

AZERBAIJAN REPUBLIC



STATE AGENCY OF AZERBAIJAN AUTOMOBILE ROADS

Regional Connectivity and Development Project

**Environmental and Social Framework (ESF)
Documents Preparation**

**Environmental and Social Management Plan for
Subcomponent 1.1 (PESMP-SC1.1)**



March 2021

[December 2021 - Note: The Environmental and Social Management Plan (ESMP) document was originally prepared as a Preliminary Environmental and Social Management Plan (preESMP) at the feasibility stage and later adopted as the Environmental and Social Management Plan because it also accurately reflected the final design. Some documents may refer to the preESMP. These references may be considered synonymous with ESMP].

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Abbreviations

AAWFJVISMO	Azerbaijan Amelioration and Water Farming Joint Venture – Irrigation Systems Management Office
AHP	Azerbaijan Highway Project
asl	Absolute sea level
CSC	Construction Supervision Consultant
CSE	Construction Supervision Engineer
DDIS	Detail Design Implementation and Supervision
DEPEP	Department of Environmental Policy and Environmental Protection
DLP	Defects Liability Period
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
ESCP	Environment and Social Commitment Plan
ESS	Environmental and Social Standard
ESS	Ecology and Safety Sector
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
GBN	Gender Based Violence
GHG	Green House Gases
GoA	Government of Azerbaijan
GRM	Grievance Redress Mechanism
FPP	Focal Point Person
IBA	Important Bird Area
IEC	Information, Education and Consultation/Communication
LMP	Labor Management Procedures
MENR	Ministry of Environment and Natural Resources
MIC	Melioration and Irrigation Committee
MOH	Ministry of Health
MDB	Multilateral Development Bank
OIP	Other Interested Party
P-AP	Project-Affected Person / Party
PCN	Project Concept Note
RCD	Regional Connectivity and Development
ROW	Right of Way
RPF	Resettlement Policy Framework
SAAAR	State Agency of Azerbaijan Automobile Roads
SCFWCA	State Committee for Family, Women and Children Affairs
SEE	State Ecological Expertise
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SWM	Solid Waste Management
TA	Technical Assistance
ToR	Terms of Reference

Units of Measurement

°C	- degree Celsius
km	- kilometer
km/h	- km per hour
km ²	- square kilometer
m	- meter
m ³	- cubic meter
mm	- millimeter

EXECUTIVE SUMMARY

Project Description

The Regional Connectivity and Development Project (RCDP) is being funded by the World Bank with the aim of providing safe, efficient and climate resilient transport connectivity and improve market accessibility along the Yenikend-Bilasuvar road corridor. The State Agency of Azerbaijan Automobile Roads (SAAAR) has initiated the planning for the Regional Connectivity and Development Project (project) with financing from the World Bank targeting mainly the Rayons of Salyan and Bilasuvar with the following main components: (i) Road Connectivity; (ii) Road Sector Sustainability; (iii) Local Development and Logistics; and (iv) Project Management and Impact Assessments. Under Component 1, Subcomponent 1.1 is the Regional Road Rehabilitation which will entail the reconstruction of the Yenikend-Bilasuvar road that will incorporate climate resilient design and engineering, to improve resilience to the impacts of climate change.

Purpose of the ESMP

The ESMP processing is to examine the Project's (in this case, applied only to Subcomponent 1.1) potential negative and positive environmental and social impacts and recommend measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and to improve environmental and social performance. The ESMP presents a set of mitigation, monitoring, and institutional measures, which should be taken during implementation and operation of the road project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. The ESMP also determines responsibilities and arrangements to implement these measures along with the assessment of the capacity for the purpose of recommending measures for enhancement, in line the World Bank's Environment and Social Framework (ESF) consistent with the Project's ESMF, RPF, LMP and SEP.

Institutional and Legal Framework

The ESMP processing was undertaken in accordance with relevant WB ESSs and in compliance with Azerbaijan legislation. All relevant local legislations were identified which normally apply to infrastructure and road projects. Policy Gap Analysis was done to enable the Project to achieve objectives materially consistent with both the WB ESSs and local requirements. An overview of the institutional responsibilities of relevant government agencies who will be involved in the management and monitoring of environmental aspects or concerns of the Regional Corridor Development Project Subcomponent 1.1 (Regional Road Rehabilitation) was also provided.

Baseline Data

Baseline data has been compiled for the overall description of the environmental and social setting prior to commencing the project. In this *Preliminary ESMP*, the Pre-Feasibility Study prepared for Subcomponent 1.1 has served as primary source of these information supplemented by data from secondary sources as well as additional field inspection along the entire alignment from the starting point at Yenikend in Salyan Rayon to the endpoint at roundabout at the entrance to Bilasuvar city, in Bilasuvar Rayon. The Study Area was determined was defined to be the area within the existing corridor, immediate surroundings as peripheral study area, communities connected to the road as supplemental study area, and the two (2) rayons and potential sources of raw materials as regional study area.

Environmental and Social Impacts

For the road rehabilitation, the environmental and social impacts will primarily be those related to pavement removal and reconstruction. The pavement reconstruction will entail earthworks and other scopes such as removal of existing pavement, elimination or relocation of objects that are within the construction strip, laying of subbase and base course layers and asphalt pavement, extension of necessary waterway crossings and installation of road furniture. In setting out the new construction corridor for pavement and shoulders, there may be unavoidable impacts consisting of clearing of existing vegetation and some trees. The detailed design phase should ascertain this aspect and propose ways to minimize these unavoidable impacts. In addition, unavoidable impacts can be expected in the extraction of materials from burrow pits and quarries, since these activities will modify

the landscape. Even with reinstatement for natural revegetation, some of the features will remain permanently altered; thus, considered unavoidable. The discussion on environmental impacts focus on aspects of borrowing for construction materials, noise/vibration and air quality, natural habitats, water resources and climate change impacts. The social impacts elaborates on labor, health and safety, potential land acquisition (should this occur), restrictions and involuntary resettlements and the need for public information and community relations.

Environmental and Social Management Plan

The ESMP presents the Mitigation Plan, Monitoring Plan, Implementation Schedule and Cost Estimate, measure of preventing diseases (more focus on the current COVID-19 pandemic), prevention of social issues related to GBV and SEA/SH, Capacity Building Needs and Institutional Arrangements. All of these items shall be applied and considered during the design/pre-construction, construction and operations phases of the Yenikend-Bilasuvur road rehabilitation project. Most of the environmental and social impacts shall occur during the construction stage which will have to be planned for appropriately in the design and pre-construction phase. Local legislations and WB ESSs should be enforced by the Implementing Agency for compliance of the Contractor and subcontractors.

Consultations and Stakeholder Engagement

Particular to the road project, consultation activities and stakeholder engagement as per the project's Stakeholder Engagement Plan (SEP) was undertaken. The SEP seeks to ensure that Project communities, as well as other Project stakeholders, are informed and involved in all the stages of the Project. The Project recognizes the need to seek representative and inclusive feedback. The means of communication and information dissemination is provided in Section 6, with more details in the SEP.

Grievance Redress

The grievance mechanism seeks to resolve concerns promptly and effectively, in a transparent manner that is culturally appropriate and readily accessible to all project-affected parties, at no cost and without retribution. Grievances can be submitted if someone believes the Project is having a detrimental impact on the community, the environment, or on their quality of life. The GRM is described in full in the project's SEP, as well as in Section 7 of this document.

It is envisaged that the grievances will primarily be those pertaining to road works implementation (including relating to environmental and social impacts, health, road safety, etc.). The handling of worksite related grievances shall be through a Grievance Redress Mechanism described herein to be established by SAAAR-PIU. Any worker-related disputes are covered in the in the Labor Management Procedure document.

Monitoring and Reporting

Monitoring ensures that mitigation measures shall be implemented and expected to be effective during the Yenikend-Bilasuvur road rehabilitation and reconstruction. The SAAR-PIU (with its DDIS) shall develop monitoring and auditing protocol for RCDP, with the reports provided to the WB. In addition, environmental management activities and reporting of project related incidences/accidents should form part of the Internal Monitoring System. The SAAAR-PIU with the assistance of the DDIS shall monitor the compliance of the Contractor in accordance with the ESMP. Monthly and quarterly reporting shall be established for such purposes.

Budget

The budget estimated in this PESMP cost will includes the following:

- Mitigation measures = US\$34,800;
- Consultants cost is during construction for monitoring = US\$285,600
- Periodic Parametric measurements = US\$72,000
- Capacity Building for SAAAR personnel (based on ESMF) = US\$50,000

The total budgetary estimate for the PESMP for Subcomponent 1.1 is US\$442,400

1 PROJECT DESCRIPTION

1.1 Overview

It is recognized that in Azerbaijan, roads are the dominant transport mode and their role in the national economy is expected to become vital. It is for this reason that the Government of Azerbaijan (GoA) wishes to enhance its focus on the capacity and quality of the road network to ensure higher mobility, reliability, and safety. Through the assistance of Multilateral Development Banks (MDB's), the road sector in Azerbaijan has progressed in the previous years starting with the reconstruction of major roads. In previous years with the World Bank, the Government of Azerbaijan, had been implementing a road program aimed at improving the country's road network starting with the major roads designated as Magistral (M) road. With the upgrading of the M highways near completion, next earmarked for reconstruction are secondary road networks, and tertiary or local roads (Y roads).

To sustain the important role of road transport in the economy, the rehabilitation of secondary and local roads is becoming an important agenda. In some regions, the secondary and local roads are of the key road sector development gaps that need attention. These are among the primary infrastructure that the proposed Project will address. Accordingly, the Azerbaijan Government, through the State Agency of Azerbaijan Automobile Roads (SAAAR) has initiated the planning for the Regional Connectivity and Development Project (RCDP) with financing from the World Bank. This project entails the rehabilitation and reconstruction of Yenikend-Bilasuvar corridor road, development of ancillary agri-logistics infrastructure, Advisory and Training Initiatives, a technical assistance for financial sustainability and operational efficiency within the road sector, and institutional development support.

The project is located within the rayons of Salyan and Bilasuvar in the Aran economic region, a lagging region of the country with socioeconomic problems that the project can alleviate such as: (i) welfare and living standards of the population being below country averages; (ii) lack of well-paying jobs and business opportunities; (iii) insufficiency of infrastructure and services; (iv) nominal average monthly wages of about 40 percent lower than the country average; and (v) a significant part of the population in the region remaining socially vulnerable and at risk of falling into poverty. The map of the RCD Project is shown below.



Figure 1: Map of RCD Project

Consistent with the objectives of the Regional Connectivity and Development Project four (4) components are hereby envisioned to be implemented as follows:

Table 1: RCD Project Components

Component		Subcomponent
No.	Title	
1	Road Connectivity	1.1 Regional Road Rehabilitation

Component		Subcomponent
No.	Title	
		1.2 Construction Supervision
2	Road Sector Sustainability	2.1 Development of Road Network Management System
		2.2 Development of Road User Charging Models
		2.3 Development of System to Prevent Axle Overloading
3	Local Development and Logistics	3.1 Development of Road Side Market and Logistics Facilities
		3.2 Advisory and Training Initiatives
4	Project Management and Impact Assessments	4.1 Support for Project Management
		4.2 Incremental Operating Budget
		4.3 Result Measurement and Impact Assessment

This *Preliminary* Environmental and Social Management Plan (PESMP) based mostly on the Pre-Feasibility Study of the Yenikend-Bilasuvur Road rehabilitation project pertains only to RDCP Sub-component 1.1 – Regional Road Rehabilitation. After the detailed design of the road, this PESMP shall be updated by the design consultants into its final form for the subsequent stages of the project.

The road section to be upgraded was part of the original alignment of M3 highway, and served as the main North-South corridor connecting Baku with the southern part of the country and to the Iranian border in Astara. A new M3 motorway was constructed along a new adjacent alignment bypassing most settlements, and was opened to traffic in 2018. The original M3 road remains in use and is critically important to service local and non-motorway traffic. The section to be upgraded under this project lies along the Salyan to Bilasuvar section, which is in poor condition and requires rehabilitation to properly serve densely populated proximate residential areas and provide a safe alternative to the motorway. Technical design will ensure a resilient road that is safe to use. The final scope of works and road sections will depend on the outcomes of the feasibility study and the project counterpart funding to be agreed with the government during the project preparation and appraisal stages.

At this stage, the sections for rehabilitation include:

- (i) between the village of Yenikend and old Kur River bridge at the entrance of Salyan town, km 31.0 to km 54.4;
- (ii) between exit of Salyan town and Shorsulu interchange, km 60.0 to km 87.0; and
- (iii) between Shorsulu and Bilasuvar interchanges, km 87.0 to km 101.0.

The section between km 54.4 and km 60.0 falls within the Salyan town boundaries and is considered for lighter rehabilitation due to its better physical condition.

Design of the regional road segments to be rehabilitated under Subcomponent 1.1 is being done under the Third Highway Project, and will meet safety and climate resilience criteria against flooding and wet weather and be designed for year-round road access for commercial vehicles.

1.2 Purpose and Scope of ESMP

Following ESS1 par 23, “The Borrower will carry out an environmental and social assessment of the project to assess the environmental and social risks and impacts of the project throughout the project life cycle”. As per consultation with the Bank, which subsequently stipulated in the ToR, an Environmental and Social Management Plan (ESMP) is required for Subcomponent 1.1.

In ESS1 - Annex 1 (f), the ESMP is described as an instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental and social impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures. Accordingly, ESS1, provides the general guidance for conducting the assessment and management of environmental and social risks and impacts consistent with the rest of the ESSs.

As stated in ESS1, the ESMP is among the methods and tools that is used to identify and assess the potential environmental and social risks and impacts of the proposed project. Depending on the nature and scale of the project, the appropriate one is required by the Bank. For Subcomponent 1.1, as indicated in the ToR, the ESMP is required.

As per the ToR, the purpose of the ESMP processing is to examine the Project's potential negative and positive environmental and social impacts and recommend measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and to improve environmental and social performance.

Within the scope of the ESMP, a set of mitigation, monitoring, and institutional measures are identified, which should be taken during implementation and operation of a project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. The ESMP also determines responsibilities and arrangements to implement these measures along with the assessment of the capacity for the purpose of recommending measures for enhancement.

The environmental and social assessment process for Subcomponent 1.1 shall have the ESMP as the output, consistent with the Project's ESMF, RPF, LMP and SEP. The ESMP report covers the following:

- (i) Executive Summary and Conclusions
- (ii) Policy, Legal and Administrative Framework
- (iii) Project Description
- (iv) Baseline Data
- (v) Environmental and Social Impacts
 - a) Borrowing Construction materials
 - b) Noise and Vibration
 - c) Natural Habitats
 - d) Impact on Water Resources
 - e) Labor, Health and Safety Measures
 - f) Public information and Community relations
- (vi) Environmental and Social Management Plan
 - a) Mitigation Plan
 - b) Monitoring Plan
 - c) Implementation Schedule and Cost Estimates
- (vii) Capacity of the Implementing Agency
- (viii) Appendices

As further mentioned in the ToR, *“the Assessment Reports and the Management Plans identify extent and complexity of potential social impacts and the socio-economic characteristics of people in the Project area. Special attention is paid to vulnerable or disadvantaged groups who could experience adverse impacts from the proposed Project more severely than other groups, nature and magnitude of impacts, the people affected and identification of mitigation measures. In the case of positive social impacts, potential measures are identified to enhance them.”*

All of the guidance notes provided in the ToR are hereby followed in the preparation of this PESMP for Subcomponent 1.1.

1.3 Socioeconomic and Environment Overview of Project Area

The RCDP shall cover Salyan and Bilasuvar Rayons. The project area is around 150 km south of the capital Baku and can be reached by new motorway M3. Both of the urban centers of the Rayons are along the old M3 alignment. The Subcomponent 1.1 of RCDP aims to rehabilitate this old M3 corridor road.

The condition of the secondary and local roads in some regions is one of the key road sector development gaps that the proposed Project will address. In the medium long term, faster and cheaper transportation of people and goods resulting from rehabilitation/ reconstruction of the Yenikend-Bilasuvar highway is expected to help stimulate economic development in all sectors (agriculture, light industry, tourism and services). Construction of the highway will provide an efficient and faster road network that is foreseen to have a positive impact on improving international trade. Moreover, the route that enables better connections to other local centers of population will increase local economic opportunities.

The basis of agriculture in Salyan district is cotton, grain, vegetable and animal husbandry. Dry sub-tropical fruit-growing like melon, viticulture (table varieties)¹ and gardening are important agricultural areas. Currently, most of the fish sold in the country such as beluga, sturgeon, stellate sturgeon, salmon, catfish and pike perch are harvested in Salyan.

Bilasuvar is agricultural plant-growing region with a large cattle-breeding sector, as well as grain, and cotton cultivation². Its agricultural produce are mainly wheat, alfalfa and cotton. In 2018, Bilasuvar farmers harvested more than 800 tons of pomegranates, among which 50% were sold to foreign markets³. It also has a well-developed 19 km of road from the city to the nearby frontier point with Iran.

Economy of agricultural districts such as Salyan and Bilasuvar, where the most of the study area falls within, may be improved by means of the trade enhancement due to efficient road network. The reconstructed route within the districts will provide improved access for the agricultural sectors of these economies.

Salyan Rayon is situated on the Kura-Araks lowland, in the Mugan steppe in the southeast of the country with a total area of 1,600 km². The Kura River, one of the main rivers of Azerbaijan flows through within the territory of the rayon and through the Salyan town itself, which is the principal urban center. A national park, "Shirvan", is also found in Salyan Rayon with an area of 54,373.5 hectares. The floral vegetation in Salyan is semi - desert and desert type, which are mainly cypress, wildflower, algae, blackberries, etc. The climate in Salyan is predominantly considered a local steppe climate. It experiences a small amount of precipitation averaging to 288 mm with average annual temperature of 15.2 °C.

Bilasuvar Rayon occupying the south-western and southern part of the Mugan plain, is to the south-west of Salyan, with a total area of 1,358 km². The climate is similar to that of Salyan with average rainfall of 260mm. Most of the area of Bilasuvar is below the sea level, 542 hectares of which are considered forests.”

1.4 Application of the ESMP

The ESMP will be integrated into the preparation and implementation stages of RCDP Subcomponent 1.1 – the Yenikend to Bilasuvar road. It must be complied with through the entire project cycle from design, implementation and operation/maintenance, to attain the above outlined purpose and objectives.

1.5 Revision / Modification of the ESMP

The ESMP will be a 'Live Document' which shall be subject to revisions, when and where necessary and applicable upon agreement between SAAAR and the World Bank. Any unexpected situations

¹ Wikipedia.org. "Salyan District, Azerbaijan". Retrieved from: https://en.wikipedia.org/wiki/Salyan_District,_Azerbaijan

² Wikipedia.org. "Bilasuvar District". Retrieved from: https://en.wikipedia.org/wiki/Bilasuvar_District

³ Fresh Plaza, October 4, 2019. "Azerbaijan: Bilasuvar region exports pomegranates to Russia". Retrieved from: <https://www.freshplaza.com/article/9150290/azerbaijan-bilasuvar-region-exports-pomegranates-to-russia/>

and/or relevant changes in the design of RCDP Subcomponent 1.1 would be assessed, and appropriate management measures will be incorporated by updating the ESMP.

As of this writing of the ESMP for Subcomponent 1.1, only a Pre-Feasibility Study was done. A full-blown Feasibility Study may have to be done to fulfill the Bank's requirements. When new information are available during the Feasibility Study stage, some updating of the ESMP may be needed. Further in the project development at the Detailed Design stage, more definite items will be brought up, and updating of the ESMP may also be done accordingly.

Revisions will be discussed and agreed with the Bank, and the revised ESMP will be re-disclosed.

2 INSTITUTIONAL AND LEGAL FRAMEWORK

2.1 National Environmental Laws, Regulations, Guidelines, and Standards

The constitution of the Republic of Azerbaijan defines principles for environmental protection and ownership of natural resources along with regulations for their use. As stipulated in the Constitution, the legislative framework relating to the environment consists of:

-) Parliamentary legislation that establishes the State regulation of strictly protected natural areas, and the protection and use of the environment and biodiversity
-) Presidential Decrees and orders and the resolutions of the Cabinet of Ministers that ensure the implementation of the major provisions of the laws
-) By-laws of the executive authorities (Ministries and Committees) that specify the activities to implement the laws
-) International Agreements and Conventions to which Azerbaijan is a signatory

The law that governs environmental protection in Azerbaijan is *The Law on Environmental Protection (EP) of 1999*, which identifies the legal, economic and social bases of environment protection. The legislations on land use and development consists of the Land Code and other legislative acts. Laws that pertain to protection and sustainable use of natural resources include: *Law on environmental Impact Assessment, (2018)*, *Law on Plant Protection (1996)*, *Forestry Code (1997)*, *Water Code (1997)*, *Law on Fisheries (1998)*, *Law on Fauna (1999)* and *Law on Protected Areas (2000)*. In addition, there are laws regulating environmental pollutants are stipulated in environmental protection (1999), atmospheric pollution (2001), pesticides and agrochemicals (1997), industrial and domestic waste (1998) and water supply and wastewater (1999).

The officially protected areas in Azerbaijan consist of the following:

-) National Parks, e.g., Shirvan National Park and Hirkan Forest National Park: areas with ecological, historical and aesthetic values, designated for nature protection, environmental awareness, scientific, cultural and other purposes. All land and natural resources belong to the Park management authority, and some economic activities (including ecological tourism) are allowed.
-) Strict Nature Reserves, e.g., Gyzyl-Agach Bay State Nature Reserve and designated Ramsar Wetland of International Importance: state-owned, strictly protected areas designated for nature protection and scientific research. No economic activity is allowed. All have management plans and both enforcement and scientific staff.

Buffer zones are designated surrounding these protected areas, and other natural areas such as rivers and water sources. The level of protection is accorded according to their respective significance as – international, national, regional or local.

2.2 National Laws, Regulations and Standards on Environmental, Social Protection and Land Issues

In addition, the legislative framework relating to the environment generally consists of the following:

-) Parliamentary legislation that defines and establishes the State regulation of protected natural areas, and the protection and use of the environment and biodiversity
-) Presidential Decrees and orders and the Cabinet of Ministers resolutions
-) By-laws of the executive authorities (Ministries and Committees)
-) International Agreements and Conventions to which Azerbaijan is a signatory

Itemized below is a compilation of legal and regulatory framework related to road rehabilitation and improvement.

Table 2: Relevant Laws and Regulation on Environmental and Social Protection and Land Issues on Road Rehabilitation

Reference	Description
<p><i>Law No. 1175-VQ on environmental impact assessment, June 12, 2018</i></p>	<p>This Law establishes:</p> <ul style="list-style-type: none">) rules on environmental impact assessment and strategic ecological assessment for the identification of possible adverse effects on the environment and human health during the implementation of the activities specified in its Annex.) the assessment, elimination or reduction of their scale and intensity over time and space.) that the impact of proposed activities on the following will be assessed, atmospheric air quality; surface and ground water; wastewater; bottom-surface of reservoirs; natural and artificial landscapes; subsoil and soil; flora and fauna; forests; ecosystems and biodiversity; ecologically sensitive areas; public health; socio-economic sphere including employment, education, health, road transport and engineering infrastructure; cultural heritage; and climate change.) provisions on the responsibilities of the relevant stakeholders, international cooperation in the fields of protection of environment and ecological safety, and state control.
<p><i>The Law of the Republic of Azerbaijan on Environment Protection, 9 February 1999</i></p>	<p>The general framework for all national objectives in the area of environmental protection:</p> <p>Chapter I. General Provisions</p> <p>Chapter II. Rights and duties in the area of protection of the environment</p> <p>Chapter III. Use of nature</p> <p>Chapter IV. State cadaster and monitoring of the environment, natural resources, standardization and certification</p> <p>Chapter V. Economic regulation in the area of protection of the environment</p> <p>Chapter VI. Regulation of ecological equilibrium of the environment</p> <p>Chapter VII. Ecological requirements upon industrial and other categories of operations</p> <p>Chapter VIII. Ecological examination</p> <p>Chapter IX. Education, training, scientific researches, statistics and information in the area of ecology and protection of the environment</p> <p>Chapter X. Extraordinary ecological situation and zones of ecological disasters</p> <p>Chapter XI. Control over protection of the environment</p> <p>Chapter XII. Ecological audit and implementation of ecological audits</p> <p>Chapter XIII. Liability for breach of legislation on protection of the environment, resolution of disputes</p> <p>Chapter XIV. International co-operation in the area of protection of the environment</p>

Reference	Description
<p><i>Chapter 7: Articles 35, 36, 37, and 38: Ecological Demands during Project Design and Implementation.</i></p>	<p>During the feasibility study, it should be confirmed that the project will comply with:</p> <ul style="list-style-type: none">) the maximum permitted discharges and emissions of pollutants in the natural environment) the maximum permitted noise and vibration levels, and other harmful physical influences as well as health norms and standards of hygiene
<p>"Law on Ecological Safety" (04.08.1999)</p>	<p>This law defines legal bases of ecological safety as component safety of the state, society and population, the purpose of which is establishment of legal bases for protection of life and health of the person, society, its material and moral values, environment, including atmospheric air, space, water objects, resources of the ground, natural landscape, plants and animals from danger, arising as a result influence natural and anthropogenic action</p>
<p>Article 50: Ecological Expertise</p>	<p>Requires identification of impact on environment caused by any activities, examine the results of such impacts and predict possible impacts in accordance with the environmental requirements and qualitative parameters of environment.</p>
<p>Article 54: Objects of the State Ecological Expertise</p>	<p>Defines the types of project which require compulsory "State Ecological Expertise (SEE)", <i>i.e.</i>, to undergo the systematic EIA process.</p>
<p><i>Law on Environmental Security 08.06.1999 and Decree No172 on application of the Law on environmental security 04.08.1999</i></p>	<p>This Law defines and sets the legal bases and dimensions of environmental safety with the related danger, dangerous situation, environmental emergency situation and disaster subsets together with their impact areas and subjectivity to risk exposure within the territory of the Republic of Azerbaijan.</p>
<p><i>The Law of the Azerbaijan Republic on Specially Protected Natural Areas and Objects 24 March 2000</i></p>	<p>This Law sets the legal bases of organization and protection of specially protected natural areas, protection of specially protected natural units within the territory of the Republic of Azerbaijan. Specially protected natural areas are sites of land and water (water area), and atmospheric space above them consisting of natural complexes and objects, representing special ecological, scientific, cultural, aesthetic and improving value, habitats of rare and endangered species of flora and fauna, fully or partly, constantly or temporarily excluded from economic circulation. Specially protected natural areas and objects in the Republic of Azerbaijan are classified into their categories of international, republican, regional and local value. Restriction on economic use of natural resources in the specially protected natural areas and objects or specially allocated sites are provided in the regulated regime of economic activity. The Law allows the use of specially protected natural areas for the following purposes:</p> <ul style="list-style-type: none">) nature protection,) scientific researches,) monitoring of the environment, sanitation,) training and education,) tourism and rest (recreation).
<p><i>Law of the Azerbaijan Republic on provision with environmental information March 2002 270 - IQ</i></p>	<p>This Law regulates relations connected with provision by State and local self-government bodies and authorities of in-time and exact information on environmental condition and application of natural resources. This Law interprets environmental information about:</p>

Reference	Description
	<ul style="list-style-type: none">) condition of soil, water, Earth surface, atmosphere and living organisms,) changes, as a result of human activity, which may occur or have occurred in environmental components, which effect or may have affected human health,) assessment of these changes,) environmental protection,) measures on efficient application and expenses. <p>According to the Law, by procedure of provision with environmental information, it is divided into restricted-type and open-type information; and excluding restricted information, every person, independent of time and unconditionally enjoys the right of getting information.</p>
<p><i>The Law of the Republic of Azerbaijan on Sanitary and Epidemiological Safety, 1993 Section III: Responsibilities of State Bodies, Agencies, Companies... on the Provision of Sanitary and Epidemiological Safety</i></p>	<p>General framework provisions on the requirement to provide healthy and safe conditions at workplaces and work camps (and many others) in compliance with the relevant sanitary hygiene, construction regulations, and norms (particularly items 14, 15 and 16).</p>
<p><i>The Law on Fauna N. 675-IQ 4 June 1999</i></p>	<p>This law determines legal grounds of usage and protection of fauna in Azerbaijan Republic. The objects and subjects are enumerated in the 4th article of the Law. Generally, objects of fauna are different species of fauna, zoolites, products of their life activity, and ranges of their location. Subjects of fauna are natural and legal persons. Law (article 5) distinguishes State, municipal and private property on fauna and determines termination bases of this law (article 26). All animals in nature are state property, and animals, which are separated from nature by different licenses and, which are determined by state list may be municipality property and private property.</p>
<p><i>Law on the Protection of Plants 210 – IQ December 3, 1996</i></p>	<p>The aim of the Law is realization of system of measures directed to prevention of mass propagation of the plant's vermin, illnesses and Weed, barring of losses of production, production of ecological clean products, protection of environment, health of the population, useful flora and fauna from harmful influence of pesticides, quarantine, isolation and liquidation of other especially dangerous vermin.</p>
<p><i>Law "On Fisheries" 457 – iQ 13 June 1998</i></p>	<p>This Law establishes legal grounds of organization, management, increase, application and protection of fish resources in Azerbaijan Republic. Fish resources are State property. One of important obligations of State in the sphere of protection of fish reserves is creation of special regime, ichthyologic and temporary reserves for protection of fish species, water flora and fauna plants, included into Red Book, creation of ichthyologic and temporary reserves, allotment of special protected areas of water.</p>
<p><i>Law of the Azerbaijan Republic on subsurface (subsoil) 439-IQ of 13 February 1998</i></p>	<p>This Law shall regulate relations in connection with the development (exploration, research), efficient use, protection and safety of works in the subsurface on the territory of the Azerbaijan Republic, including subsurface in the Azerbaijan Republic section of the Caspian Sea (Lake), provide for the protection of interests of the state, users of the subsurface and individuals in course of use of the subsurface</p>

Reference	Description
<p><i>Regulations on Carrying Out the State Expertise of Geological Information on Subsoil Plots Granted for the Use and Reserves of Mineral Resources.</i></p> <p>No. 102 of 13 February 1999</p>	<p>These Regulations have been prepared in accordance with the Law of the Azerbaijan Republic “On Subsoil”, the Decree of the President of the Azerbaijan Republic No. 701 of 27 April 1998 “On Application of the Law of the Azerbaijan Republic On Subsoil”, and shall determine the conduct and approval of the state expertise of as well as the main requirements on geological information on subsoil plots necessary for the construction and operation of underground installations not connected with the extraction of mineral resources in the Azerbaijan Republic, and the state expertise of the reserves of the already explored mineral resources fields and conditions for mineral resources (hereinafter shall be referred to as the “state geological expertise”).</p>
<p><i>Law of the Azerbaijan Republic on Fertility of Lands</i></p> <p>788-IQ of December 30 1999.</p>	<p>This Law shall establish legislative provisions related to reinstatement, increase and protection of fertility of state, municipal and private lands in the Azerbaijan Republic.</p>
<p><i>Azeri Law on Automobile Roads: Section 39: Protection of Environment, March 10, 2000.</i></p>	<p>Spells out that any construction or reconstruction of roads requires the official approval of the Azerbaijan State Ecological Expertise, must introduce state of the art technology, and chemicals used must be environmentally benign. The unit of the ministry responsible for road environment must approve the environmental, health and safety norms of the construction.</p>
<p><i>Law the Azerbaijan Republic on "Industrial and domestic waste"</i></p> <p>No: 514-iQ</p> <p>Adopted: 30 June 1998</p>	<p>This law regulates in Azerbaijan Republic relationships, connected with protection of environment from industrial and domestic waste (further called waste) generated, as a result of human activity, decrease of hazardous influence of those waste, provision of ecological balance in the nature, determines state policy on usage of waste, as secondary raw materials, excluding hazardous gas, sludge water and active waste.</p> <ul style="list-style-type: none"> <p>) For responsibilities and Obligations:</p> <ul style="list-style-type: none"> - the responsibilities of the state authorities include "...allocation, upon agreement with the relevant executive authority, of plots of land for location, burial and processing of wastes; designing and construction of facilities for storage, use and neutralization of wastes; ensuring economic, social and legal framework in the area of use and reduction of level of accumulation of wastes". - In Chapter 2 (Articles 7-14) – Requirements in relation to design, construction and re-construction of enterprises, facilities and other installations, conditions of waste processing, requirements for waste processing places, disposal, transportation, at the same time for cleaning up the residential areas from domestic wastes are commented. - Articles 9 and 10 of the Law, stipulate the conditions for waste processing and the requirements for the places of waste processing. The following requirements related to waste processing are also put forward parallel to the others <p>) For permits as per Article 11:</p> <ul style="list-style-type: none"> - Waste disposal is carried out based on permit of MENR. MoH and local executive powers - Special researches with permissions of relevant authorities (MENR, SCGMR, MIC & Local Executive Powers) with public consultations for disposal sites <p>) For Disposal Facilities as per Article 11: Shall not be in location or within cities, residential settlements, resort, treatment</p>

Reference	Description
	/ health areas, forest, recreation zone, groundwater, industrial and drinking water reservoir, mineral resources, and mining operations.
<p><i>Law of the Azerbaijan Republic on municipality water industry</i> 29 June 2001 N. 159-IIQ</p>	<p>Purpose of this Law is to determine legal bases of relationship between municipalities and corresponding bodies of executive power, legal and physical persons, connected with usage and protection of water industrial objects, located at the territory of municipalities of Azerbaijan Republic.</p> <p>Water industrial objects of local significance, being state property and located at municipality land area are transferred to municipality property, in order established by President of Azerbaijan Republic. Municipality property on water industrial objects may be established taking into account the following conditions:</p> <ul style="list-style-type: none">) transferring of water industrial objects belonging to state property to municipality ownership, in order established by legislation;) establishing of new water industrial objects by municipalities;) purchase of water industrial objects, belonging to legal and physical persons by municipalities on base of agreements;) By other conditions, taken into consideration by legislation, (article 3).
<p><i>Law of the Azerbaijan Republic on safety of hydrotechnical installations</i> December 27, 2002 N. 412 - HQ</p>	<p>The Law regulates relations connected with guaranteeing of safety of hydro-technical installations during design, construction, operation, reconstruction, recovery, preserving and liquidation of them and determines relevant duties of state power organs, owners and operators of these installations.</p> <p>The hydro-technical installations may be state, municipal and private property. Right for operation of hydro-technical installations is to be obtained in the order determined by legislation of Azerbaijan Republic.</p> <p>At the territories of location of hydro-technical installations, relevant protection regime is to be applied depending on classification of them on safety issues, and the protection zones are to be formed around them. Sizes of protection zones, their boundaries and use rules are determined by relevant executive power organ. Features of guaranteeing of safety of hydro-technical installations operated within enterprises of the state energetic and water transport systems, including safety of off -share installations located in the Sector of the Caspian Sea (Lake) owned by Azerbaijan Republic are to be determined by Regulations approved by relevant executive power organ. Carrying out of explosion work and mining of nature resources, also location and activity of objects rendering negative physical, chemical and biological effect to these installations and environment are prohibited.</p> <p>Economic activity of legal entities or natural persons at the origins and zones of rivers, water basins and at sea, which negatively effect to safety of hydrological installations, is to be terminated or limited.</p>
<p><i>Law on the Protection of Historical and Cultural Monuments of Azerbaijan Republic</i> 470-IQ, Baku, 10 April 1998</p>	<p>This Law is regulating the issues connected to protection, investigation and using of historical and cultural monuments.</p> <p>Article 13. Protection of the monuments during construction and other service works</p> <p>Article 14. Archaeological investigations on the sites of new constructions</p>

Reference	Description
<p><i>Rules of Issue of the Status of “Mountainous-Mining Allocation” To Subsurface Section for Extraction of Mineral Resources, Construction and Operation of Underground Facilities Not Associated with Extraction of Mineral Resources</i> No. 1 of January 9, 1999</p>	<p>These Rules shall establish procedures for the issue of the status of “Mountainous-Mining Allocation” to a subsurface section upon special permission (license) for extraction of mineral resources and construction and operation of underground facilities not associated with extraction of mineral resources on the territory of the Azerbaijan Republic.</p>
<p><i>Rules for Liquidation and Conservation of Enterprises Engaged into Extraction of Mineral Resources, Mountainous-Mining Excavations, Drilling Wells and Underground Facilities not associated with extraction of mineral resources</i> No. 2 of 9 January 1999</p>	<p>These Rules shall be compulsory for all subsurface users irrespective of the type of ownership engaged into exploration, extraction of mineral resources and construction and operation of underground facilities not associated with mineral resources in the territory of the Azerbaijan Republic and the Azerbaijan Republic section of the Caspian Sea (lake).</p>
<p><i>Labour Code of the Republic of Azerbaijan 1 February 1999</i> 618-IG.</p>	<p>The Code sets the conditions for contractual relations between employers and employees and minimum standards on labour protection.</p>
<p><i>new Law of the Republic of Azerbaijan “On Employment”</i> August 28, 2018</p>	<p>Supersedes the Law on Employment, dated July 02, 2001 with the following updates:</p> <ul style="list-style-type: none">) Creation of employment subsystem in the central electronic information system of the MLSPP;) Registration of job seekers and unemployed persons in employment subsystem and provision of electronic services to them;) Insured persons’ salary financing program (subsidized employment);) Registration of legal entities engaged in mediation in employment activity in the register;) Setting up an electronic vacancy bank and the obligations of the employer in connection with it;) Determination of quota and social workplaces for employment of persons in need of social protection) Creating a registry of employed people) Development of standards for social enterprises and jobs beyond the quota) Rules of organization and activity of labor exchanges and job fairs;) Creation of unified information resources for control of informal employment) State support for self-employment
<p><i>Law of the Republic of Azerbaijan No 768-IIQ dated 5 October, 2004 «On Living Wage” (as amended by Law No. 109-IIIQD dated May 12, 2006, and Law No. 260- IIIQD dated March 6, 2007)</i></p>	<p>Describes the principles and procedures of setting the living wage in the Azerbaijan Republic and its state support, as well as its increase in consistence with the social and economic development in the country.</p>
<p><i>Law on entrepreneurship activity</i> 405, dated December 15, 1992</p>	<p>Defines the principles of entrepreneurship in the Republic of Azerbaijan, rights and obligations of business entities, forms and methods of its protection and approval by the state, and interaction of entrepreneurs with state bodies and relevant executive authorities (hereinafter – the organizations)</p>

Reference	Description
<i>Law of the Republic of Azerbaijan “On social insurance” (18 February 1997 No. 250-IQ)</i>	This Law regulates relationships in the area of social insurance, defines legal, economical and organization grounds for social insurance in the Republic of Azerbaijan.
<i>16 February 2011 – “Regulation on the State Employment Service under the Ministry of Labour and Social Protection of the Republic of Azerbaijan”.</i>	This Regulation defines the role and responsibilities of the State Employment Services under MLSP in organizing delivery of state employment services in the country
<i>“Unemployment Insurance Law” of the Republic of Azerbaijan (approved on June 30, 2017)</i>	The purpose is to strengthen social protection of the unemployed and job seekers. Implementation of this law will provide wider opportunities for the organization of vocational trainings and re-training courses on advancement of professional skills, public work, labour exchange and labour fairs, as well as extensive adoption of self-employment projects and legalization of labour relations
<i>Law on Targeted State Social Assistance 1039-IIQ dated 21 October 2005 (with amendments made in 2008, 2015, 2018, 2019)</i>	This regulates the purposes and principles of rendering targeted state social assistance, the legal basis for the appointment and other relations arising in this area. Targeted state social assistance is a subsidy provided by the state to low-income families. Before need criterion was an annual limit approved by the state budget for the purpose of establishing targeted state social assistance, depending on the subsistence minimum for the major socio-demographic groups of the population.
<i>Law on “Prevention of Disability, Rehabilitation and Social Protection of Disabled” (August 1995)</i>	Defines "disabled person" as "a person, with limited functions, who need in social assistance and protection due to congenital or injury/illness caused by physical or mental deficiencies.
<i>Law of the Republic of Azerbaijan No. 275-IVQ dated December 30, 2011 “On social service”</i>	Establishes legal, organizational, economic and organizational basis of state policy in the field of social servicing of persons which are in difficult life situation and governs the relations arising in this area
<i>Law of the Republic of Azerbaijan No. 55-IIIQ dated February 7, 2006 “On social benefits” (Law No.720-IVQD of 30 September 2013 to Amend Law on Social Benefits)</i>	Establishes social benefits in the Republic of Azerbaijan and other relations arising in this area regulates. The following basic definitions are used for the purposes of this Law: <ul style="list-style-type: none">) Social benefits (hereinafter referred to as allowances) - as defined by law provision of social assistance to certain categories of persons in the established order monthly or lump sum money;) Disabled persons - disabled people, aged up to 18 years with limited opportunities of health children, the women who reached age of 62 years, the men who reached age of 67 years, the women who reached age of 57 years, women who gave birth to 3 and more children and brought up them to 8-year age, or brought up the child with limited opportunities of health to 8-year age, the men who reached age of 62 years and independently bringing up 3 and more children to 8-year age in view of the death of mother or deprivation of its maternal rights without entering repeated scrap or grown up the child with limited opportunities of health to 8-year age, the children of the deceased supporter who did not reach age of 18 years (before the end of training by pupils in fulltime courses, but not advanced age of 23 years), or handicapped children is more senior 18 years which limited opportunities of health are established before achievement of 18 years by them.
<i>Land Code 25 June 1999 No: 695-iQ</i>	When land is required for projects of national interest, compensation is initially offered on the basis of valuations made in accordance with a standard code (no. 158 dated 1998). If landowners are unhappy with this valuation, there is scope for agreeing a revised valuation. In the event that such agreement cannot be reached, the acquiring authority can process its

Reference	Description
	application for acquisition through the courts, but this is often a long and complex process. The landowner also has an option for seeking recourse through the courts. The Land Code also allows for exchange land to be given, that is equivalent to the land being acquired.
<i>Cabinet of Ministers Resolution No. 42 (On Some Normative and Legal Acts Relating to the Land Code of the Azerbaijan Republic dated 15 March 2000)</i>	This resolution outlines procedures for the compulsory acquisition of land for state or municipal needs.
<i>Cabinet of Ministers Resolution No 110 (On Approval of Regulations for an Inventory Cost estimation of Buildings Owned by Natural Persons dated June 1999)</i>	This resolution outlines procedures for acquisition and compensation valuation for affected buildings and immovable properties. It refers to the standard code No. 58 that is to be used for making valuations of land and property to be acquired. These valuations are made on the basis of standard unit rates for different types of construction in different regions of Azerbaijan.
<i>Civil Code 1 December 1998</i>	This Civil Code states that any rights to immovable properties must be registered with the State, and that land may be recalled from owners for state or municipal needs as approved by the relevant courts.
<i>Water Code of the Republic of Azerbaijan December 26, 1997 N. 418- IQ</i>	Regulates the use of water bodies, setting also property rights and covering issues of inventory and monitoring. State, municipalities and individuals may own water bodies depending on their importance. The Code regulates the use of water bodies for drinking and service water and for medical treatment, spas, recreation and sports, agricultural needs, industrial needs and hydro energy, transport, fishing and hunting, discharge of waste water, fire protection, and specially protected water bodies. It provides for issues of zoning, maximum allowable concentrations of harmful substances and basic rules of conduct for industry.
<i>The Forestry Code of the Republic of Azerbaijan 30 December 1997 N. 424-iQ</i>	<p>The purpose and objectives of forestry legislation of Azerbaijan Republic are to manage forests with scientific approach, to preserve biological diversity of ecosystem, on base of principles of increasing reserve potential to use them effectively, protect and restore.</p> <p>The intents of forestry relations in Azerbaijan Republic are for the forestry fund of the Azerbaijan Republic, areas of the forestry fund, trees and bushes and its use. All forests within Republic and land lots of forestry fund not covered with plants, (forest and non-forest lands areas) comprise forestry fund of Azerbaijan Republic. Forest fund belongs to State property and it is State property. Forests and forest fund is not privatized.</p> <p>Subjects of forestry relations are state bodies, the municipalities, natural and legal persons.</p>
<i>Rules for Use, Protection and Preservation of Trees and Bushes which are not included to the Forestry Fund of Azerbaijan Republic No 173; 19 of September, 2005</i>	This document includes detailed description of trees and shrubs that are not include to the forestry Fund and the way of their protection as well as the exclusions and the regulation in case of necessity of their cutting or replanting.

Reference	Description
<p><i>Law of about land lease : 587-IQ. Adopted: 11 December 1998</i></p>	<p>This law determines the legal bases of leasing and leasing relationships of land of state, municipal and private property in Azerbaijan Republic.</p>
<p><i>EIA Handbook for Azerbaijan (UNDP), 1996</i></p>	<p>Regulations on EA in Azerbaijan which define the type of projects requiring EA, the contents of an EA document, the roles and responsibilities of the developer and the competent national authorities, the procedures for public participation and the appeal process.</p> <ul style="list-style-type: none">) Upon formal application, MENR determines the scope of environmental investigation to be conducted, including categorization. If a full EIA is required, the scope of the EIA investigations will be determined after a scoping meeting convened by MENR with the participation of the developer.) After completion of investigations and consultations, the developer submits an EA report to MENR for approval. MENR makes the EA report available to the public and submits it to the Environmental Review Expert Group, which conducts its own investigations and produces a review document that is submitted to MENR. Official approval of the project may be subject to conditions that can relate to any phase of the project.) On accepting MENR's EA permission, the developer accepts the conditions attached to the permission, which then become legally binding.
<p><i>Azeri Law on Automobile Roads: Section 39: Protection of Environment, March 10, 2000.</i></p>	<p>Spells out that any construction or reconstruction of roads requires the official approval of the Azerbaijan State Ecological Expertise, must introduce state of the art technology, and chemicals used must be environmentally benign. The unit of the ministry responsible for road environment must approve the environmental, health and safety norms of the construction.</p>
<p><i>Guidelines for Road Construction, Management and Design, February 7, 2000</i></p>	<p>Addresses environmental issues in road design, construction, and maintenance.</p>
<p>Part I: Planning of Automobile Roads</p>	<p>Requires minimizing the impacts on the ecological, geological, hydrogeological, and other natural conditions, by implementing adequate protection measures.</p>
<p>Part II: Construction and Reconstruction of Automobile Roads</p>	<p>Requires consideration of appropriate protection measures, which shall contribute to the maintenance of stable ecological and geological conditions as well as natural balance.</p>
<p>Section II.3: Protection of the Environment</p>	<p>General overview on the protection of environment.</p>
<p><i>Reg. 514-1Q-98: Regulation on Industrial and Municipal Waste</i></p>	<p>Requirements for industry and enterprises for implementation of standards and norms of environmental protection for waste when designing, constructing, or reconstructing.</p>
<p><i>SNIP III-4-80: Norms of Construction Safety</i></p>	<p>Detailed regulations on construction worker's health and safety. Chapters 2 and 5 provide the organizational procedure of construction and work sites and transport sites. Annex 9 contains standards on maximum concentrations of toxic substances in the air of working zones; Annex 11 specifically requires that workers need to be informed and trained about sanitation and health care issues and the specific hazards of their work.</p>
<p><i>SNIP 2.05.02-85 Building Code & Regulations for Automobile Roads Ch. 3: Environmental Protection</i></p>	<p>Indicates the general need to minimize adverse environmental impacts in road design and provides, for instructions on the removal and re-use of top soil (no. 3.4); the need to provide buffer between the road and populated areas and to carry out noise reduction</p>

Reference	Description
	measures to assure compliance with the relevant sanitary norms (no. 3.9); on the dumping of excess materials (no. 3.12);
<i>Safety Regulations for Construction, Rehabilitation, and Maintenance of Roads, 1978</i>	Compilation of safety rules related to technical safety requirements of road construction equipment, rehabilitation of bridge, operation and maintenance of asphalt plants, working with toxic substances, working in borrow sites etc.
<i>The Law of the Republic of Azerbaijan on Sanitary and Epidemiological Safety, 1993</i> Section III: Responsibilities of State Bodies, Agencies, Companies... on the Provision of Sanitary and Epidemiological Safety	General framework provisions on the requirement to provide healthy and safe conditions at workplaces and work camps (and many others) in compliance with the relevant sanitary hygiene, construction regulations, and norms (particularly items 14, 15 and 16).
<i>BCH 8-89</i> Regulations on Environmental Protection in Construction, Rehabilitation and Maintenance of Roads	Comprehensive provisions on environmental protection measures in road construction such as use of soils, protection of surface and groundwater resources, protection of flora and fauna, use, preparation and storage of road construction machinery and materials, servicing of construction machinery; provisional structures, provisional roads, fire protection, borrow pits and material transport, avoidance of dust, protection of soils from pollution, prevention of soil erosion etc. The appendices to this document also include state standards for: maximum permitted concentrations of toxic substances; noise control measures; soil pollution through losses of oil and fuel from construction equipment; quality of surface water.
<i>Sanitary Norms CH</i> 2.2.4/2.1.8.562-96; 1997	Ambient noise quality standards for residential, commercial and industrial areas, hospitals and schools (day/night standards);

As stated in Article 151 (Legal value of international acts) of the Azerbaijan Constitution, agreements in International Conventions supersede national laws in case of conflict. This principle is embodied in Articles 81 and 82, Chapter 14 (International Co-Operation on Environment Protection Issues) of the Law on Environmental Protection. Furthermore, Azerbaijan is signatory to most international agreements and conventions relating to the environment, as shown in Table below.

Table 3: International Agreements and Conventions

International Convention	Year Ratified
UNESCO Convention on Protection of World Cultural and Natural Heritage	1994
UN Framework on Climate Change	1995
UN Convention for the Protection of the Ozone Layer (Vienna Convention)	1996
Kyoto Protocol on Greenhouse Gas Emissions	1997
Agreement on Mutual Cooperation of the Commonwealth of Independent States in the area of Hydrometeorology	1998
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and Agreement on Protection of Sturgeons	1998
UN Convention to Combat Desertification	1998
Aarhus Convention on Access to Information, Public Participation in Decision Making and Access to Justice for Environmental Matters	1998
UN Convention on Environmental Impact Assessment in the Trans-boundary Context (Espoo Convention)	1999
Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)	1999
UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention)	1999
UNESCO Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention)	2001

International Convention	Year Ratified
UNECE Convention on the Protection and Use of Trans-boundary Watercourses and International Lakes (Helsinki Convention)	2000
UN Convention on Biological Diversity	2000
FAO Convention on Plant Protection	2000
Protocol on UN Framework Convention on Climate (Kyoto Protocol)	2000
Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol)	2000
European Agreement about Transportation of Dangerous Goods on International Routes	2000
UN Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention)	2001
UNECE Convention on Long-Range Trans-boundary Air Pollution	2002

Source: Scott Wilson Ltd, D112140EAEMP

On July 18, 2001, the Republic of Azerbaijan ratified the treaties of the Convention on Wetlands of International Importance as Waterfowl Habitation which was held in Ramsar city (Iran) and which later became to be known as the Ramsar Convention. The Ramsar Convention was the first of the modern global intergovernmental treaties on the conservation and sustainable use of natural resources, and emphasized on the conservation and wise use of wetlands primarily as habitat for water birds. Traditionally regarded as wastelands, wetlands were at constant threat due to conversion of use, especially to agriculture. With the Ramsar Convention, the importance of wetlands has been recognized in sustainable development and for conservation of world's biodiversity. In Azerbaijan wetlands perform vital functions such as flood control, water purification, water regulation, production of fish and etc., making them essential in the biophysical health of the areas. Primarily the signatories to the Ramsar Convention are expected to do the following: (i) specify at least one wetland on a List of Wetlands of International Importance; (ii) encourage the wise use of wetlands; (iii) establish wetland reserves, cooperate in the exchange of information and shared wetlands species.

The following are other laws with relevance to Environment and Roads:

-) *Azeri Law on Automobile Roads (March 10, 2000) Section 39: Protection of the Environment:* States that any construction or reconstruction of roads requires the official approval of the Ecological Committee. State of the art technology must be applied and that chemicals used must be environmentally sound. The unit of the Ministry responsible for road environment must approve the proposed environmental, health and safety norms of the construction.
-) *SNIP 2.05.02-85 Building Code & Regulations for Automobile Roads Ch. 3: Environmental Protection:* Indicates the general need to minimize adverse environmental impacts in road design and provides for instructions on the removal and re-use of top soil (no. 3.4); the need to provide buffer between the road and populated areas and to carry out noise reduction measures to assure compliance with the relevant sanitary norms (no. 3.9); on the dumping of excess materials (no. 3.12).
-) *The Law of the Republic of Azerbaijan on Sanitary and Epidemiological Safety, 1993 Section III: Responsibilities of State Bodies, Agencies, Companies on the Provision of Sanitary and Epidemiological Safety:* General framework provisions on the requirement to provide healthy and safe conditions at workplaces and work camps (and many others) in compliance with the relevant sanitary hygiene, construction regulations and norms (particularly items 14, 15, and 16).
-) *Safety Regulations for Construction, Rehabilitation and Maintenance of Roads, 1978:* Comprehensive compilation of safety rules to technical safety requirements of road construction equipment, operation and maintenance of asphalt plants, work in borrow sites, loading and unloading operations, work with toxic substances, etc.
-) *SNIP III-4-80 Norms of Construction Safety:* Detailed regulations on construction worker's health and safety. Chapters 2 and 5 provide organizational procedures of construction and work sites and material transport. Annex 9 contains standards on maximum concentrations of toxic substances in the air of working zones; Annex 11 states that workers need to be informed and trained about sanitation and health care issues and the specific hazards of their work.
-) *Guidelines for Road Construction, Management and Design, February 7, 2000: Part I: Planning of Automobile Roads:* Addresses environmental issues in road design, construction and

maintenance. Part II: Construction of Automobile Roads: Requires that the impacts on the ecological, geological, hydro-geological and other ecological conditions are minimized by implementing adequate protective measures. Part III: Protection of the Environment: Requires the consideration of appropriate protection measures, which shall contribute to the maintenance of stable ecological and geological conditions as well as the natural balance. Provides general overview on the requirements for environmental protection.

-) *BCH 8-89 Regulations on Environmental Protection in Construction, Rehabilitation and Maintenance of Roads*: Comprehensive provisions on environmental protection measures of surface and groundwater resources; protection of flora and fauna; use, preparation and storage of road construction machinery and materials; servicing of construction machinery; provisional structures; provisional roads; fire protection; borrow pits and material transport; avoidance of dust; protection of soils from pollution, prevention of soil erosion etc. The appendices to this document also state standard for: maximum permitted concentrations of toxic substances; noise control measures; soil pollution through losses of oil and fuel from construction equipment; quality of surface water.
-) *Sanitary Norms CH 2.2.4/2.1.8.562-96, 1997*: Ambient noise quality and maximum allowable noise level standards for residential, commercial and industrial areas, hospitals and schools (day/night standards).
-) *Reg. 514-1Q-98 Regulation on Industrial and Municipal Waste*: This law includes requirements for industry and enterprises on the implementation of identified standards, norms and environmental protection for waste when designing, constructing or reconstructing.

2.3 Applicable World Bank Environment and Social Standards (ESS)

The ESMP for Subcomponent 1.1 is prepared to address the environmental and social risks and impacts associated with the **RCDP** and addresses issues related to the relevant ESSs as follows:

- **ESS 1 Assessment and Management of Environmental and Social Risks and Impacts**
 -) An overview of the Azerbaijan Environment and Social Assessment policies, legal, and administrative conditions.
 -) Assessment of the environmental and social baseline conditions of the Project area, including geography, climate (rainfall for climate change relevance), biodiversity, landscape, environmental sensitivities, socio-economic indicators, etc.
 -) Identification of vulnerable and disadvantaged groups who may be disproportionately affected by project activities or face obstacles to benefit for the project in equitable manner, and proposal of project activities to ensure that vulnerable populations to reduce or eliminate such obstacles for vulnerable populations.
 -) ESMP guidelines for the identification and assessment of potential environmental and social risks and impacts and determination of generic mitigation measures to be undertaken for identified activities at all stages - from identification and selection, through the design and implementation, to the monitoring and evaluation of results which will include:
 - Instructions on identifying environmental and social risks and impacts.
 - Developing mitigation measures and monitoring activities.
 - Outlining roles and responsibilities for implementing ESMPs.
 - Detailing labour management requirements.
 - Outlining stakeholder engagement.
 - Quantifying the costs and benefits of alternatives; and
 - Incorporating the estimated costs of implementing the ESMPs.
 - Guidance on preparing ESMP Implementation Budgets that include:
 - A clear statement of financial responsibilities.
 - Identification and summaries of costs for implementation of proposed mitigation measures; and
 - Guidance on preparing detailed estimated budgets and contingencies for all project phases including planning, implementation, monitoring and evaluation.

➤ **ESS 2 Labor & Working Conditions**

- With due considerations on direct workers and contracted workers, this ESMF presents:
- Labor Management Procedures (LMP) that will detail the requirements for labor management in each of the types of activities to be financed (Also to be part of ESMP requirements).
- Guidelines on Environment Health and Safety (EHS) including specific instruments that will need to be prepared either by the client or the contractor prior to commencement of works (ESH checklists, codes of conduct; safety training etc.).
- Guidelines on incorporation of social and environmental mitigation measures based on the WBG EHS Guidelines and the ESMF into civil works contracts financed by the Project. All civil works contracts will include industry standard Codes of Conduct that include measures to prevent Gender Based Violence/Sexual Exploitation and Abuse (GBN/SEA).
- A locally based Grievance Redress Mechanism (GRM) specifically for direct and contracted workers. In addition, internal GRM for project workers (Contractors/ Subcontractors, and PIU-SAAAR, etc.) should also be established to address internal matters.

➤ **ESS 3 Resource Efficiency and Pollution Prevention and Management.**

- Discussions on resource efficiency, pollution prevention and management, assessment of risks and impacts (with proposed mitigation measures); and to be included into the specific ESMP outline.

➤ **ESS 4 Community Health and Safety.**

- Adverse impacts on the health and safety of surrounding communities are anticipated during the construction and refurbishment works.
- Elaboration on potential risks and impacts associated with labor influx, gender-based violence / sexual exploitation and abuse and sexual harassment as a result of project activities, and use of security forces.

➤ **ESS 5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement.**

- Though the RCDP may not require land acquisition, land use restrictions, or involuntary resettlement, prior to Project Appraisal, a Resettlement Policy Framework (RPF) has been prepared (as a separate document) to guide the management of ESS5-related impacts if any are encountered during implementation.
- The RPF, to be approved and disclosed by Project Appraisal, sets out the procedures to be followed if resettlement impacts occur in the course of the Project, including the procedures for the preparation and implementation of site-specific Resettlement Action Plans.

➤ **ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources.**

- With the existence in the vicinity of the Project area of protected areas, sites of high ecological value, and natural water bodies, a set of environmental and social applicable screening criteria has been provided. This is to ensure that project activities will not cause adverse impacts on biodiversity and living natural resources in the Project area, in order to ensure that any risks of impacting biodiversity and natural resources are avoided or minimized.

➤ **ESS 8 Cultural Heritage.**

- In case of discovery of significant archaeological or cultural artifacts, Chance Find Procedures will be included herein and in the template for site-specific ESMPs. Basically, the Chance Find Procedure is a process that prevents chance finds from being disturbed until an assessment by a competent specialist is made and actions consistent with the requirements are implemented. In the event of discovery of a “chance find” the steps to be followed consist of the following:

- (i) stop all works in the vicinity of the find, until preservation method has been decided
- (ii) Notify concerned personnel (immediate supervisors and SAAAR Safeguards Specialist;
- (iii) Record details in Incident Report and take photos of the find;
- (iv) Delineate and secure the discovered site or area;
- (v) Conduct preliminary evaluation of the findings by SAAAR Safeguards Specialist; and if necessary, government archaeologists;
- (vi) Concerned agencies are to conduct their own investigations in reasonable time
- (vii) 11. Construction works could resume only after permission is granted from the responsible authorities (tentatively around 2 weeks).

➤ **ESS 10 Stakeholder Engagement and Information Disclosure.**

- Herein a summary of Stakeholder Engagement Plan (SEP) activities is included to enable the Project to identify elaborately different stakeholders and provide an approach towards reaching each of the sub-groups.
- The SEP (a separate document) also identifies impediments, if any, at reaching out to stakeholders as well as reflect/ build capacity of the client in engaging with stakeholders

2.4 Project Environment and Social Risks (referenced by WB ESSs)

The RCDP takes full cognizance of the Environmental and Social Standards that the Borrower (Government of Azerbaijan – SAAAR) and the project will meet through the project life cycle, as described below on the applicable ESSs:

➤ **ESS 1 – Assessment and Management of Environmental and Social Risks and Impacts**

ESS1 establishes the Client's (*Gov. of Azerbaijan – SAAAR*) responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs) (*ESS1 par. 1*). The fundamental requirements **for Subcomponent 1.1** are as follows:

- Z The Client will undertake an environmental and social assessment to assess the environmental and social risks and impacts of a project throughout the project life cycle (*ESS1 par. 14, 23*).
- Z Expected Actions of the Borrower: (a) Conduct an environmental and social assessment of the proposed project, including stakeholder engagement; (b) Undertake stakeholder engagement and disclose appropriate information in accordance with ESS10; (c) Develop an ESCP, and implement all measures and actions set out in the legal agreement including the ESCP; and (d) Conduct monitoring and reporting on the environmental and social performance of the project against the ESSs (*ESS1 par. 15*).
- Z The environmental and social assessment is the primary means of ensuring projects are environmentally and socially sound and sustainable and will be used to inform decision making (*ESS1 Annex 1 par. 2*).
- Z The Client will undertake the environmental and social assessment at the scale and level of detail appropriate to the potential risks and impacts (*ESS1 Annex 1 par. 3*).
- Z The environmental and social assessment will be based on current information, including a description and delineation of the project and any associated aspects, and environmental and social baseline data at an appropriate level of detail sufficient to inform characterization and identification of risks and impacts and mitigation measures. The assessment will evaluate the project's potential environmental and social risks and impacts; examine project alternatives; identify ways of improving project selection, siting, planning, design and implementation in order to apply the mitigation hierarchy for adverse environmental and social impacts and seek opportunities to enhance the positive impacts of the project (*ESS1 par. 24*).

- Z The Borrower will ensure that the environmental and social assessment takes into account in an appropriate manner all issues relevant to the project, including: (a) the country's applicable policy framework, national laws and regulations, and institutional capabilities (including implementation) relating to environment and social issues; variations in country conditions and project context; country environmental or social studies; national environmental or social action plans; and obligations of the country directly applicable to the project under relevant international treaties and agreements; (b) applicable requirements under the ESSs; and (c) the EHSGs, and other relevant Good International Industry Practice (GIIP) The assessment of the project, and all proposals contained in the assessment, will be consistent with the requirements of this paragraph.(ESS1 par. 26).
- Z The environmental and social assessment will apply a mitigation hierarchy, which will: (a) Anticipate and avoid risks and impacts; (b) Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels; (c) Once risks and impacts have been minimized or reduced, mitigate; and (d) Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible (ESS1 par. 27).
- Z The environmental and social assessment, informed by the scoping of the issues, will take into account all relevant environmental and social risks and impacts of the project, as detailed in ESS1 par. 28.
- Z The environmental and social assessment will be conducted in accordance with ESS1, and will consider, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts of the project, including those specifically identified in ESS2–10. The breadth, depth, and type of analysis undertaken as part of the environmental and social assessment will depend on the nature and scale of the project, and the potential environmental and social risks and impacts that could result. The Borrower will undertake the environmental and social assessment at the scale and level of detail appropriate to the potential risks and impacts (ESS1 Annex 1 par. 3).
- Z The environmental and social assessment will include stakeholder engagement as an integral part of the assessment, in accordance with ESS10 (ESS1 par. 24).
- Z The environmental and social assessment will include and take into account coordination and consultation with affected people and other interested parties, particularly at an early stage, to ensure that all potentially significant environmental and social risks and impacts are identified and addressed (ESS1 Annex 1 par. 4).
- Z For projects involving multiple small subprojects, that are identified, prepared and implemented during the course of the project, the Borrower will carry out appropriate environmental and social assessment of subprojects, and prepare and implement such subprojects, as follows: (a) High Risk subprojects, in accordance with the ESSs; (b) Substantial Risk, Moderate Risk and Low Risk subprojects, in accordance with national law and any requirements of the ESSs that the Bank deems relevant to such subprojects.(ESS1 par. 30)

➤ **ESS 2 – Labor and Working Conditions**

ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions. This Standard applies to project workers including fulltime, part-time, temporary, seasonal and migrant workers. ESS2 aims to: promote safety and health at work and the fair treatment, nondiscrimination and equal opportunity of project workers; to protect project workers, including vulnerable workers such as women, persons with disabilities; children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate; to prevent the use of all forms of forced labor and child labor; to support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law; to provide project workers with accessible means to raise workplace concerns. (ESS2 par. 1). Under this ESS2, the

relevant risks in RCDP would include in general unfair practices in the employment, discrimination, exploitation, etc., that will result undue suffering of project workers.

In general, **for Subcomponent 1.1** the Borrower will develop and implement written labor management procedures applicable to the project. These procedures will set out the way in which project workers will be managed, in accordance with the requirements of national law and this ESS. The procedures will address the way in which this ESS will apply to different categories of project workers including direct workers, and the way in which the Borrower will require third parties to manage their workers in accordance with (ESS2's) paragraphs 31–33 (*ESS2 par.9*).

➤ **ESS 3 – Resource Efficiency, Pollution Prevention and Management**

ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the welfare of current and future generations. At the same time, more efficient and effective resource use, pollution prevention and GHG emission avoidance, and mitigation technologies and practices have become more accessible and achievable. This ESS sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle consistent with GIIP. (*ESS3 par. 1*). For RCDP, ESS3 targets on promoting resource efficiency of resources for road construction (materials, water, energy, etc.) and prevention of contamination at project sites. The applicability of this ESS is established during the environmental and social assessment described in ESS1 (*ESS3 par. 2*). Among the important requirements **for Subcomponent 1.1** are as follows:

- Z **Resource Efficiency** - The Borrower will implement technically and financially feasible measures for improving efficient consumption of energy, water and raw materials, as well as other resources. Such measures will integrate the principles of cleaner production into product design and production processes to conserve raw materials, energy and water, as well as other resources. Where benchmarking data are available, the Borrower will make a comparison to establish the relative level of efficiency (*ESS3 par. 5*). This covers:
 - A. Energy use - efficient use of energy
 - B. Water use - When the project is a potentially significant user of water or will have potentially significant impacts on water quality,
 - C. Raw material use - When the project is a potentially significant user of raw materials
- Z **Pollution prevention and management** - The Borrower will avoid the release of pollutants or, when avoidance is not feasible, minimize and control the concentration and mass flow of their release using the performance levels and measures specified in national law or the EHSGs, whichever is most stringent. This applies to the release of pollutants to air, water and land due to routine, non-routine, and accidental circumstances, and with the potential for local, regional, and transboundary impacts (*ESS3 par. 11*). This covers:
 - A. Management of air pollution – Borrower will characterize and estimate sources of air pollution related to the project whenever technically and financially feasible.
 - B. Management of hazardous and nonhazardous wastes - Borrower will avoid, if not, minimize the generation of waste, and reuse, recycle and recover waste in a manner that is safe for human health and the environment
 - C. Management of chemicals and hazardous materials - Borrower will minimize and control the release and use of hazardous materials
 - D. Management of pesticides - Borrower will assess the nature and degree of associated risks, taking into account the proposed use and the intended users.

➤ **ESS 4 – Community Health and Safety 237.**

ESS4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project activities (*ESS4 par. 3*). The potential RCDP risks involve health and welfare hazards of the people in the community affected by RCDP (including risks of infection of COVID-19 virus) due to works related to construction or contact with workers of the project. The applicability of this ESS is established during the environmental and social assessment described in ESS1 (*ESS4 par. 3*). Among the important requirements pertinent to RCDP in **for Subcomponent 1.1** are as follows:

A. **Community health and safety** – Borrower will evaluate the risks and impacts of the project on the health and safety of the affected communities during the project life cycle (*ESS4 par.5*).

This covers:

- Z **Infrastructure and equipment design and safety** - Borrower will design, construct, operate, and decommission the structural elements of the project in accordance with national legal requirements, the EHSs and other GIIP, taking into consideration safety risks to third parties and affected communities
- Z **Traffic and road safety** - Borrower will identify, evaluate and monitor the potential traffic and road safety risks to workers, affected communities and road users throughout the project life cycle and, where appropriate, will develop measures and plans to address them.
- Z **Safety related to construction works, excavations, access to public, residential, or other properties** – Where project works occur close to or within residential areas, all excavations should be secured and safe access to homes, economic activities, and public services, for cars and pedestrians, ensured through the duration of the project.
- Z **Ecosystem services** - The project's direct impacts on ecosystem services may result in adverse health and safety risks to and impacts on affected communities. With respect to this ESS, ecosystem services are limited to provisioning and regulating services as defined in ESS1.
- Z **Community exposure to health issues** - Borrower will avoid or minimize the potential for community exposure to water-borne, water-based, water-related, and vector-borne diseases, and communicable and non-communicable diseases that could result from project activities, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups.
- Z **Sexual exploitation and abuse, sexual harassment (SEA/SH)** – SEA/SH risk is assessed as low as no significant labor influx is expected under project; nevertheless, measures will be put in place for the prevention and mitigation of SEA/SH risks, as described below.
- Z **Management and safety of hazardous materials** - will avoid or minimize the potential for community exposure to hazardous materials and substances that may be released by the project.
- Z **Emergency preparedness and response** - Borrower will identify and implement measures to address emergency events, which are unanticipated incidents, arising from both natural and man-made hazards, typically in the form of fire, explosions, leaks or spills, which may occur for a variety of different reasons, including failure to implement operating procedures that are designed to prevent their occurrence, extreme weather or lack of early warning.

B. **Security personnel** - When the Borrower retains direct or contracted workers to provide security to safeguard its personnel and property, it will assess risks posed by these security arrangements to those within and outside the project site

➤ **ESS 5 – Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement**

ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons and sets forth requirements for their avoidance and mitigation. This standard is not relevant for the Project. This ESS is covered in Resettlement Policy Framework (RPF). The Resettlement Policy Framework (RPF) expounds the policies and procedures to ensure that project affected persons (PAPs) are adequately consulted regarding the project activities and receive compensation or assistance that will at least restore their living status to pre-displacement

levels. The risks under this ESS5 consist of deprivation of actual compensation due to direct relocation (if needed) or economic burden arising from earnings and livelihood impacts. The RPF **for Sub-component 1.1** as per ESS5, shall assess potential expected risks and impacts, identify detailed steps to develop appropriate mitigation measures, including mitigation and compensation for the impact caused under the project including:

-) Temporary or permanent involuntary land acquisition;
-) Loss of, or impact on, assets or access;
-) Loss of standing crops, trees income source or livelihoods, regardless of whether the PAPs will be resettled, or not;
-) Restricted access to natural resources, public places and services;
-) Legal framework, eligibility criteria of displaced population, valuation methodology, compensation provision, entitlement matrix, implementation process, consultation procedures;
-) Due diligence procedures in case of project interventions linked to other development activities supported by the government and other funding agencies;
-) Grievance redress mechanisms, entitlement payment procedures, and monitoring and evaluation procedures for land acquisition and resettlement under this project.

➤ **ESS 6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources**

ESS6 recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development. Biodiversity is defined as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems. Biodiversity often underpins ecosystem services valued by humans. Impacts on biodiversity can therefore often adversely affect the delivery of ecosystem services (*ESS6 par. 1*). This ESS is applied: (i) during the environmental and social assessment described in ESS1 (*ESS6 par. 5*); (ii) to all projects that potentially affect biodiversity or habitats, either positively or negatively, directly or indirectly, or that depend upon biodiversity for their success; and (iii) to projects that involve primary production and/or harvesting of living natural resources. The risks in ESS6 pertain to RCDP impacts to biota and biodiversity in the ecosystem due to introduced contamination or disturbance to natural habitats of living organisms. Among the requirements that may be relevant to RCDP **for Subcomponent 1.1** are as follows:

- Z The environmental and social assessment as set out in ESS1 will consider direct, indirect and cumulative project-related impacts on habitats and the biodiversity they support (*ESS6 par. 8*).
- Z The Borrower will avoid adverse impacts on biodiversity and habitats. When avoidance of adverse impacts is not possible, the Borrower will implement measures to minimize adverse impacts and restore biodiversity in accordance with the mitigation hierarchy provided in ESS1 and with the requirements of this ESS (*ESS6 par. 9*). Specifically, this covers: (i) *Assessment of risks and impacts*; (ii) *Conservation of biodiversity and habitats (modified, natural and critical habitats)*; (iv) *Legally protected and internationally recognized areas of high biodiversity value*; (v) *Invasive alien species*; and (vi) *Sustainable management of living natural resources*
- Z Primary suppliers - Where a Borrower is purchasing natural resource commodities, including food, timber and fiber, that are known to originate from areas where there is a risk of significant conversion or significant degradation of natural or critical habitats, the Borrower's environmental and social assessment will include an evaluation of the systems and verification practices used by the primary suppliers (*ESS6 par. 38*).

➤ **ESS 7 – Indigenous Peoples, Sub-Saharan African Historically Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

This ESS7 applies whenever Indigenous Peoples / Sub-Saharan African Historically Underserved Traditional Local Communities (as they may be referred to in the national context) are present in, or have collective attachment to a proposed project area, as determined during the environmental and social assessment. Since there are no indigenous people in the RCDP areas, this Standard is not relevant.

➤ **ESS 8 – Cultural Heritage**

ESS8 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future and formulates requirements aimed at reducing or avoiding negative impacts on tangible and intangible cultural heritage. The risks in RCDP covers destruction and obliteration of cultural items which may result to permanent loss or irreparable damage of artifacts important to the culture of Azerbaijan. Under this ESS the requirements that may be relevant to RCDP **for Subcomponent 1.1** are as follows:

General

- Z Consider direct, indirect and cumulative project-specific risks and impacts on cultural heritage (*ESS8 par. 8*);
- Z Avoid impacts on cultural heritage When avoidance of impacts is not possible, the Borrower will identify and implement measures to address impacts on cultural heritage in accordance with the mitigation hierarchy (*ESS8 par. 9*);
- Z Implement globally recognized practices for field-based study, documentation and protection of cultural heritage in connection with the project, including by contractors and other third parties (*ESS8 par. 10*);

Stakeholder consultation and identification of cultural heritage (*ESS8 par. 13-14*)

- Z Identify, (in accordance with ESS10), stakeholders that are relevant for the cultural heritage and carry out meaningful consultations maintaining confidentiality (*ESS8 par. 15*) and stakeholder' access (*ESS8 par. 16*).

Provisions for specific types of cultural heritage (*ESS8 par. 18-18*)

- Z This covers: (i) Archaeological sites and material; (ii) Built heritage; (iii) Natural features with cultural significance; and (iv) Movable cultural heritage

Commercial use of cultural heritage (*ESS8 par. 29-30*)

- Z Pertains to cultural heritage of project affected parties (including individuals and communities) for commercial purposes.

Under this ESS, in case of discovery of significant archaeological or cultural artifacts, "Chance Find Procedures" shall be used for site-specific ESMPs (Sample is shown in the Annex).

➤ **ESS 9 – Financial Intermediaries (FI)**

ESS9 applies to Financial Intermediaries that receive financial support from the World Bank. This standard is not relevant for the RDCP.

➤ **ESS 10 – Stakeholder Engagement and Information Disclosure**

This ESS recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation (*ESS10 par. 1*). This ESS is covered in Stakeholder Engagement Plan (SEP) and to be applied **for Subcomponent 1.1**. The SEP provide ways to identify potential different stakeholders, to develop an approach for reaching each of the subgroups, to create a mechanism by which Project-Affected Parties (P-APs) and Other Interested Parties (OIPs) can raise concerns, provide feedback, or make complaints, and to minimize and mitigate environmental and social risks related to the proposed project. The recognized risks in the RCDP may entail exclusion of people's concern as well as further marginalization of vulnerable and disadvantaged groups of the local society. Overall, SEP serves the following purposes (*ESS10 par. 8*):

- (i) Stakeholder identification and analysis;
- (ii) Planning how the engagement with stakeholders will take place; (iii) disclosure of information;
- (iii) Consultation with stakeholders;
- (iv) Addressing and responding to grievances; and
- (v) Reporting to stakeholders.

2.5 Gap Analysis: WB ESF and National Legislation

In the World Bank's committed goal to ending extreme poverty and promoting shared prosperity, its Environmental and Social Framework (October 2018) presents the following:

-) **A Vision for Sustainable Development**, which sets out the Bank's aspirations regarding environmental and social sustainability;
-) The World Bank Environmental and Social Policy for Investment Project Financing, which sets out the mandatory requirements that apply to the Bank; and
-) **The Environmental and Social Standards**, together with their Annexes, which set out the mandatory requirements that apply to the Borrower and projects focuses on preventing and mitigating negative impacts to social and physical environment throughout the project cycle.

In its vision, the World Bank sets forward a set of global aspirations consisting of global engagement in issues such as climate change, disaster risk management, and gender equality, to ensuring that environmental and social considerations are reflected in all sector strategies, operational policies, and country dialogues. At the project level, these global aspirations translate into enhancing development opportunities for all, particularly the poor and vulnerable, and promoting the sustainable management of natural and living resources. Therefore, within the parameters of a project, the Bank seeks to:

-) Avoid or mitigate adverse impacts to people and the environment;
-) Conserve or rehabilitate biodiversity and natural habitats, and promote the efficient and equitable use of natural resources and ecosystem services;
-) Promote worker and community health and safety;
-) Ensure that there is no prejudice or discrimination toward project-affected individuals or communities and give particular consideration to Indigenous Peoples, minority groups, and those disadvantaged or vulnerable, especially where adverse impacts may arise or development benefits are to be shared;
-) Address project-level impacts on climate change and consider the impacts of climate change on the selection, siting, planning, design and implementation and decommissioning of projects; and
-) Maximize stakeholder engagement through enhanced consultation, participation and accountability.

Based on WB's Environmental and Social Policy for Investment Project Financing, the projects supported by the Bank through Investment Project Financing are required to meet the following Environmental and Social Standards:

-) 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;
-) ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;
-) ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
-) ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities;
-) ESS8: Cultural Heritage;
-) ESS9: Financial Intermediaries; and
-) ESS10: Stakeholder Engagement and Information Disclosure.

As footnoted in the Policy, it replaces the following Operational Policy (OP) and Bank Procedures (BP):

- OP/BP4 00, Piloting the Use of Borrower Systems to Address Environmental and Social Safeguard Issues in Bank-Supported Projects;
- OP/BP4 01, Environmental Assessment;
- OP/BP4 04, Natural Habitats;

- OP4 09, Pest Management;
- OP/BP410, Indigenous Peoples;
- OP/BP411, Physical Cultural Resources;
- OP/BP412, Involuntary Resettlement;
- OP/BP4 36, Forests; and
- OP/BP4 37, Safety of Dams.

However, the Policy does not replace OP/BP4 03, Performance Standards for Private Sector Activities, OP/BP750, Projects on International Waterways, and OP/BP760, Projects in Disputed Territories.

These ESS details the requirements for the World Bank and Borrowers for comply with in the overall project cycle starting from identification, preparatory works (Pre-feasibility Study/ Feasibility Study) and implementation (design/procurement and construction) of programs and projects.

As stipulated in the Policy (par. 23) The Bank supports the use of the Borrower’s ES Framework in the assessment, development and implementation of projects supported through Investment Project Financing, provided this is likely to address the risks and impacts of the project, and enable the project to achieve objectives materially consistent with the ESSs. Accordingly, an analysis of the Environmental and Social Framework vis-à-vis the ESS is shown below.

Table 4: WB ESF and Azerbaijan Policies Considered in the Environmental and Social Assessment

Items with Difference	WB’s ESF	Azerbaijan Policy	Measures to Address Differences
Assessment of project impacts	ESS1 is comprehensive and considers the full scope of project impacts from an environmental and social perspective, integrating all these aspects. In addition, the ESF has particular standards that deal with labor, gender and community health and safety, among others, as well as ensuring disadvantaged and vulnerable people/ groups are not disproportionately affected by projects’ adverse impacts or disadvantaged in sharing development benefits.	Azerbaijan legislation focuses on project impacts from an environmental point of view and does not consider social, gender and labor impacts, among others, as well as cumulative and transboundary impacts. Also does not consider the specific needs of vulnerable people (the poor, elderly, women-headed households, people living with a disability, etc.)	This ESMP covers both direct, indirect and cumulative environment and social risks/impacts and proportionate mitigation measures, taking a holistic approach to the project and looking at impacts in an integrated way, including considering the needs of disadvantaged and vulnerable persons or groups. Future ESMPs (updates) will also detail how to conduct detailed impact and risk assessment and the definition of proportionate mitigation of measures
Mitigation hierarchy	WB ESF, in particular ESS1 (but also ESS 5, 6 and 7), discusses the need to have a mitigation hierarchy when planning projects, in order to avoid, minimize or, if not possible, mitigate project impacts. Having a mitigation hierarchy allows project planners to plan their projects with potential for environment and social impacts in mind.	There is no mitigation hierarchy in Azerbaijan legislation.	This ESMP discusses a mitigation hierarchy to be followed by project planners/designers when choosing road sections for rehabilitation and conducting detailed engineering designs.

Items with Difference	WB's ESF	Azerbaijan Policy	Measures to Address Differences
Minimum working age	<p>ESS 2 para 19, and footnote 13, notes that a child under the age of 18 may be employed or engaged in connection with the project if there is no hazardous work, an appropriate risk assessment is conducted prior to the work commencing, and the Borrower conducts regular monitoring of health, working conditions, hours of work.</p>	<p>Minimum working age in Azerbaijan is 15. No hazardous work is permitted for children under 18. Work (with parents'/guardians' permission) is allowed for ages 15-18. However, stricter enforcement is needed.</p>	<p>This ESMP will propose a minimum working age of 18 years due to the potential for hazardous work related to RCDP particularly to road rehabilitation.</p>
Eligibility Classification	<p>Lack of title should not be a bar to compensation and/or rehabilitation. Non-titled landowners receive rehabilitation and assistance. <i>(ESS5 Eligibility Classification, par. 10)</i></p> <p>- Where the DP's are legal owner, or have right to the land, Borrower will offer the choice of replacement property of equal or higher value, with security of tenure, equivalent or better characteristics, and advantages of location, or cash compensation at replacement cost</p> <p>Compensation in kind should be considered in lieu of cash. <i>(ESS5 Physical displacement, par. (28))</i></p> <p>- Where the DP's own structures, the Borrower will compensate them for the loss of assets other than land, such as dwellings and other improvements to the land, at replacement cost. <i>(ESS5 Physical displacement, par. 29)</i></p>	<p>Compensation to title holders; tenant with legal rights; legal long-term occupants including renters. Resettlement assistance for non-title holders.</p>	<p>This ESMP will propose to follow ESS5 consistent with RPF and Azerbaijan legislations</p>
Compensation and benefits for affected persons	<p>Compensation for lost or damaged structures should be based on replacement value. <i>(ESS5 Compensation and benefits for affected persons, par. (12))</i></p>	<p>Compensation to be determined based on market value as well as replacement value. In case both principles are applicable, the one that provides larger compensation will be applied. (Article 55.2, 58 & 59 of LALSN, 2010).</p> <p>As per the Decree of the President of Azerbaijan, an additional 20% compensation amount shall be paid to cover</p>	<p>This ESMP will propose to follow ESS5 consistent with RPF and Azerbaijan legislations</p>

Items with Difference	WB's ESF	Azerbaijan Policy	Measures to Address Differences
		additional costs. An additional 10% premium for voluntary sale of affected lands. (LALSN, 2010)	
Compensation and benefits for affected persons	Depreciation is not considered in the valuation of structures. (ESS5 <i>Compensation and benefits for affected persons, par. 12</i>)	As per the Decree of the President of Azerbaijan, an additional 20% compensation amount shall be paid to cover additional costs. An additional 10% premium for voluntary sale of affected lands. (LALSN, 2010)	This ESMP will propose to follow ESS5 consistent with RPF and Azerbaijan legislations
Planning and implementation	Resettlement Plan (RP) proportionate to the risks and impacts associated with the project will be prepared in line with the provisions of the World Bank ESS5 to address the issues identified in the environmental and social assessment. (ESS5 <i>Planning and implementation, par. 21</i>)	Under the national legislation (LALSN, 2010), in cases where the number of people to be relocated 100 meters away from their land exceeds 200, a resettlement plan is to be prepared. In other cases, only a resettlement manual will be prepared.	This ESMP will propose to follow ESS5 consistent with RPF and Azerbaijan legislations
Grievance mechanism	Complaints & grievances are resolved informally through community participation in the Grievance Redress Committees (GRC), Local governments, and NGO and/or local-level Community Based Organizations (CBOs). (ESS5 <i>Grievance mechanism, par. 19</i>)	Grievance Commission (Article 75 of LALSN, 2010) to be appointed in large scale projects in case of necessity. The Executive Agency, Land Acquisition Group, Control Agency, local Executive Power, municipalities and CSC are able to receive, consider, and solve grievances and complaints.	This ESMP will propose to follow ESS5 consistent with RPF and Azerbaijan legislations
Economic displacement	WB policy requires rehabilitation for income/livelihood, severe losses, and for expenses incurred by the APs during the relocation process. (ESS5 <i>Economic displacement, par. 33-36</i>)	No additional provisions for income rehabilitation, allowances for severely affected or vulnerable APs considered. Notion of 'livelihood rehabilitation' is stipulated in Azerbaijani legislation.	This ESMP will propose to follow ESS5 consistent with RPF and Azerbaijan legislations
Stakeholder Engagement	Public consultation and participation are the integral parts of WB's policy which is a continuous process at conception, preparation, implementation and post implementation period. (ESS5 - <i>annex 1. involuntary resettlement instruments: Community participation, par. 11 & 22; ESS10: Stakeholder Engagement and Information Disclosure</i>)	Public meetings are to be conducted to discuss land expropriation proposal at the preparatory stage.	A Stakeholder Engagement Plan (SEP) has been developed following the guidelines of ESS10.

The Resettlement Policy Framework (RPF), Labor Management Plan (LMP) and Stakeholder Engagement Plan (SEP) provide more details regarding ESS5, ESS2 and ESS10 respectively.

2.6 Institutional Responsibilities on National Legislation

The following government agencies will be involved in the management and monitoring of environmental aspects or concerns of the Regional Corridor Development Project Subcomponent 1.1 (Regional Road Rehabilitation):

- J State Agency of Azerbaijan Automobile Roads (SAAAR) [Azərbaycan Avtomobil Yolları Dövlət Agentliyi (AAYDA)] State Agency of Azerbaijan Automobile Roads (SAAAR) [Azərbaycan Avtomobil Yolları Dövlət Agentliyi (AAYDA)] is responsible for planning, constructing, operating, and maintenance of national roads in Azerbaijan. The Project Implementation Unit (PIU) of the SAAAR will be in charge of project management, among others, to ensure that appropriate budget will be provided for the implementation of mitigation measures and monitoring the programme, and that the contract provisions are properly implemented. The Ecology and Safety Sector (ESS) of the SAAAR shall coordinate the Environmental and Social Assessment (ESA) study, carry out required public consultations, ensures implementation of the ESMP and public disclosure of the ESA study. The ESS shall also liaise with relevant government offices for securing environmental approvals. During the operational phase of the Project (especially for Sub-components 1.1 and 1.2), SAAAR will undertake routine monitoring of road safety, the storm water drainage system, the condition of tree plantations and re-vegetation, etc.
- J The ESS and the district offices of SAAAR in Rayons along the project road will undertake day-to-day supervision of construction and oversight of the implementation of environmental management plans during project implementation. The Regional Monitoring Department of the Ministry of Environment and Natural Resources (MENR) shall undertake routine and random monitoring of the project to determine compliance with environmental regulations and standards.
- J The Sanitary and Epidemiology Department of the Ministry of Health (MOH) will undertake routine monitoring of the living conditions and sanitary provisions at the contractor's work camp and worksites. MOH's Regional Disinfection Centre shall be involved in approving the contractor's work camp installations and facilities and their compliance with the relevant sanitary and health norms and guidelines.
- J There are four principal environmental institutions (or Ministries in Azerbaijan and the Nakhchivan Autonomous Republic (NAR)) who handle environmental protection, management and operation caused by infrastructure projects. These include (i) MENR, (ii) the Ministry of Health, (iii) the Ministry of Emergency Situations (which implements construction safety supervision), and (iv) AzerSu / State Amelioration and Water Management Agency (SAWMA) who will manage the Water Supply and Sanitation (WSS) in their respective areas under the Investment Program:
- J **Ministry of Ecology and Natural Resources.** Ministry of Ecology and Natural Resources1 (MENR) is the primary institution entrusted with the responsibility of environmental protection and implementation of environmental related laws. The functions and activities of the MENR are sub-divided into the following areas: (i) Environmental policy development; (ii) Environmental protection; (iii) Water monitoring and management; (iv) Protection of marine (Caspian Sea) bio- resources; (v) Forest management; and (vi) Bio-resources and protected areas management. This ministry upholds all of natural resource protection laws. The State Ecological Expertise (SEE) Department, under the Department of Environmental Policy and Environmental Protection of MENR acts within this agency on the Program level in reviewing Environmental Impact Assessments (EIAs). The activities, fields and sectors to which SEE would apply are specified in Article 54 (The units controlled by the SEE) of the EP Law as:
 - The State and local programs related to development and placement of productive capacities in governmental and economical institutions;

- The documentation of technical and economical substantiation, construction (reconstruction, enlargement, and renovation technology) and destruction of economical capacities, as well as assessment of the project influence on environment;
 - Documentation concerning creation of new techniques, technologies, materials, and substances, as well as import of the same from abroad;
 - Draft of scientific-methodical and normative-technical documentation concerning environment protection;
 - Certain ecological conditions caused by improper work of industry and extraordinary situations;
 - Ecological conditions of the regions and individual (separate) natural objects and systems;
 - Provisions of draft contracts stipulating use of natural resources, as specified by the relevant decrees of the concerned executive bodies
-) **Ministry of Health:** (Sanitary and Epidemiology Service sub-body within Azerbaijan only). Sanitary and hygienic safety is the responsibility of the Ministry of Health. Its main function is the implementation of control over meeting the sanitary and epidemiological rules and standards as well as hygienic standards. This entity implements anti-epidemiological measures throughout Azerbaijan and NAR by legal and physical persons through application of laboratory and sampling controls.
-) **Ministry of Emergency Situations** (Commission of Emergency Situations in the NAR). This agency implements construction safety supervision and standards. Their main involvement in this Program will be to regulate safety on site and to road users.
-) **Azersu Open Joint Stock Company** - is in charge of policy and strategy for the water supply and sanitation services in Azerbaijan. The Company makes necessary arrangements for extraction of water from sources followed by treatment, transportation, and sales and takes necessary actions for wastewater treatment. Azersu OJSC engages in the design, construction, operation, and maintenance of intake structures, reservoirs, pumping stations, water pipelines and sewerage collectors. SAWMA is responsible for respective concerns in the Nakhchivan Autonomous Republic,

3 BASELINE DATA

Following the task of preparing an ESMP for Subcomponent 1.1, baseline data has been compiled that serves as overall description of the environmental and social setting prior to commencing the project. The Pre-Feasibility Study prepared for Subcomponent 1.1 has served as primary source of these information supplemented by data from secondary sources as well as additional field inspection along the entire alignment from the starting point at Yenikend in Salyan Rayon to the endpoint at roundabout at the entrance to Bilasuvar city, in Bilasuvar Rayon.

3.1 The Study Area

The study area for the environmental and social assessment of Subcomponent 1.1 consists of the reconstruction/rehabilitation of the main corridor road, the old M3 starting at Yenikend and spanning 71km to the roundabout area at the entrance to Bilasuvar city. The road is envisioned to be reconstructed within the existing right-of-way passing through Salyan city as the main population center and a number of settlements of villages. In addition, the reconstruction will also entail setting up of some ancillary facilities such as potential borrow pits, quarries, access roads, disposal sites for debris, camps, facilities, etc.

Accordingly, since it was envisioned that design for the reconstruction will follow the same alignment and for that the reconstruction activities will be within the existing corridor, the Study Area is determined as: (i) within the existing corridor width for construction impacts as primary Study Area; (ii) direct social impact areas for people and properties alongside the road, as peripheral study area;

(iii) indirect social impacts for communities connected to the project road considered as supplemental study area; and (iv) regional impacts for the 2 rayons and potential sources of raw materials outside the two rayons of Salyan and Bilasuvar, considered as regional study area. The map of the Study Area is shown below.

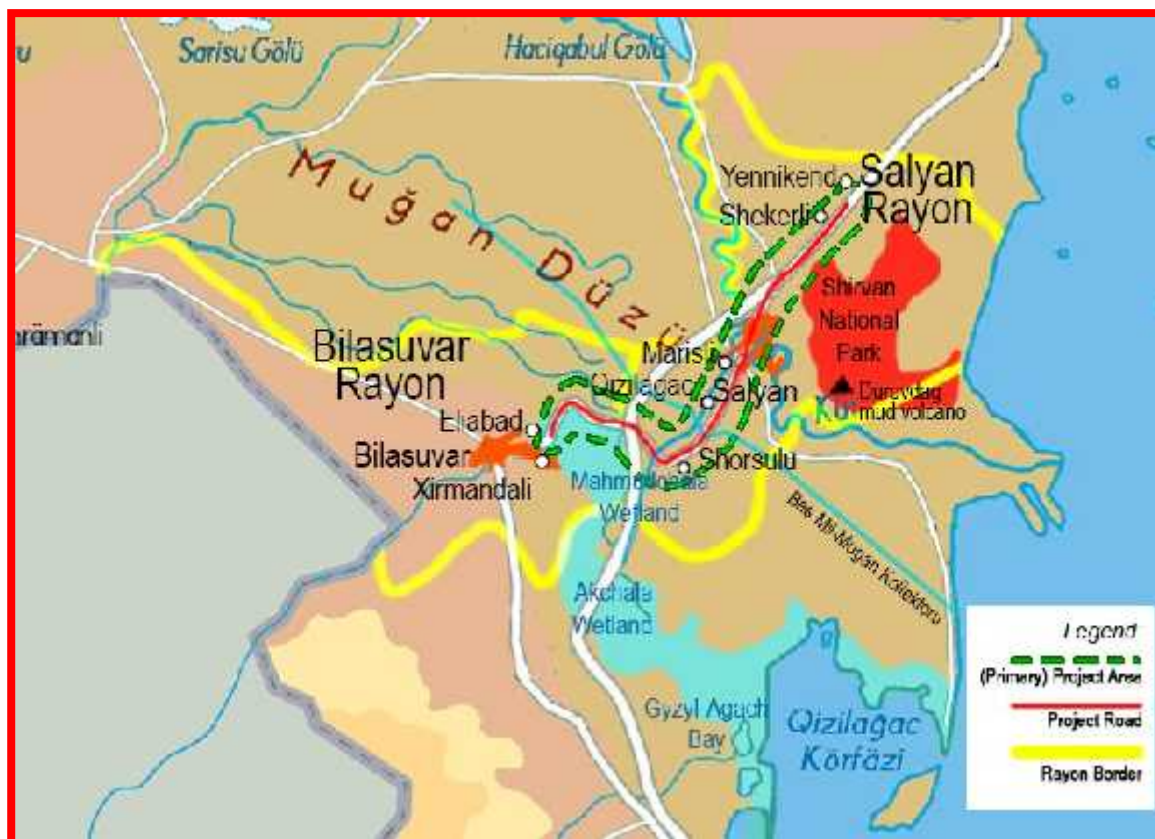


Figure 2: Map of RCDP Study Area

3.1.1 The Project Road Corridor

The RCDP main corridor road starts at Yenikend in Salyan Rayon and ends at the roundabout at the entrance to Bilasuvar. The starting point at Yenikend (designated as km31⁴) is around 110 km from Baku with a road span of around 71 km to its end point in Bilasuvar (designated as Km110) running along the old M3 corridor (original alignment). The reconstruction will entail repaving the 2-lane road with shoulders to properly serve the densely populated proximate residential areas and provide a safe alternative to the new M3 motorway completed in 2018. The design of the road will improve the road safety and introduce adaptation measures to improve resilience to climate change impacts.

The Pre-Feasibility Study covers the road survey chainage at Km 32+125 pegged at Yenikend⁵ and proceeds to the endpoint at Km 102+335. Based on these parameters, the road length for reconstruction will be 70.21 km. From Yenikend to the border marker with Bilasuvar, is around 57.135km within Salyan Rayon; and from thereon to the endpoint of the project road within Bilasuvar Rayon is around 13.075km.

3.1.1.1 Current Road Condition

The Pre-Feasibility Study has assessed the existing road and bridges with some of the findings as follows:

⁴ The chainage was based on the Pre-Feasibility Study

⁵ Km 0+00 possibly in the interchange of M2 and M3

-) The average existing width of the road is about 8m with unpaved shoulder of around 2m.
-) The road runs over a flat terrain with slight undulation at between Km54+300 and Km 60+000 (within Salyan City center) and Kms 80+500 and 81+500 (as the road makes an elbow turn towards northwest at Shorsulu). Generally, the gradient is between 1.2 – 2.25 per cent except at the approach ramps of Kura River Bridge.
-) Both the section RHS & LHS of the road was found to be heavily deteriorated Km 90+675 to 93+000 at the vicinity of Makhmudchala wetlands.
-) The project road has major intersections with other roads as follows with: (i) R44 road which connects Salyan and Shirvan Regions at Km 45+400; (ii) R45, Shirvan-Nokhudlu-Salyan road at Km 55+600, R46, Salyan-Nefchala road at Km 57+600; and new M3 Motorway at Km 88+900, an interchange.
-) Evidence of elevated clay materials were found on the 1m embankment which can be submerged by groundwater which rises to 1.5-2.0 meters.
-) It was noticed that the embankment of the road was constructed by using heavily contaminated clay material⁶. It was observed that the average height of the existing embankment is around 1.00 meter.
-) The road structure is the same for the full length of the projected road.
-) There are existing sidewalks in the left- and right-hand sides of the road section which runs through Salyan City between Km 56+300 and Km 58+800.
-) Cross-Section are not consistent in the towns/settlements since the width of the road is larger in the center of the Salyan City between Km 56+800 and 57+800.
-) The surface of the road section in Salyan city is technically in a reasonable shape since this section has been maintained regularly.
-) Rehabilitation of Existing Kura River Bridge is not necessary because the Bridge has been rehabilitated in 2019 and it is in a good condition.
-) As per the Pre-FS document for the project road, a bridge over a collector canal at Km 35+810 may need to be reconstructed; other bridges may be decided in the detailed Feasibility Study or Detailed Design stages.

3.1.1.2 Proposed Road Cross section

The road is to be designed according to Azerbaijan geometric design standard, and accordingly, it shall be sufficient to carry the traffic loading efficiently and with safe passage for bi-directional traffic. Effectively, these will be a two-lane road consisting of a carriageway width (sum of the width of lanes) and the width of the shoulders. The design elements for the cross section of the project road are as follows:

- Number of lanes: 2
- Lane width: 3.75 m
- Carriageway width: 7.50 m
- Width of shoulder: 2.00 (DBST sealed) & 0.75 m (paved) = 2.75m
- Total road width: 13.00 m

The road profile is shown below corresponding to Technical Category II Road.

⁶ Source and type of contamination was not identified in the Pre-FS Report

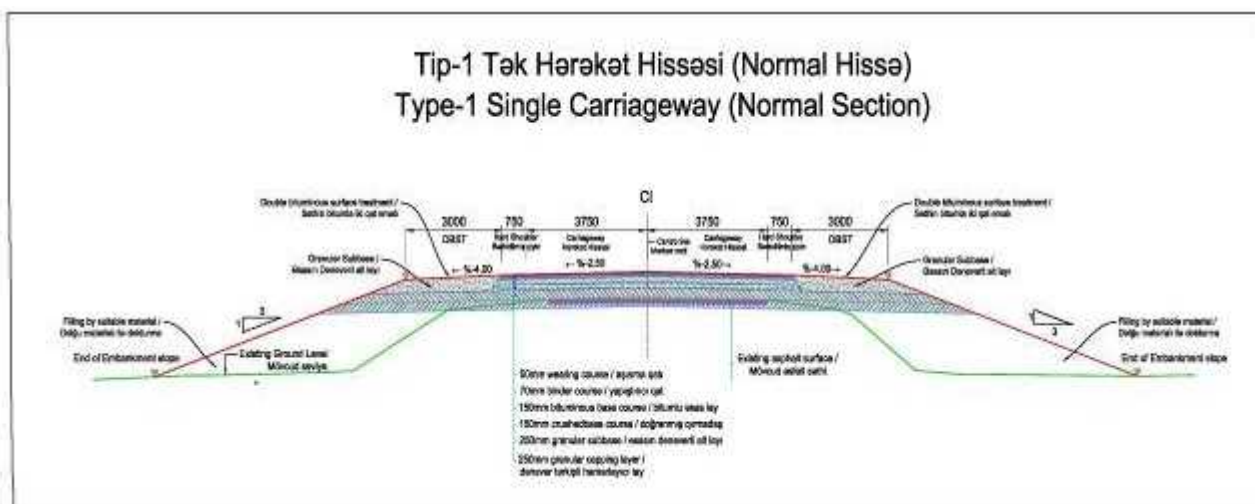


Figure 3: Project Road Profile

3.1.1.3 Bridges and Culverts

Along the project road there are eight (8) bridges over water and thirty-six (36) minor waterway crossing consisting of box or pipe culverts. A railroad crossing occurs at Km 58 km + 880 which will need special technical consideration during the Detailed Design Stage. The subsequent studies will determine if these bridges will be repaired, partly reconstructed (rehabilitated) or replaced by new bridge; accordingly, the ESMP will be updated to cover these types of changes. Critical to the environment, particularly on water quality will be those major water-crossings. Since the bridge over Kura River has just been recently rehabilitated, this will not be part of the project and also out of the ESMP concerns. A list and location chainage of these bridges and culverts is presented below.

Table 5: List of Bridges and Culverts

	Section Chainage	Description
1.	Km 34 + 680	Culvert
2.	Km 35 + 800	Culvert
3.	Km 37 + 600	Culvert
4.	Km 39 + 000	Culvert
5.	Km 40 + 170	Culvert
6.	Km 40 + 900	Culvert
7.	Km 41 + 950	Culvert
8.	Km 44 + 470	Culvert
9.	Km 47 + 580	Culvert
10.	Km 51 + 570	Culvert
11.	Km 52 + 940	Bridge over the Kura River marked by statues on both ends
12.	Km 56 + 300	Bridge crossing unidentified river surrounded by smaller bridges and pipes
13.	Km 58 + 000	Culvert
14.	Km 59 + 960	Culvert
15.	Km 63 + 580	Culvert
16.	Km 65 + 200	Culvert
17.	Km 65 + 870	Culvert
18.	Km 65 + 890	Culvert
19.	Km 66 + 600	Culvert
20.	Km 68 + 730	Culvert
21.	Km 70 + 300	"Bash Mil-Mugan Kollektoru" Collector
22.	Km 70 + 460	Culvert
23.	Km 71 + 420	Culvert
24.	Km 74 + 300	Culvert
25.	Km 76 + 010	Culvert

	Section Chainage	Description
26.	Km 78 + 220	Culvert
27.	Km 79 + 330	Culvert
28.	Km 80 + 700	Culvert
29.	Km 81 + 260	Akkusha River bridge
30.	Km 81 + 450	Culvert
31.	Km 83 + 100	Culvert
32.	Km 84 + 080	Culvert
33.	Km 84 + 580	Culvert
34.	Km 85 + 190	Culvert
35.	Km 86 + 100	Culvert
36.	Km 88 + 160	Culvert
37.	Km 85 + 190	Culvert
38.	Km 85 + 650	Bridge over channel
39.	Km 86 + 100	Culvert
40.	Km 88 + 160	Culvert
41.	Km 88 + 880	Ramp and bridge on the new Alat-Astara I degree road
42.	Km 90 + 650	Bridge
43.	Km 94 + 700	Bridge
44.	Km 100 + 190	Culvert

3.1.2 Observed Features along the Corridor

The existing two-lane road along the old M3 from Yenikend to Bilasuvar runs through a corridor which was established during the soviet times. Property fences and boundaries allow for a corridor which is wide enough for a two-lane road to be rehabilitated at its current alignment. Within settlements in city center, based on observations from photos taken and from maps, a corridor of around 30 meters has been maintained. This road corridor is sufficient for a two-lane road, which on a preliminary design will have a width of 13 meters. In addition, on regulation of right-of-way (ROW), the Decree # 18 of the Cabinet of Ministries of Azerbaijan Republic (dated 28 February 2004), states the prohibition of construction within 60 meters of republic roads. This provides a buffer distance of around 23.5meters for any vibration that may be cause by equipment in the construction of the project road.

The first segment of the project road has its starting point where the north bound (or Baku bound) traffic merges with the northbound of the M3 motorway. As it seems the road will mainly take unidirectional traffic northbound traffic from Km 34+000 to Km 32+125, a distance of around 2.125km. The main southbound traffic towards Salyan and Bilasuvar along the project road will enter from the M3 motorway via a trumpet interchange (Km 34+000). In this general area, the left-hand side is mainly cultivated agricultural land, while the right-hand side is also mainly agricultural land with some standing structure alongside the project road. These agricultural lands on both sides of the project road extends up to a bridge over a collector canal at Km 35+800.

The collector canal is the northwestern edge of cluster villages of Yenikend, Shekerli, Hesenli and Garadili, which are residential areas with agricultural plots. Village roads web out from the project road servicing the individual residential houses. Along the project road are shops, gasoline stations and some restaurants.

From around Km 49 to around Km 53 is a stretch of mainly agricultural lands on both sides. At Km 49+200, the project road comes close to around 2km with the western boundary of Shirvan National Park. The Babazanan borrow pit is also found in the area, and was used in the construction of the M3 motorway. This can also be a potential borrow pit for the project road.

At Km 53, the project road crosses the Kura River. The bridge has newly been reconstructed in 2019 and will not be part of the project. After crossing the Kura River, the village on the right is Ashagi Kurendi. This is followed by the main city of Salyan mainly on the left-hand side and from around Km 54+500 to Km 62+700. On the right-hand side, several side rural roads branch out to some villages

– at Km 57+200 to Arbatan; at Km 62+200 to Marishli; at Km 63+700 to Seyidsadiqli; at 65+300 to Quyshu; at Km 65+500 and Km 66+600 to Alshali. Along the road are Gizilagaj (Km 67+200), Beydili (Km 69+300), Sarvan (Km 71+700), Deyikand (Km 75+700), and Seyidlar (Km 78+800). Then closed to the boundary of Salyan are the villages of Shorsulu (Km 79+500) on the left-hand side and Boranikand (Km 81+100) at the elbow curve to the right (northwest direction). From there, the project road continuous westward toward edge of Salyan passing through farmlands on both sides up to Km87+800 and crossing the M3 Motorway at Km 88+800.

At Km 89+260, the project road enters the territory of Bilasuvar as evidenced by a marker on the right-hand side. From this spot up to Km 90+600 is an area with very little vegetation on both sides of the road. At Km90+650 is a bridge over a collector canal which comes from upper canal systems from Araz River. Around half-kilometer from here on the left-hand side is the expanse of the Makhmudchala Wetland. The northern periphery of the wetland is practically bordered by the road from Km 90+800 to Km94+150, a distance of around 3.35km. At the right side of this stretch is uncultivated land with very little vegetation.

On the left-hand side, from Km 94+150 to the endpoint at Km 102+335 at a distance of 12.185km there are some parcels of land plots and ponds with some structures. On the right side are fairly vacant lands with little traces of cultivation. The farmlands on this left-hand side starts appearing at Km 900+900 up to the endpoint. Few structures on the left-hand side can be seen and no major settlements or village is found within these areas.

Based on information from the Pre-Feasibility Study and inspection of the project road an alignment sheet is presented in Appendix 1: Alignment Sheet – Environmental and Social Features along Yenikend to Bilasuvar.

3.1.3 Environmental and Social Resources

3.1.3.1 Physical Resources

Salyan Rayon is situated on the Kura-Araz lowland, in the Mugan steppe in the southeast of the country with a total area of 1,600 km². The Kura River, one of the main rivers of Azerbaijan flows through within the territory of the rayon and through the Salyan city itself, which is the principal urban center.

Bilasuvar Rayon occupying the south-western and southern part of the Mugan plain, is to the south-west of Salyan, with a total area of 1358 km². The climate in Bilasuvar is similar to that of Salyan with average rainfall 260mm. Most of the area of Bilasuvar is below the sea level, 542 hectares of which are forests.

Geology

There are two major mountain ranges in Azerbaijan namely the Greater Caucasus and the Lesser Caucasus. The Greater Caucasus is 1,200 km long and traditionally separated into three parts: (i) Western Caucasus, between the Black Sea and Mount Elbrus; (ii) Central Caucasus, between Mount Elbrus and Mount Kazbek; (iii) Eastern Caucasus, between Mount Kazbek and the Caspian Sea, and which is bordering Azerbaijan and Russia. The Lesser Caucasus is 600km long and runs parallel with Greater Caucasus. It is connected to the Greater Caucasus by the Likhi Range (in Georgia) and separated from it by the Kolkhida Lowland (in Georgia) in the west, and Kura-Aras Lowland (Azerbaijan) (by the Kura River) in the east.

The geological record of Azerbaijan is diverse and comprises often strongly deformed and folded sedimentary, volcanic-sedimentary, volcanic and terrestrial deposits of pre-Cambrian to Holocene age. Crystalline rocks of igneous and metamorphic origin are far less common and occupy much smaller areas largely restricted to the Lesser Caucasus. Alluvial fans and molasse type deposits

(erosion products derived from the uplift and erosion of, in this case, the Caucasus Mountains) are ubiquitous in the foreland of the mountain ranges.

The central and eastern lowlands of Azerbaijan are occupied by the Kura River intermontane basin that extends over c. 86.000 km². It comprises of several kilometer of thick sequence of molasse type sediments, which unconformably rest upon subsided Jurassic and Cretaceous rocks. Prevailing deformation has led to an internal structuring of the Kura intermontane basin into several domains (or sub-basins) that are known from seismic data and borehole evidence. Towards the Caspian Sea Basin in the east, the thickness of the geologically young molasse-type sediments reaches 6-8 km. Over much of the central and eastern lowlands, the solid geology is covered by varying thicknesses of alluvial deposits (sand, gravel, mud, loam) related to the Kura River and its tributaries that erode the high relief Caucasus Mountains. Accordingly, the project road is underlain by Fourth Era Sediments as indicated in the geologic map of the area.

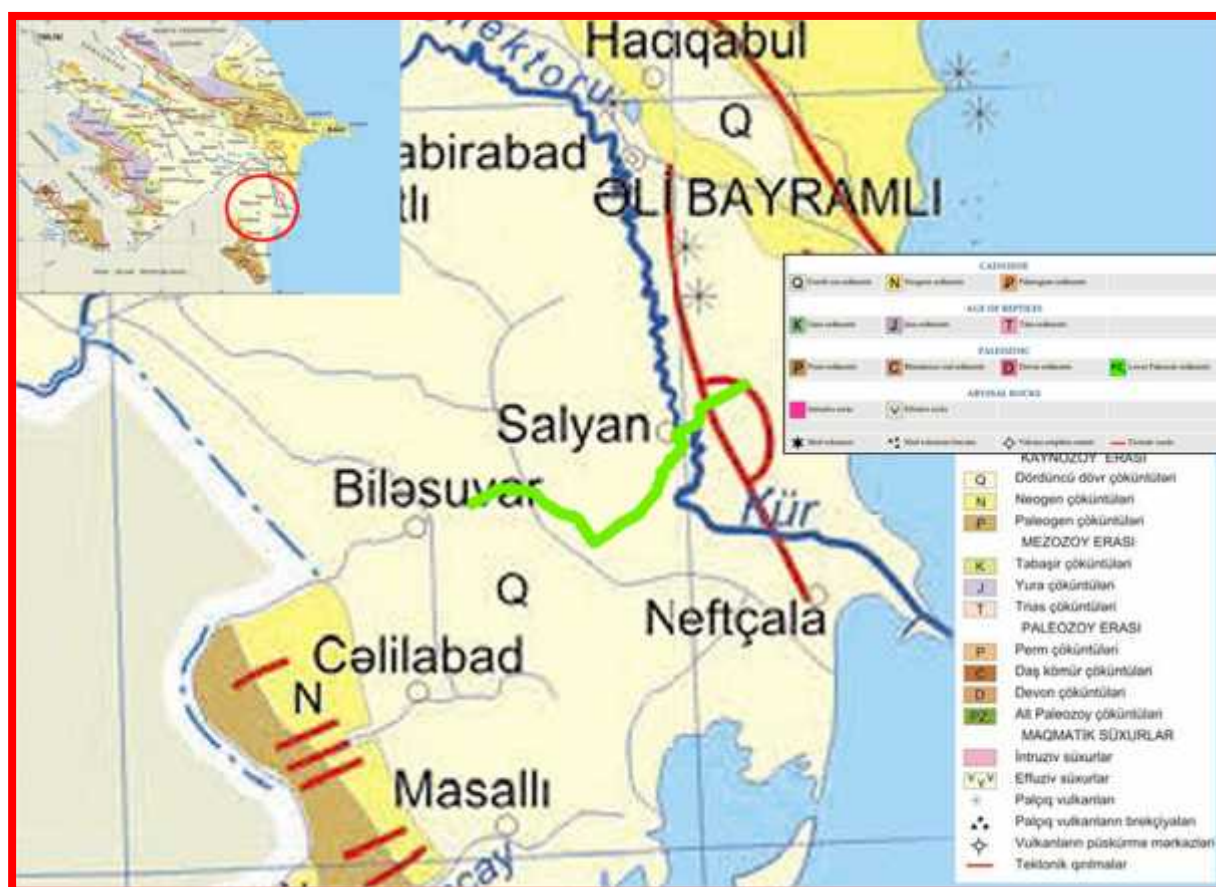


Figure 4: Geologic Map of the Area

Soils

Most of the Project Corridor is formed by sierozem⁷ (meadow gray soil), which occur over almost the entire stretch. Meadow gray soil is typical for altitudes of up to 150 m asl and dry climates with maximum rainfall of 200 mm. Meadow gray soil is generally semi-dry, dry steppe, light loamy kind, which is suitable for winter pastures and arable land (cereals, cotton). The agricultural potential is classified as low to medium.

The Makhmudchala wetland area has meadow-swamp and swamp soil type, and a depression that was formed as a result of overflow from the Araz River. In geomorphologic terms, it can be considered that the area can possibly be part of an ancient river course. However, in present times there is little natural flow through the depression, most surface water movement in the area is by irrigation canals and drains.

⁷ A group of soils found in cool to temperate arid regions that is brownish gray at the surface with a lighter layer below

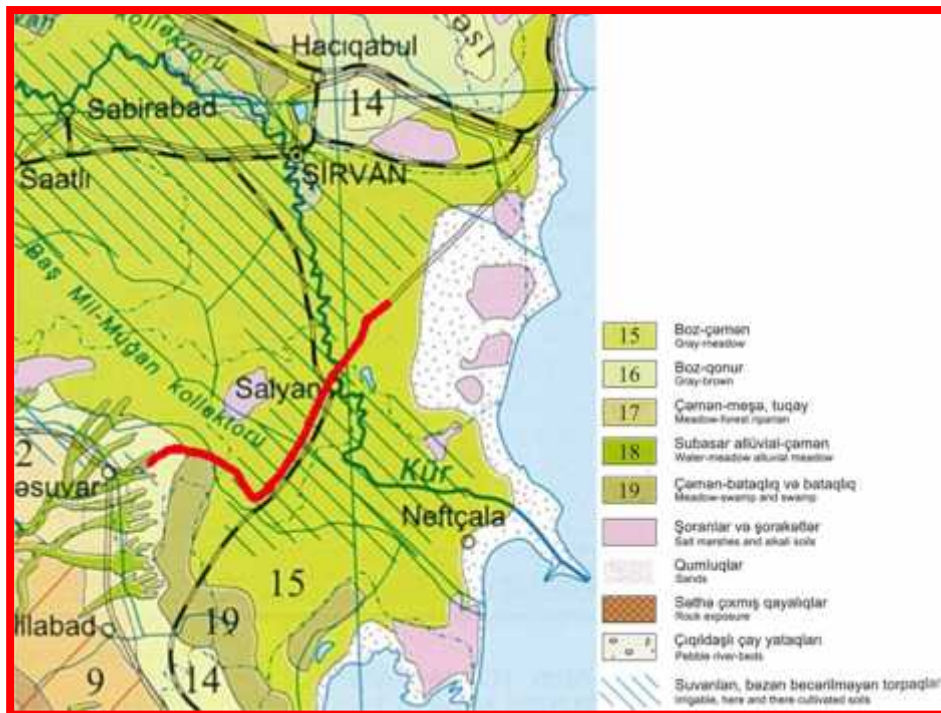


Figure 5: Soil Map of the Area

Climate, Air Quality and Climate Change

Azerbaijan's climate is highly varied, with different areas of the country manifesting several climate zones such as semi-arid, temperate, warm-temperate, cold and tundra zones, meaning that there are marked variations in average annual temperature and precipitation in different regions. Generally, more mountainous parts of Azerbaijan receive higher levels of precipitation and lower average temperatures than the central lowlands and Caspian Sea coast, where the climate is drier and hotter. Historical data show that Azerbaijan has a mean annual temperature is 11.81°C (1901-2016) and a mean annual precipitation is 427.56mm (1901-2016). There has also been an increase in temperatures across Azerbaijan of 1.3°C in 2010, relative to the normal average annual temperatures observed in the period 1961-1990. Though it seems that rainfall has not changed so much, Azerbaijan experiences frequent flooding with greatest risk of floods in the central and south-eastern regions.

Between Salyan and Bilasuvar, western winds dominate in winter and eastern winds during the summer period. Wind speeds vary between 0-12.5 meters per seconds (m/s) on average with the strongest winds in summer and winter. Average annual evaporation is 800-1,000 mm, humidity is 50%.

The Project Corridor of Yenikend to Bilasuvar is within the Aran region of Azerbaijan which is characterized by dry semi-desert climate.. In Salyan, the summers are hot, muggy, and clear; the winters are long, very cold, and partly cloudy; and it is dry year-round. Over the course of a year, the temperature typically varies from 31°F (-0.55°C) to 89°F (31.67°C) and is rarely below 24°F (-4.44°C) or above 95°F (35.0°C). In Bilasuvar, the summers are hot, humid, and clear; the winters are long, very cold, and partly cloudy; and it is dry year-round. Over the course of the year, the temperature typically varies from 29°F (-1.67°C) to 93°F (33.88°C) and is rarely below 22°F (-5.55°C) or above 100°F (37.77°C).

For the area, the average annual precipitation is no more than 200-400 mm. Most rainy seasons are late autumn and winter (October-March – about 50% of annual precipitation). Some compiled historical Rainfall Data is depicted in the next Figure with an analysis of the significant rainfall events in both Salyan and Bilasuvar shown in Figure 5 and Table 6 below.

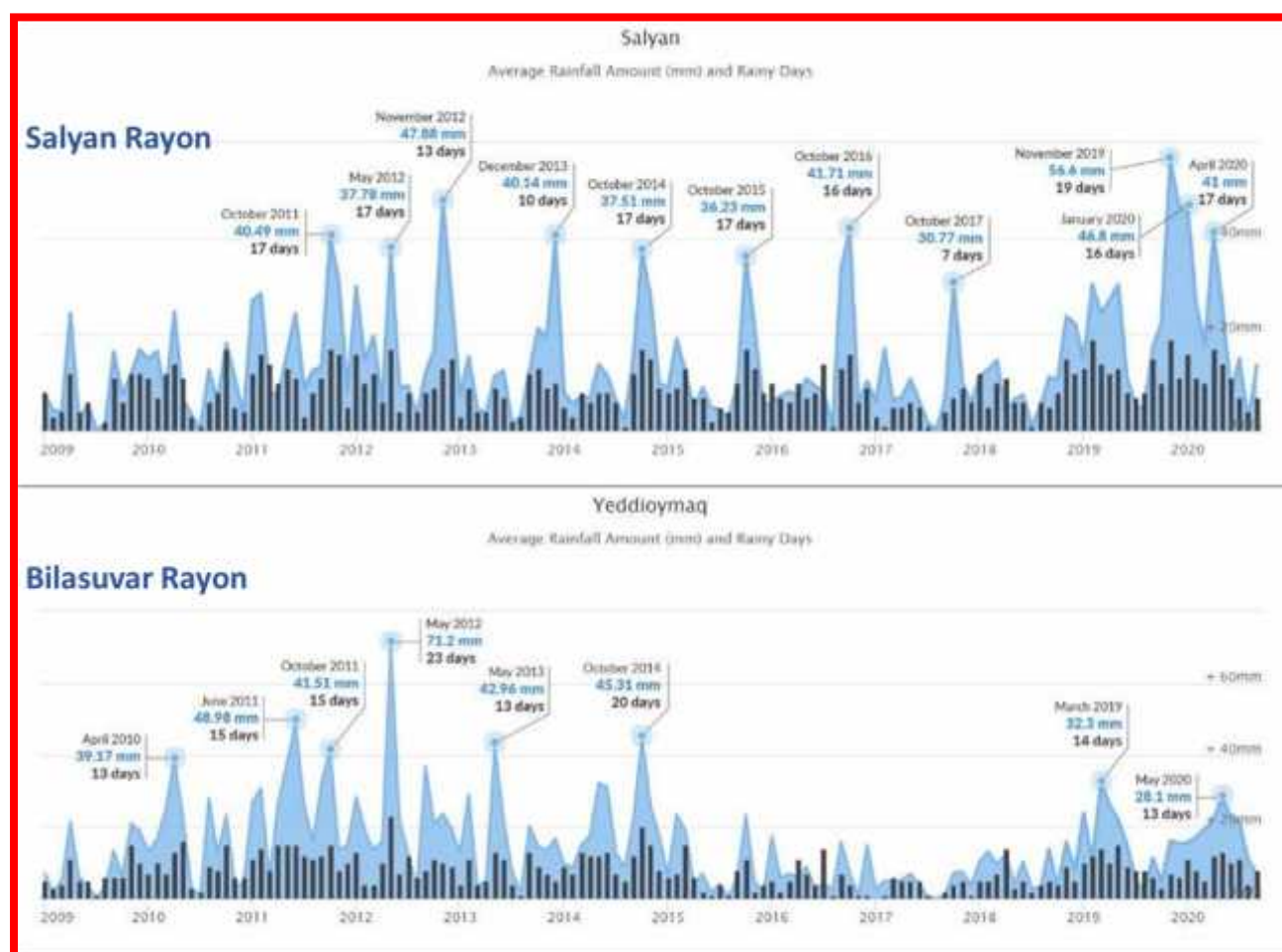


Figure 6: Graph of Historical Rainfall Intensities (2009-20)

Table 6: Historical Rainfall Intensities (2009-20)

Year	Month	Days	Rainfall (mm)	Rainfall /day (mm/day)	Rainfall/hour (mm/hr)
Station: Salyan, Salyan Rayon					
2011	October	17	40.49	2.381765	0.09924
2012	May	17	37.78	2.222353	0.092598
2012	November	13	47.88	3.683077	0.153462
2013	December	10	40.14	4.014	0.16725
2014	October	17	37.51	2.206471	0.091936
2015	October	17	36.23	2.131176	0.088799
2016	October	16	41.71	2.606875	0.10862
2017	October	7	30.77	4.395714	0.183155
2019	November	19	56.6	2.978947	0.124123
2020	January	16	46.8	2.925	0.121875
2020	April	17	41	2.411765	0.10049
Maximum				4.395714	0.183155
Station: Yeddioymaq, Bilasuvar Rayon					
2010	April	13	39.17	3.013077	0.125545
2011	June	15	48.98	3.265333	0.136056
2011	October	15	41.51	2.767333	0.115306
2012	May	23	71.2	3.095652	0.128986
2013	May	13	42.96	3.304615	0.137692

Year	Month	Days	Rainfall (mm)	Rainfall /day (mm/day)	Rainfall/hour (mm/hr)
2014	October	20	45.31	2.2655	0.094396
2019	March	14	32.3	2.307143	0.096131
2020	May	13	28.1	2.161538	0.090064
Maximum				3.304615	0.137692

Comparatively, in the previous decade, Salyan seemed to be having more rainfall than Bilasuvar. The graph also indicates some dry spells or droughts to have occurred from mid-2016 to mid-2018.

The main emissions from the combustion of fuel in vehicle engines include Nitrogen Oxides (NO_x), Carbon Monoxide (CO), Volatile Organic Compounds (VOCs), Carbon Dioxide (CO₂) and Particulate Matter (PM). Certain portions of the road are however, degraded to such an extent that vehicle movements in these areas create high volumes of PM or dust from the exposed surface, especially within the dry summer months. Heavy goods vehicles are a particular cause of these dust impacts.

Azerbaijan has signed the Paris Climate Agreement on 22 Apr 2016 and ratified it on 9 Jan 2017 with entry into force on 8 Feb 2017. As stated in its Nationally Determined Contribution, Azerbaijan has outlined climate change mitigation actions in its energy, oil and gas, residential and commercial, transport, agricultural and waste sectors which will entail technological improvements to reduce the negative environmental impact of various sectors of the economy, together with some regulatory changes and public awareness measures.

Below are some facts on Azerbaijan obtained from the Climate Knowledge Portal of the World Bank:

-) Under all climate scenarios the number of summer days is expected to increase and the number of frost and ice days are expected to fall significantly by the end of the century.
-) Under all scenarios the number of summer days is expected to increase and the number of frost and ice days are expected to fall significantly by the end of the century.
-) There is little seasonal variation in the expected change in average monthly precipitation, although according to most models the level of precipitation is marginally more likely to fall in summer months and to rise in winter months, relative to the reference period.
-) Under the higher emission scenarios, the annual probability of severe drought in Azerbaijan is projected to rise significantly.
-) Mean annual temperature will rise by 2.27°C (1.24°C to 3.56°C) in 2040-2059 (high emission scenario)
-) Annual precipitation will decrease by -0.41mm (-153.70mm to 177.38mm) in 2040-2059 (highest emission scenario)
-) Annual Cooling Degree Days will rise by 609.56mm (218.09mm to 0.00mm) in 2040-2059 (highest emission scenario)
-) Annual Maximum 5-day Rainfall (25-yr Return Level) will rise by 6.98mm (-18.24mm to 77.74mm) in 2040-2059 (highest emission scenario)

In addition, based on Climate Change Risk Profile Azerbaijan – Country Risk Profile (USAID Fact Sheet) there will be 1.5–2 m rise in Caspian Sea level by 2050. These information need to be considered in the design of water-crossings for the road.

Hydrology

There are few surface water resources of this area which are mostly irrigation/drainage canals with an occasional reservoir. Lake Shorgyol, a brackish lake, lies within Shirvan National Park, which originates from overflows from the Shirvan Collector.

The Kura River is the primary natural watercourse that runs through the area, which provides approximately 90% of the surface water resources in Azerbaijan, draining 68,900 km² or 80% of its territory. The Kura starts in Turkey and passes through Georgia before entering Azerbaijan on its 1,500 km journey to the sea (900 km in Azerbaijan) where it drains via the Mingachevir Reservoir into the Caspian Sea about 50 km south-east of Salyan town. The Kura River is being fed also by Araz River

which runs over 1,000 km and originates near Erzurum in Turkey and is the major river basin of the Caucasus region. Within Salyan, the Kura flows in an extensively meandering course. The minimum flow maintained in the river is around 354 m³/s, which gives a channel width of about 230-260m wide and a flow depth of around 4-5 m.

The Akkusha River runs north to south from Salyan to Shorsulu and crosses the project road at Km 56+300 (flowing east to west) and at Km 81+265 (flowing north to south). The water is being pumped by a pumping station located at the right bank of Kur River in Salyan, near Km 54+500. The Akkusha River forms the western boundary of the Salyan Plain that is also bounded by the Caspian Sea in the east, the Kur River in the north and Gyzyl-Agach Bay in the south. The Akkusha River water irrigates much of the farmlands along its path to Shorsulu, and from which it meanders southeast within Neftchala Rayon until its discharge point at Gyzyl-Agach Bay.

The Mingechivir Reservoir, Azerbaijan's largest reservoir, delivers water to area via the Azizbeyov Canal (total length 123 km, irrigation re 69,000 ha) and Mugan-Salyan Canal (total length 37km, irrigation area 68 ha) and described as follows:

-) The Mugan-Salyan Canal is the major carrier of water used for soil washing and outwash, sourced from Kura River overspill (water which flows over weirs when it reaches a high level) primarily at Azadkand and augmented at a number of other locations, in particular at Salyan. The canal feeds water to, and accepts outwash from, a complex network of irrigation canals. During times of high-water level in the Kura River, additional overspill enters the Mugan-Salyan Canal and is released into storage areas via secondary overspill weirs (these are weirs across which water flows once it reaches a high level) to reduce water levels through towns such as Shorsulu. One such storage area is the upper Makhmudchala wetland, alongside the existing road (the Project Road) north of Bilasuvar. The Makhmudchala wetland straddles the left-hand side of project road from Km 90+700 to Km 92+900 (approximately 2.2km); hence at this spot the wetland is south of the project road.
-) The Azizbeyov Canal, a man-made watercourse, is one of two key channels by which freshwater from the Kura River system is brought to the wetlands area. It is supplied by the Araz River in the vicinity of Birmai, approximately 60 km northwest of Bilasuvar. The Azizbeyov Canal is used primarily for irrigation supply and is pumped into adjacent field drainage systems within the study area. There is a number of formalized diversion points where water is diverted into separate canals for wider irrigation demand distribution (e.g., 'Tributary No.4' on the northern outskirts of Bilasuvar). The canal can also be diverted into the Balhari River at the 'Azerbaijan Amelioration and Water Farming Joint Venture – Irrigation Systems Management Office' (AAWFJVISMO) in Bilasuvar, via a spillway. The end point of the canal is within the Akchala wetland area, south of the existing Railway Alignment (more than 30km from the project road). However, at this point, the discharge of the canal is comprised only of surplus irrigation water and thus is entirely dependent on the scale of consumptive use further upstream. The scale of this use appears unregulated.

The other waterways within Salyan are the Mugan Canal and the Shirvan Main Collector. The Mugan Canal is an offshoot of the Mugan-Salyan Canal, and branches from that main channel close to Shorsulu. It then flows south, passing along the eastern boundary of the Akchala wetland before discharging at least some of its waters into the lower Akchala wetland area. In addition, the 250 km Shirvan Main Collector, which forms the north boundary of Shirvan National Park, drains directly to the Caspian Sea.

In the small portion of the project road within Bilasuvar, the primary body of water is the Makhmudchala wetland. It is connected to the Akchala wetlands, a 15,000-ha area, that is located in Neftchala and Lenkeran districts. The Akchala wetlands extend to the western boundaries of the Gyzyl-Agach Nature Reserve. Based on previous studies on the Makhmudchala Wetland, its main source of water is overspill from the Mugan-Salyan Canal, while for Akchala wetlands, its main source is Mugan (drainage) Canal. The main water sources for the wetlands are as follows:

-) Balhari River (Bolgar River): This natural watercourse is sourced in the northern Talysh Mountains, close to the town of Bilasuvar on the Iranian border (note, this town has the same

name as that within the study area). The Balhari River flows over (via man-made channel) the Azizbeyov Canal at the AAWFJVISMO in Bilasuvar, and can receive additional water from the Azizbeyov Canal at this point, via a sluice and spillway arrangement.

-) Inca River: This natural watercourse begins in the northern Talysh Mountains, close to the town of Chanagach. The Inca River is heavily influenced by on-line reservoirs (these are reservoirs through which the river flows) throughout its course and hence has a discharge lower than would be expected when it outfalls to the Azizbeyov Canal at the village of Allar, between Bilasuvar and Jalilabad.
-) Mishar River: This small natural watercourse is sourced in the Talysh Mountains near the town of Lakin. Like the Inca River, this watercourse is heavily influenced by on-line reservoirs, most notably alongside the existing main road immediately south of Jalilabad, where water is stored during the winter for use in local irrigation systems in the spring.

A map of the watercourses passing crossing the project road is shown in the next Figure.

From other reports in the area, it was said that in the Mugan and Salyan lowlands, groundwater levels occur at around 3 m, very rarely at 3-5 m. Over the years, the groundwater level in the area has generally become shallower due to the influence of collector and drainage systems. In the area around Gizil-agach Bay, groundwater levels come up to 0.1-1.2 m.

Groundwaters of the plain are highly saline (salt concentration of 5–62 g/l) and not suitable for drinking water or agriculture. The high salinity of this groundwater is caused by the salinity of the water-bearing rocks of sea origin. The saline intruded irrigation water is felt at shallow depths. The chemical properties are characterized by sodium chloride and sulphate-sodium chloride.

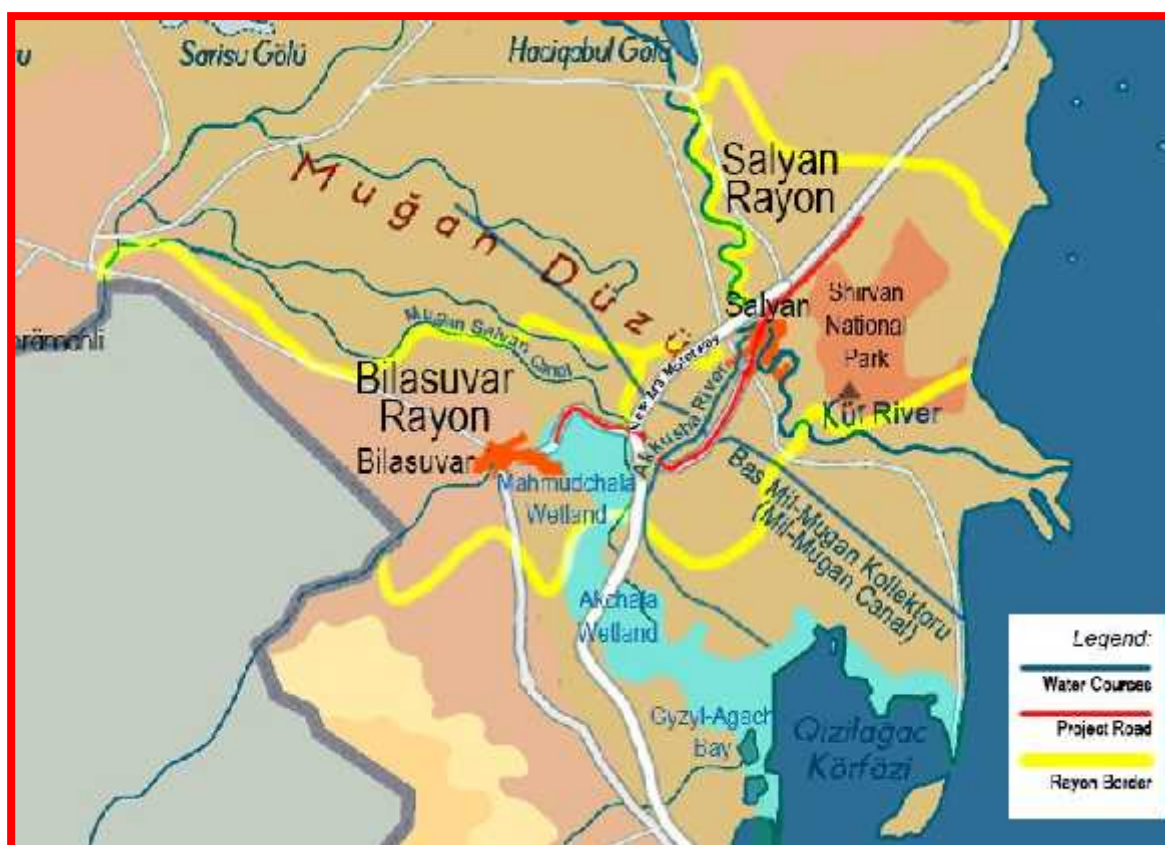


Figure 7: Watercourses in the Project

Natural Hazards

Seismic activity in the study corridor is of concern to Talysh-Kura area. Earthquakes of the magnitude 6 on the Richter-scale have been recorded in Salyan. As has been previously identified, a further type

of natural hazard south of the study area is flooding on the Kura River, which causes serious problems for both Salyan and Neftchala districts.

Within Salyan rayon, flooding has occurred along the banks of Kur River. Such incidences of flood occurred in May 2003, May 2007 and May 2010 (spring seasons). This was due to intensive rain within the Araz-Kur Basin coupled with melting of snow. The water level of Kur River rose and overtopped the existing earth dykes and levees. In the flood of 2010, it was reported that the rain poured continuously for ten (10) days affecting the seven (7) rayons along the path of Kur River. In Salyan rayon alone, Salyan there were 53 houses damaged or destroyed, 3,000 houses were underwater, 218 houses were under threat and 76 families or 380 persons were evacuated.

In relation to the project road, such incidences should be taken into consideration during the design for provision of necessary measures to make the road section flood-proofed and resilient. Hydrologic study should be done on the flooding incidences to ascertain a flood-safe elevation of the road, particularly those near the Kur River. This should be done by the detailed design consultant during the design phase. The results should be form part of design parameters for the hydrologic infrastructures and drainage works and specific flood mitigation measures should be presented in the updated ESMP Table.

3.1.3.2 Biological Resources

Based on areal assessment of the project road, there are certain areas that has limited anthropogenic disturbances like at left hand side of Km 48+500 to Km 49 +200, in the vicinity of Lake Duzdag (near Babazanan), a small water pond where some birds congregate in winter time. A larger area which also has been left untouched are those at Km 88+100 to Km 94+200. The grasslands on the right-hand side are also being utilized as grazing area of animals raised by the surrounding settlers, while much of it on the left-hand side is part of Makhmudchala wetland. All of these mentioned are **not consider critical habitat** is located in the vicinity of the project road.

Flora

The arboreal species planted along the road consist of different species of Willows (*Salix fragilis*, *Salix alba* and *Salix babylonica*), Poplars (*Populus alba* and *Populus pyramidalis*), Mulberry (*Morus alba*), a few Elm (*Ulmus foliacea*), Tamarisk (*Tamarix Pallasii*) and Blackberry (*Rubus fruticosus*) shrubs. Fruit trees planted in yards consists of Pomegranate, Quince, and Cherry etc. Also, other tree types that are present are species like *Populus pyramidalis*, *Ulmus foliacea*, *Punica Granatum*, *Cupressus sp.* and *Pinus sp.*

At the vicinity of the M3 Motorway junction with the project road resembles saltwort and ephemeral deserts and wormwood-saltwort semi-deserts with short period of vegetation. The vegetation that thrives consist of *Salsola dendroides* and other woody-shrubby vegetation such as tamarisk shrubs and other plants consisting of Such species as *Halocnemum strobilaceum*, *Halostachys caspica*, *Suaeda microphylla*, *Petrosimonia brachiata*, *Gamanthus pilosus* and *Salsola crassa* etc. are most characteristic species for salty lands. Cereals are mainly distributed within ephemeral semi-deserts: *Poa bulbosa*, *Bromus japonicus*, *Anisantha tectorum*, *Anisantha rubens*, *Eremopyrum orientale*, *Eremopyrum triticeum* and many others.

Fauna

Within the rayons, the typical predators are the jackal (*Canis aureus*) and red fox (*Vulpes vulpes*), a resident species of this area and wolf (*Canis lupus*), which follow sheep flocks to their winter pastures in the lowlands. The mammals in the area are the Eared Hedgehog (*Hemiehinus auritus*) that shows up mainly during the warm seasons of the year. Some species of bats are also found in summer time - *Pipistrellus pipistrellus*, *P. kuhlii*, *Myotis mystacinus* and *Barbastella barbastella*^{b8}). The hare *Lepus*

⁸ a – Species included into Azerbaijan Red Data Book

b – Species has international protection status (IUCN Red List)

c – Species has both local and international protection status

europaeus and rodents *Mus muscus*, *Meriones erythrourus*, *M. vinogradovi* and *Microtus socialis* are widely distributed in the fields adjacent to the project road. African Wildcat (*Felis libyca*^a) and Marbled Polecat (*Vormela peregusna*^a) are extremely rare species for the area. The Wild boar (*Sus scrofa*) is keeping mainly reed overgrowing at the Shirvan National Park, but quite often moving to the agricultural fields at night and returning back to the shelters at the morning. The Coypu (*Myocastor coypus*) is one of most typical mammals occurring in the numerous water canals.

Most characteristic resident bird species of the area are Common Kestrel (*Falco tinnunculus*), Rock Dove (*Columba livia*), Turtle Dove (*Streptopelia turtur*), Little Owl (*Athene noctua*), Hoopoe (*Upupa epops*), Crested Lark (*Galerida cristata*) and Isabelline Wheatear (*Oenanthe isabellina*). Many breeding species are also occurring in the area within summer time: Lesser Kestrel (*Falco naumanni*), European (*Merops apiaster*) and Blue-Cheeked Bee-Eaters (*Merops superciliosus*), Rufous Bushchat (*Cercotrichas galactotes*), Red-Backed (*Lanius collurio*) and Lesser Grey Shrikes (*Lanius minor*), Goldfinch (*Carduelis carduelis*) and many others. Penduline Tit (*Remiz pendulinus*) and Magpie (*Pica pica*) are especially numerous here and their nests can be observed at most of the trees alongside the project roads.

Such birds as Little White (*Egretta garzetta*) and Cattle Egrets (*Bubulcus ibis*) are also present on the study area within breeding season, but these species have their core habitats and breeding sites in different areas. A lot of other non-breeding water birds can be observed here during the whole year: Pygmy (*Phalacrocorax pygmaeus*) and Great (*Phalacrocorax carbo*) Cormorants are fishing at the channels, akhazes and Kur River or drying wings on the neighboring trees. Numerous egrets and herons (*Ixobrychus minutus*, *Ncticorax nycticorax*, *Egretta alba*, *Ardea cinerea* and others) are hunting on the shallow water of channels and floodings. Some small waders are occurring on the flooded fields within non-breeding seasons. Both Dalmatian (*Pelecanus crispus*^c) and White (*P. onocrotalus*^a) Pelicans, different common and protected species of ducks including White Headed Duck (*Oxyura leucocephala*^c), gulls and terns are quite common along the Kur River during migration and winter season.

The dangerous reptiles of the area are the venomous Blunt Nosed Viper (*Vipera lebetina*) that mainly active in warm seasons of the year with peak of activity in May, however can be observed during whole year. Other reptiles are lizards – Caspian Gecko (*Cyrtopodion caspius*), Grozny Lacerta (*Lacerta strigata*), European Glass Lizard (*Pseudopodus apodus*). One of most distributed by same time both internationally and locally protected reptile species of the area is Greek Tortoise (*Testudo graeca*). This species is used to keep arid landscapes but also like to visit the grasslands and gardens for foraging. Two species of turtles (*Emys orbicularis*^b and *Mauremys caspica*) are sharing similar habitats of water streams, marshes and ponds with Dice Snake (*Natrix tessellata*).

Most typical amphibian species for semi-desert landscape is Green Toad (*Bufo viridis*) The Common Frog (*Rana ridibunda*) is characteristic and most numerous species that can be found in the vicinity of each water body within the project area. Much rarer is Tree Frog (*Hyla savignyi*) that occurs only in canals and ponds with well-developed reed-bed.

The Kur River and its tributaries are the temporary (spawning or/and migration areas) or residential habitat for most of fish species occurring within Azerbaijan. However just few of them can be found inside the channels crossed by the Project Roads: *Elox lucius*, *Rutilus rutilus*, *Alburnus charusini*, *Scardinius erythrophthalmus*, *Barbus cyri*, *B. capito*, *Cobitis caspia* etc. In the relatively small channels, the local population does some fishing, but according to information obtained from local people it is not a source of regular alimentation, it is more a sportive occupation.

Tarantula (*Lycosa*), Phalanges (*Galeodes araneoides*), Scorpions (*Buthus eupeus*) and tick (*Ornithodoros*) are most common species from arthropoda on the study area. Insects are presented by Darkling Beetles (*Blaps*), a lot of locust species (*Dociostaurus maroccanus* is especially numerous), some mantis, small mosquito (*Phlebotomus*) occurs in the burrows of sanderlings in dry area and many different gnats occurs on wetlands. Two species are from Azerbaijan Red Data Book - *Megacephalus euphraticus* (beetle), *Manduca atropos* (Lepidoptera).

3.1.3.3 Areas with Protection Status

Within the broad project Study Area of the Yenikand-Bilasuvar corridor, there are areas with protection status or of importance that are needed to be recognized and considered in the overall project cycle. These areas with their closest distance to the project road are:

-) Shirvan National Park (left-hand side, 1.2km from Km 49+800, bordered by farmlands and structures);
-) Durovdag mud volcano (left-hand side, 16.2km at Km 69+300, east of Kur River and Salyan city);
-) GyzyI-Agach Bay State Nature Reserve (left-hand side, 26.km from Km 81+000, southeast of Shorsulu);
-) Akchala (Novogolovka-chala) wetland (left-hand side, 10.km from Km 90+000, south beyond Makhmudchala wetland); and
-) Makhmudchala wetland (straddles the left-hand side of project road from Km 90+700 to Km 92+900, approximately 2.2km).

The Shirvan National Park had been created by Presidential Decree No 1298 from July 05, 2003. The territory of the park is 54,373.5 ha and including plots within Baku (Garadag), Salyan, Shirvan and Neftchala administrative districts. Additionally, 6,232.0 ha of adjacent territory is belonging to Shirvan State Nature Reserve and 4,930 hectares to Bandovan Sanctuary. The main landscape of the park is natural semi-desert steppe with wormwood (*Artemisia* sp.) edificatory and high diversity of ephemeral grasses. Tamarisk bushes are also highly developed here. The artificial Lake Shorgyol (Flamingo) is located in the middle of the park occupying territory of about 4,000 ha and is important habitat for various water birds. Eastern part of the park is Caspian Sea coast with sand beaches and shallow lagoons. The main reason for this protected area creation was protection of Persian Gazelle (*Gazella subgutturosac*) widely distributed within its area and species of fauna that are typical to this territory. Its functions also envision the implementation of environmental monitoring, public environmental education, as well as creating conditions for tourism and recreation.

With regards to mud volcanoes, according to the presidential decree No 2315 from August 15, 2007, most of mud volcanoes are subject to governmental protection as nature monuments. One of protected volcanoes - Durovdag, is placed within Shirvan National Park – at its southern border. However, this volcano is located in some distance from the project road (in about 9 km to the east from village Ashagi Surra) and separated by Kura River from the Project area. When selecting for burrow pit, the location of this protected area shall be taken into consideration.

GyzyI-Agach Bay State Nature Reserve with a current area of 99,060 hectares, was created for the purpose of protecting, creating conditions for wintering and nesting of migrant, swamp and wild birds in 1929. Along with the reserve, there is also the Little Qizil-Aghaj State Nature Protected area with a total area of 10,700 ha. According to the area, the GyzyI-Agach is the second largest reserve in the country, trailing the Shahdag National Park. The reserve was included in the list of UNESCO Ramsar convention "On internationally important swampy areas as the birds' residing places".

There are two wetland-Important Bird Areas (IBAs) within the project area namely Makhmudchala (IBA AZ045) and Akchala (Novogolovka-chala) (IBA AZ047) wetlands that support breeding and wintering habitats for a number of Globally Threatened (IUCN Red List) and Nationally Protected (Az RDB) specie and described below:

-) The Makhmudchala wetlands were formed in 1896 as a result of overflow from the Araz River. As mentioned in previous studies, the main source of water is overspill from the Mugan-Salyan Canal. The wetland area extends north, north-east and south of the Shorsulu-Bilasuvar section of the existing road. The total area of the wetland is about 8,000 ha.
-) The Akchala wetlands, a 15,000 ha area, is a continuation of Makhmudchala wetlands that is located in Neftchala and Lenkeran districts. The Akchala wetlands extend to the western boundaries of the GyzyI-Agach Nature Reserve. These are shown on Figure 1 below. They

are Lake Makhmudchala (IBA AZ045) and Agchala (Novogolovka-chala) (IBA AZ047). The total area of both IBAs is approximately 6,500 ha.

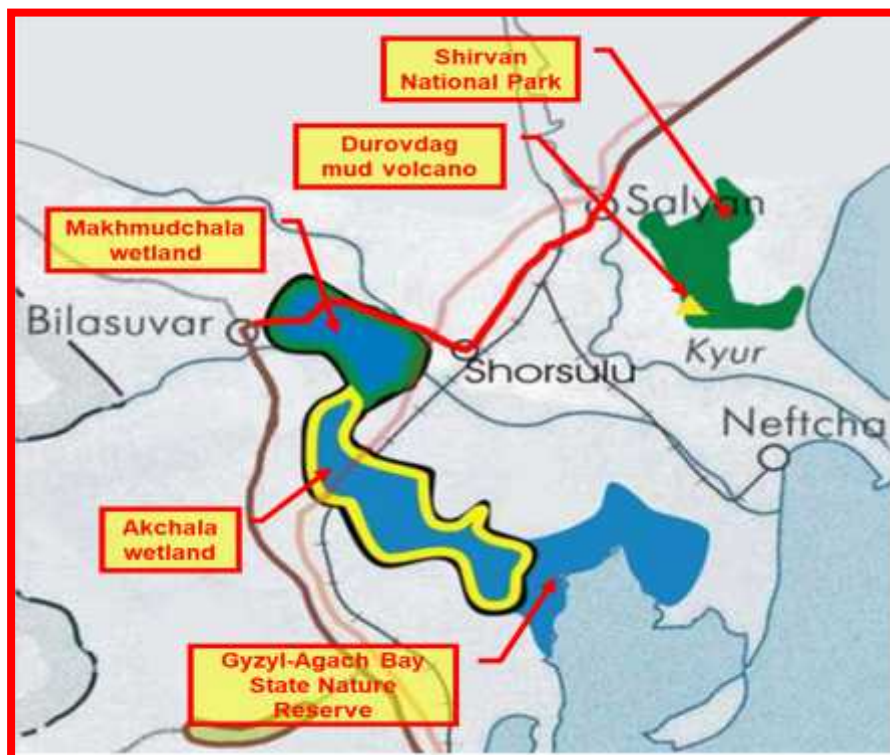


Figure 8: Protected Area Map

3.1.3.4 Cultural Property

Way back in the second century, Salyan, which was located on the Silk Road, was also the center of trade. That role continued on for over the entire history. In February 1868, it was also said that it was transformed into a cultural center with the establishment of Javad District within Baku rayon. In 1916, Salyan was officially considered a city. Salyan has museums which features local artifacts of potteries, tools and agricultural implements. It also has a flag museum that houses some of Azerbaijan’s flags, banners, medals and other memorabilia.

The Persian historian Hamdullah Qazvini wrote that the medieval urban settlement of Bilasuvar was established by the emir of Buveyhi, Pilsuvar in the 10th century, and was hence named after him. In the 1930s, Bilasuvar was called Pushkino and Pushkin as a result of the settlement of people from Russia. In the city there is a History-Ethnography Museum that was constructed on May 9, 2007, with an open-air museum in its yard. This is used during national holidays and public events and features history and patriotism lessons are regularly held in the museum, and this increases interest to museum among schoolchildren. Bilasuvar also has a flag museum showcasing Azerbaijan’s historic and patriotic memorabilia.

All across history, the lands in Azerbaijan have experience a lot of cultural influences through migrations, conquests, occupations and invasions from various types of people. It is understandable that artifacts can be discovered in the course of the road reconstruction. In case of any discovery a “chance find procedure” should be established beforehand to serve as guideline during road construction. This is to properly record and assess the cultural significance of any artifacts in order to preserve as they are considered valuable treasures of the country.

Along the project road, there are two monuments were erected in honor of the soldiers who died during World War II. These monuments are found at Km 38+410, RHS and Km 80+800, RHS with the photos below.



Figure 9: Photos of the WW 2 Soldiers’ Monuments along the Project Road

3.1.3.5 Socio-Economic Conditions

The household in the rayons is generally headed by male, who makes the major decisions concerning its economic undertakings. The household size ranges from 2–8 members. Family members often include the household head and his wife, grown up children with/without their husband/wife, and their grandchildren. The household head’s age ranges from 38–72 years. The highest educational attainment of the household head is usually secondary level but occasionally one has a university degree. Migration of family members seems to be low; however, this may not be indicative of the real situation as a number of adult male members of households in the village usually find work outside, normally in Baku, but are not reported as having migrated. A 2018 statistics data from the State Statistics Committee of the Republic of Azerbaijan on demographics and wages for both Salyan and Bilasuvar Rayon are shown below.

Table 7: Demographics and Wages

Indicator	Salyan	Bilasuvar
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<u>Population</u>	138,600	103,800
Men	69,300	52,400
Women	69,300	51,400
Population density per km ²	87	76
<u>Labor</u>		
Number of employees	14,200	8,100
No employees on industry	2,061	1,333
No. employees construction	138	196
Ave monthly nominal wages	363.9 manat	298.7 manat
Ave monthly nominal wages (industry)	863.8 manat	326.2 manat
Ave monthly nominal wages (construction)	324.3 manat	277.9 manat
No employed population	65,100	47,100
No civil servants	209	200

The economy of agricultural rayons, such as Salyan and Bilasuvar, where the most of the study area falls within, may be improved by means of the trade enhancement due to efficient road network. The reconstructed route within the districts will provide improved access for the agricultural sectors of these economies. Some economic data from State Statistics Committee is shown below for 2018.

Table 8: Gross Product Outputs

Indicator	Salyan	Bilasuvar
Output of goods and services in main sectors of economy, per capita (manats)	2948.8	3039.6
Volume index of output in main sectors of economy (manats)	89.90%	110.40%
Income of population (million manats)	370.4	344.6

Agricultural data in Salyan and Bilasuvar obtained from State Statistics Committee is shown below.

Table 9: Agricultural Production

Indicator	Salyan	Bilasuvar
Production of cereals and dried pulses (tons)	59,788	87,229
Production of cotton (tons)	10,356	22,732
Production of sunflower for seed (tons)	5	1,080
Production of potatoes (tons)	5,094	6,994
Production of vegetables (tons)	34,805	55,174
Production of watermelons and melons (tons)	12,188	1,525
Production fruits and berries (tons)	3,370.70	7,176.40
Stock of cattle and buffaloes (heads)	62,663	40,113
Stock of sheep and goats (heads)	185,770	139,369
Stock of poultry (heads)	676,624	375,058
Meat production (in slaughtered weight) (tons)	7,294	4,562
Milk production (tons)	49,957	27,105
Eggs production (thousand units)	34,865	15,509
Wool production (in greasy weight) (tons)	347	310
Production of pomegranate (tons)	2,175	3,601
Production of olive (tons)	42.2	0.7
Production of hazel-nuts (tons)	0.6	29.3
Stock of bee families (units)	306	2,480
Wheat production (tons)	29,163	45,328
Apple production (tons)	68.3	235.4

With reference to basic social infrastructure of the studied settlements it is generally available within villages or a nearby urban centers. Schools and polyclinics are located within walking distance. Most roads to or within villages are unpaved or in a poor state. Such roads are a source of dust nuisance for villagers in the dry summer months. During the wetter autumn, winter and spring months they are a source mud and related inconvenience (difficult to drive or walk over, mud carried into houses on people's shoes). Public transport system is only available in major roads and railway networks: people use them for special needs (e.g., hospital visits) or occasions (e.g., visiting relatives, weddings) for going to major urban centers or Baku. Some data on education and health from State Statistics Committee is shown below for 2018.

Table 10: Data on Education and Health

Indicator	Salyan	Bilasuvar
<i>Education and culture</i>		
Number of pre-school educational institutions by towns and regions of the country (number)	17	11
Number of children in preschool educational institutions at the beginning of the year (number)	799	505
The number of day general educational institutions at the beginning of the school year by towns and regions of the country (number)	54	37
The number of pupils at day general educational institutions at the beginning of the school year by towns and regions of the country	20,725	16,234
Number of public libraries	44	30
Number of clubs	29	17
Number of museums	3	3
Number of children in school preparation groups of the day general educational institutions total	1,662	1,382
<i>Health and Sport</i>		
The number of physicians per 10 000 population (persons)	18	10
The number of paramedical staff per 10 000 population (persons)	54.3	30.5
The number of hospitals per 10 000 population (pieces)	36.3	17.7

Women in the area have been given opportunities for employment in recent years. In 2017, a Women Resource Centre was opened in the Salyan district of Azerbaijan as a result of a partnership among the United Nations Development Programme (UNDP), the State Committee for Family, Women and Children Affairs (SCFWCA) and The Coca-Cola Foundation⁹. In the same time period, a job fair in Bilasuvar district of Azerbaijan brought together over 70 job-seeking women and approximately 20 local companies¹⁰. The event aimed to connect the job-seeking women with potential employers according to their education and skills, and to assist the local unemployed women in finding jobs and enabling them more actively exercise their economic rights. The current (2018) state of entrepreneurship in Salyan and Bilasuvar is shown below (from the State Statistics Committee)

Table 11: Gender Segregated Entrepreneurs

Indicator	Salyan	Bilasuvar
Number of registered individual entrepreneurs	11,497	13,755
Women registered individual entrepreneurs	2,005	3,077
Men registered individual entrepreneurs	9,492	10,678

⁹ United Nations Azerbaijan, October 20, 2017. "UNDP, Government of Azerbaijan, Coca-Cola open Women Resource Centre in Salyan district". Retrieved from: <http://unazerbaijan.org/en/undp-government-of-azerbaijan-coca-cola-open-women-resource-centre-in-salyan-district/>

¹⁰ United Nations Azerbaijan, November 18, 2017. "EU, UNDP, Government and civil society support job fair in Bilasuvar". Retrieved from: <http://unazerbaijan.org/en/eu-undp-government-and-civil-society-support-job-fair-in-bilasuvar/>

With regards to solid waste management (SWM) systems for Salyan and Bilasuvar, current information were obtained directly from the staff of the Executive Powers of the respective rayons and presented below.

Table 12: Features of the SWM Systems

Attributes	Salyan¹¹	Bilasuvar¹²
Description and location of garbage disposal site	There is a central landfill in the territory of Chukhanli village	There is a central landfill in a close vicinity of Bilasuvar town and in the territory of Yukhari Aghali village
Area of disposal site (in hectares)	5	10
Equipment at the disposal sites	None	None
Areas/villages where garbage is being collected	Centralized garbage collection covers only Salyan town Villages randomly organize garbage collection and its utilization (most of garbage is buried into initially dug pits) If villages transport their garbage to the central landfill, they pay extra fee for disposal	Centralized garbage collection covers only Bilasuvar town Only Beydili village municipality has a tractor to transport garbage from the village to the landfill
Number of trucks/equipment for collection	7 trucks and 1 tractor	There is a tractor and one garbage truck Beydili village has a tractor
Collection frequency	Once a day	Once a day
Are there segregation or sorting of garbage in individual homes or some other sites (if yes, specify)	None	None
Are there individuals buying/selling/ dealing with recyclable materials?	Individuals in the central disposal are sorting garbage to collect metals and plastic	
Is there composting activities in the rayon?	None	None
What are the normal ways of dealing with garbage in each of the rayons?	After sorting by individuals, the rest of the garbage materials are buried into initially dug pits	After sorting by individuals, the rest of the garbage materials are burned

Based on the above data it is observed that both major towns (Salyan and Bilasuvar) have their respective disposal sites, but mainly being used as dumping areas. No efficient SWM systems are established in accordance to standard practice of minimization, segregation, and efficient recycling. Collection activities are limited to the central towns with some villages also being collected or conducting self-collection and self-transport. It is also being reported that burning of garbage is being done in Bilasuvar, which manifests low understanding of a good SWM system.

3.1.4 Ancillary Facilities

Aside from the project roads, potential locations of ancillary facilities for the road project need to be established. These facilities are described in the following sections.

¹¹ Information was provided by Elmeddin Kazimov, a head of Salyan town Housing Maintenance and Service Unity

¹² Information was provided by Gabil Khanmadov, a representative of Executive Power Office for Bilasuvar town

3.1.4.1 Borrow Pits and Quarries

Considerable volume of materials will be obtained from borrow areas and quarries, that will be used for reconstruction of road/bridge as embankment fills, gravel for bituminous pavement layers and bridge concrete components. Several potential borrow areas and quarries were used in previous road projects close to the project road. The following are potential borrow materials

Table 13: Potential Borrow Pits and Quarries

No.	Borrow Pit name	Remark
1	Babazanan	Used in M3 motorway for embankment with black fine sand
2	Kalmas	Mentioned in R45/46 Road for embankment; Considered in Section 1 of M3
3	Atbutlaq	Considered in Section 1 of M3 for embankment
4	Bharamtapa quarries	Used in M3 motorway for crushed gravel
5	Vilesh River quarry	Used in M3 motorway for gravel
6	Lankaran River	Used in M3 motorway for crushed gravel
7	Qrunba borrow pit	Used in M3 motorway for embankment
8	Rvo borrow pit (near Lankaran)	Used in M3 motorway for embankment and still operating
9	Bina (near Alyat)	Embankment Material; Considered in Section 1 of M3

During the detailed engineering phase, potential sites shall be investigated again to ascertain their capacities to be source of materials. These materials should conform to the specifications prescribed in the design. If the Contractor will operate the material sources, he shall be responsible for proper operations of the borrow pits or quarries and any access used in hauling materials to the project sites, along with reinstatement of the extraction site/s upon completion of the project.

To operate a new borrow pit for extraction of materials requires a number of documents such as Permission from Local Executive Power with attached Act and Map from local Land Committee. A permit from Ministry of Emergency Situations (State Agency on Industrial Safety and Mining Supervision) shall also be needed. On the basis of these documents and site observation, the Regional Department of MENR will issue "Conclusion" that has to be presented to the State Ecological Expertise Department of MENR for final processing. This document will include the list of rules for site exploitation and re-cultivation. The application requires an Ecological Passport that can be issued after site final approval. Details required include location of borrow pit and proposed volume, rate of extraction, estimated volume of dust emission etc. Prior to closing the borrow pit, the Contractor shall undertake relevant reinstatement measures, such as site clearing, landscaping, top-soiling, grass seeding and/or re-plantation of bushes and trees if any had been disturbed. Approval on properly done reinstatement shall be received from regional department of MENR. Additionally, if area of the borrow pit is exceeding 1 ha, archaeological conclusion from Academy of Science Institute of Archaeology and Ethnography shall be received.

3.1.4.2 Disposal Sites for Construction Wastes

During road reconstruction, it would be necessary that old materials will result into waste, unless they are still suitable for reuse. Old asphalt pavement can be scrapped and milled and the aggregates mixed with new batches of asphalt mix. However, old components of concrete structure may not be suitable for immediate use. Temporary storage or stockpile of such materials should be discussed with Road Maintenance Units (RMUs) in the Rayons, in coordination with the SAAAR. It is preferred to store these materials in vacant government land but not within the protected area or IBA's. Any contaminated substance, materials, soil, etc., should be transported by the Contractor to appropriate and approved disposal facility for proper treatment.

Some vacant private lands may be used only with written permission of the owner and if it will not pose any environmental or social risk or impacts. Concrete components may be reused for other purposes by rayon authorities or private citizens in their properties. After any demolition of structures,

this option will be explored by the Contractor along with the permission of the Engineer and no objection of SAAAR-PIU and Local Executive Power, when necessary to eliminate generation of debris waste in the project.

Should there be any toxic and hazardous waste that will arise due to construction activities, certain guidance can be obtained from the WBG Environmental, Health, and Safety (EHS) Guidelines, particularly on the chapter on “Hazardous Materials Management”. For the road project, the following should be considered:

-) Hazardous chemicals and liquids (even solids) should be inside roofed and sufficiently sealed, banded and containment works (shelters or sheds or buildings).
-) Containers should be those recommended by manufacturers and appropriate to safely contain materials that are corrosive, reactive or with low flash points.
-) Any spills on the ground should be removed immediately and stored in appropriate containers and to be disposed in approved facilities. One potential disposal site for toxic and hazardous waste is the facility in Sumqayit, which was constructed under the WB Urgent Environmental Investment Project¹³. This landfill was intended to have a capacity of 180.000 m³ with a storage lagoon and necessary facilities.
-) Spill Prevention Plan should be drafted and established by the Contractor prior to commencement of works.

3.1.4.3 Access Roads

During the construction stage, local access may be impaired. Major traffic can be diverted to the M3 motorway via existing interchanges. Rural roads may be utilized with due regard to local residents for their safety and welfare. If rural village roads will be used for temporary accesses, the Contractor should see to it that generation dust and noise/vibration are minimized, and the road frequently maintained to drivable condition. At the end of the usage, the Contractor should reinstate the road to pre-construction or to a better condition.

During bridge or waterway reconstruction, temporary water crossing may be necessary. It is advisable that construction be done during the non-rainy season to take advantage of low water level. This is also to ensure safer vehicular passage over temporary crossing at bridge construction sites. When water crossing structure are finished, the temporary crossings should be demolished and site properly reinstated with revegetation.

The local traffic should be provided with alternate access in areas of road construction. The Contractor should strategize to undertake work in stages in order to minimize inconvenience to the public. Alternate lane construction should be done in case of narrow ROW or vacant spaces within the ROW converted to temporary access whenever possible. Restoration should be done after completion of works in certain spots.

3.1.4.4 Plants and Camps

In establishing asphalt plant and cement batching plant sites for the needs of the project, the Contractor should be guided by a number of items to protect the environment. Emissions will be produced in producing the asphalt mix likewise bitumen spill may occur during handling and mix preparation. For the cement batching plant for concreting works such as bridges, culverts and drainage works, cement dust can contaminate the air. In addition, the preparation, mixing and loading of concrete mix into the transit mixer and subsequent washing of trucks will result into soil and water contamination.

¹³ World Bank (2005) Urgent Environmental Investment Project: Environmental Protection – Priority Directions and Actions, Baku, 2005.

These two facilities should be situated at appropriate distances (no less than 300m) from the residences as well as the river so as not to result to water contamination. Within the project road, since the area is rural, there are ample spaces to set up these plants. The Contractor should obtain the necessary permits, negotiate properly with the landowners and reinstate the area after usage at the end of the project.

The proper maintenance of all the service and sanitary facilities at the construction camp falls under the direct responsibility of the Contractor under the supervision of the Construction Supervision Engineer (CSE) for the project. The sanitary facilities or ablution include toilets, urinals, showers, washstands and a laundry area. In addition, equipment and maintenance yard will also have to be sited accordingly. Waste water should not be discharged into the river unless treated in compliance to local effluent standards.

Solid waste collection and disposal should be planned properly. The Contractor should establish a Solid management for work camps, facility vicinities and work sites. It is expected that for the reconstruction of project road, considerable refuse materials will be generated. If not managed properly, will contaminate depository sites of accumulated solid waste. Improper management of solid waste result in contamination of the surroundings, water resources, and even biota in the vicinity. Along the routed to the disposal sites in the rayons, droppings of solid waste will result to spot contamination and possibly pollution of the natural surroundings. It should be emphasized to the workers that the practice of inadvertent dumping and improper disposal in unpermitted sites will result in contamination of the environment's land and water resources.

For construction camps, there are ample spaces in the area that the Contractor can select to set them up. Since the road traverses sections of farmland with some of them non-productive, usage of these lands can be negotiated with the landowners. There were also some work camp sites used by previous contractors of the M3 Motorway that can also good candidate sites for work camp. The selection of any work camp should ensure proper protection of the physical and social environment as per relevant ESSs and local regulations.

It will be up to the Contractor to select the land parcels required, negotiate directly with the landowner and obtain the necessary permits for his facilities. Such facilities should not be located within the protected areas or IBAs and should have buffer zones when adjacent to forested areas. Site selection and operation of camps and material plants shall be in line with this ESMP as well as Contractor's ESMPs mentioned below in Section 5.1 of this ESMP Report (List of other Plans to be prepared by the Contractor is shown after the ESMP Table).

The list of permits are as follows:

A. LIST OF PERMITS NEEDED FOR ESTABLISHMENT AND EXPLOITATION OF CONSTRUCTION CAMP

1. Permission on establishment from local Executive Power
2. Contract with land owner
3. Conclusion on using of land for Camp installation with description of establishing facilities from Local Department of MENR
4. Permission on using of land for Camp installation with description of establishing facilities from State Ecological Expertise Department of MENR
5. Conclusion on exploitation of Construction Camp from Ministry of Emergency Situation
6. Agreement with local Municipal organization on transportation and utilization of domestic waste and sewage
7. Agreement with local department of "Azersu" on supply with potable quality water or (if domestic and/or drinking water is supplied from unofficial source) result of water analysis made in licensed laboratory with copy of laboratory certificate
8. Agreement with licensed organization on transportation and utilization of hazardous waste

B. LIST OF PERMITS NEEDED FOR ESTABLISHMENT AND EXPLOITATION OF PLANTS

1. Permission on establishment from local Executive Power
2. Contract with land owner
3. Conclusion on using of land for Camp installation with description of establishing facilities from Local Department of MENR
4. Permission on establishment from State Ecological Expertise Department of MENR
5. Ecological Passport
6. Inventory of exhaust to the atmosphere
7. Approved norms PDV (limit for allowed exhaust)
8. Special permission (Technical Passport on filter only for Asphalt Plant)
9. Passports for each Bitumen and Fuel (Diesel) Tanks
10. Conclusion on exploitation of Construction Camp from Fire Department of Ministry of Emergency Situation
11. Agreement with local Municipal organization on transportation and utilization of domestic waste and sewage (separate agreement if located outside the Construction Camp)
12. Agreement with licensed organization on transportation and utilization of hazardous waste

C. LIST OF PERMITS NEEDED FOR ESTABLISHMENT AND EXPLOITATION OF BORROW PITS

1. Permission on establishment from local Executive Power
2. Contract with land owner
3. Conclusion on using of land for Borrow Pit installation with description of establishing facilities from Local Department of MENR
4. Permission on establishment from State Ecological Expertise Department of MENR
5. Ecological Passport

D. LIST OF PERMITS NEEDED FOR ESTABLISHMENT AND EXPLOITATION OF STOCKPILES

1. Contract with land owner
2. Permission letter from land owner on this type of land use

4 ENVIRONMENTAL AND SOCIAL IMPACTS

Under Subcomponent 1.1, the road-works will incorporate climate resilient design and engineering, to improve resilience to the impacts of climate change, which is expected to be rising ambient summer temperatures, increase in the intensity and duration of precipitation with the potential for river and flash-flooding, and increased fire risk. The old M3, which is being rehabilitated, will provide better connectivity and access for local area traffic and in emergency situations, the project road may be used to divert traffic from the new M3.

The engineering design of the road rehabilitation will consider culverts and side-drains sized for the catchment and on rainfall and runoff records. Bridge infrastructure will be designed with adequate protection of the abutments and piers, against erosion, and with suitable water-way areas to accommodate peak flood flows. Similarly, erosion protection will be provided at culvert inlets and outlets. The invert level of side drains will be designed to be lower than the road formation, to prevent ponding water from infiltrating the road sub-base and base layers. The combination of earthquake and increased rainfall may increase susceptibility to landslides; however, engineering design standards and appropriate quality materials will be applied to provide improved resilience to low seismic hazard and landslide susceptibility. Fire hazard could impact short-term connectivity through smoke, dust and road closures. Road surfacing and road-side furniture may also be impacted by fire, but these can be repaired through re-surfacing, or replaced, without lasting consequence.

With these added considerations, the general public will benefit through better connectivity, thus ensuring enhanced mobility, more options for route of goods and improved transport safety. The existing dilapidated road is no longer able to provide the intended service, thus with the planned rehabilitation, the transport systems in these two rayons will improve and boost the economy and alleviate the standards of living.

In this stretch of Yenikend to Bilasuvar road, the primary disturbance along the road corridor will entail generally earthworks such as removal of existing pavement, removal or relocation of objects that are within the construction strip, laying of subbase and base course layers and asphalt pavement, extension of necessary waterway crossings and installation of road furniture.

In setting out the new construction corridor for pavement and shoulders, there may be unavoidable impacts consisting of clearing of existing vegetation and some trees. The detailed design phase should ascertain this aspect and propose ways to minimize these unavoidable impacts. In addition, unavoidable impacts can be expected in the extraction of materials from burrow pits and quarries, since these activities will modify the landscape. Even with reinstatement for natural revegetation, some of the features will remain permanently altered; thus, considered unavoidable.

Detailed impacts are presented in the ensuing discussions.

4.1 Borrowing Construction Materials

The road reconstruction will entail usage of materials in the new two lanes and two shoulders. The excess milled materials from the asphalt layers of the existing road can be used in the new project pavement layers, after verification in accordance with specified parameters. From the environmental point of view the recycling of old asphalt as raw materials in new asphalt mix proves to be beneficial. Savings in the bitumen can likewise be realized with the reuse of old asphalt pavement. As shown in the Pre-FS, the amount of borrow materials will be around 1.8 M - 2M m³, and crushed gravel will be around 4.5M-5M m³. Since nine (9) possible material sources can be utilized (in Table 12: Potential Borrow Pits and Quarries) the sourcing of these needed materials will not be a problem. Nevertheless, the Detailed Design stage will provide more clarification on this particular matter.

If materials from the old road will not be sufficient or if unsuitable materials are found along the new carriage ways, suitable materials will have to be transported from borrow or quarry areas. Materials

from borrow areas will be used for fill, capping layer, granular subbase, crushed base course, and bituminous base course. Several potential material sources were already used in the previous road projects and can also be used. The prospective Contractor can identify his source of materials. However, the materials need to be approved by the Construction Supervision Engineer prior to using them for the project road. Should the Contractor be sourcing the materials from existing and operational quarry site, he will be required to exert influence on the operator that proper operational and management measures be instituted to minimize impacts to the general environment. Should the Contractor decide to open a new borrow site, the guidelines below should be followed in order to minimize impacts associated with the operation of borrow areas:

-) All of the required environmental approvals should be secured and extraction and rehabilitation activities consistent with the requirements of MENR and/or permit conditions be carried out;
-) Prior to operation of the borrow areas, the contractor should submit to ESS and Construction Supervision Consultant (CSC) the following:
 - 1) A plan indicating the location of the proposed extraction site as well as rehabilitation measures to be implemented for the borrow areas and access roads upon project completion;
 - 2) A dust management plan which shall include schedule for spraying water on access road and schedule of the equipment to be used;
 - 3) A schedule of regular dust suppression on all unpaved access roads during the construction period, particularly in sections where critical receptors, such as settlements, are located;
 - 4) Location map of stockpiles which should be away from watercourses to avoid obstruction of flow and siltation;
 - 5) Cover on haul trucks to minimize dust emission and material spillage;
 - 6) Plan to undertake regular maintenance and repair of access roads to their original condition whenever necessary.

The ESMP Table (Table 16) provides specific guideline to ensure that these preventive and /or mitigating measures are carried out and the proper authorities will undertake regular monitoring of its implementation and compliance by the Contractor

4.2 Noise/Vibration and Air Quality

Noise/vibration and air quality issues along the project road are expected to be considerable in certain spots and in settlements. During the road rehabilitation phase, trucks and heavy machinery will be used, and although these activities may be intermittent and localized, they nevertheless contribute lowering air quality levels and sustained noise during work periods.

The noise levels and air quality along the project road are generally satisfactory. In general, the main source of air pollution is dust eroded from flat, dry, un-vegetated agricultural or barren land soil surfaces by the wind. In Salyan, which is the primary population centers, it is observable the lower air quality and elevated noise/vibration levels during the busy times of the day.

In Azerbaijan noise standards were based on the former Soviet Union standards as shown in the Table below:

Table 14: Maximum Allowable Noise Levels

Maximum allowable noise levels, dBA		Description of Area
23 pm to 7 am	7 am to 23 pm	
45	60	Residential area of settlements
55	65	Industrial areas
35	50	Places of public amusement and tourism areas
30	40	Sanitary areas and resorts
45	50	Agricultural areas

Maximum allowable noise levels, dBA		Description of Area
23 pm to 7 am	7 am to 23 pm	
up to 30	up to 35	Strictly protected areas
Note: Project designer may establish stricter maximum allowable noise standards in case of correspondent justification		

Source: TERA International Group on the Environmental Review Framework and Impact Assessment Report. ADB TA 4684-Aze-Phase 2: Preparing the Southern Road Corridor Improvement Project.

A number of mitigating measures to minimize impacts of excessive noise and vibration can be done by the Contractor during the conduct of his work as follows:

- (i) Work will be restricted to between 0600 to 2100 hours within 500m of the settlements.
- (ii) A limit of 70 dBA will be set in the vicinity of the construction site and strictly followed;
- (iii) Machinery to be used for the construction should be equipped with mufflers to minimize the generation of noise;
- (iv) Whenever possible the local population should be advised of occurrence of elevated noise levels to enable them to take the necessary preparatory measures.

Some selected air quality standards in Azerbaijan are shown below.

Table 15: Selected Air Quality Standards

Pollutant	Maximum Allowable Concentration (mg/m ³)	
	For a given moment	For 24 hours
Dust	0.15	0.03
Sulphur dioxide	0.30	0.20
Carbon monoxide	3.00	2.00
Nitrogen dioxide	0.08	0.07
Lead and its compounds (except for tetraethyl lead)	0.001	0.0002

Source: ADB. EIA Report. Masalli (Sarcuvar) Interchange to Shorsulu (Bilasuvar) Interchange MENR (August 2012)

It is expected that the road work will generally be intermittent and not permanent in a specific site, and as such air quality impacts will be short term in specific locations. Short term emissions from machinery and trucks will be expected as well as dust from exposed work area, especially in dry seasons. Likewise, emissions will be expected on a longer-term from stationary sources such as quarries, borrow pits, asphalt plants and/or cement. Siting of these facilities where they can cause the least impact on human and ecologic receptors will be mandatory. Dust can come from quarries, borrow pits, haul roads, unpaved roads, exposed soils, uncovered dump trucks and material stock piles and may settle in residential areas and on productive crops, and may cause to some degree of respiratory stress for nearby residents.

Places that may encounter issues on noise and air quality are residential and commercial places (roadside café's, restaurants, stores and shops) along the road such as Salyan city and villages such as *Gizilagaj (km 67+200)*, *Sarvan (km 71+700)*, *Seyidlar (km 78+800)* and *Shorsulu (km 79+500)*. The Contractor should be more diligent in minimizing impacts to these areas.

Monuments and village markers are structures of local interest that need to be protected during construction. Cemeteries are regarded as place of respect that require extra protection against disruption by minimizing noise and vibration, especially when considerable number of people are present.

The locations of sensitive receptors which will be critical for air quality and noise along the project road need to be taken into consideration especially during the construction phase. Schools and places of worship are considered sensitive receptors because of the considerable number people that are present at certain times. Periodic noise and air quality monitoring should be done during construction in a few places such as (i) *at Km 44+170 (Mashadi Aslan Mosque –RHS)*; (ii) *Km 79+550 (School at Deyikend – RHS)*; (iii) *and Km 81+140 (chool at Boranikend – LHS)*. During the detailed design and construction phase, additional places may be also added for periodic monitoring of noise

The spots where vibration have to be minimized are areas of monuments, village markers, and other landmarks located near the project road as shown in the Table 15 below.

Table 16: Noise and Vibration Impact Spots

Section	Description
Km 37 + 650	Shekerli village marker, LHS
Km 38+ 410	WW II Memorial Monument, RHS
Km 44 + 170	Mashadi Aslan Mosque (Old Mosque), RHS
Km 52 + 400	Salyan Landmark
Km 55 + 900	Salyan Flag Museum, RHS
Km 57 + 600	Monument at Salyan Roundabout, LHS
Km 57 + 630	Cemetery monuments near the roundabout
Km 57 + 650	Cemetery near Salyan roundabout, RHS
Km 62 + 220	Marisli village marker, RHS
Km 63 + 700	Seyidsadiqli village marker, RHS
Km 66 + 580	Alcali village marker, RHS
Km 67 + 260	Qizilagac village marker, RHS
Km 71 + 700	Sarvan village marker, RHS
Km 78 + 400	Shorsulu village marker, RHS
Km 79 + 550	School at Deyikend, RHS
Km 80 + 550	Cemetery, RHS
Km 80 + 800	WW II Memorial Monument, LHS
Km 81 + 140	School at Boranikend, LHS
Km 88 + 500	Farewell' marker near ramp and Flyover Bridge, LHS
Km 88 + 550	Bilasuvar border marker, RHS
Km 89 + 200	Salyan border marker, LHS
Km 89 + 260	Bilasuvar border marker, RHS
Km 89 + 360	'Welcome/Farewell' border marker, LHS

4.3 Natural Habitats

Within the stretch of the project road, the most critical portion is the vicinity of the Makhmudchala wetland, since this forms part of the northern periphery of the perennial waterlogged expanse of the wetland. Although the perceived wetland's northern boundary extends beyond the right-hand side of road, this part of the wetland tends to dry up in summer months because of this locality's shallow depths.

As currently envisioned, the construction works shall be confined within the existing corridor with old pavement removed to be replaced by new pavement layers. Since there will be no "land take" to be undertaken, most of the impacts will be during construction period. Risk of contamination on water quality of the wetland, generation of dust and noise will be elevated during construction. Spills from pavement or embankment materials will have some water quality impacts in the vicinity of the road. However, if done with sufficient due diligence to avoid any contamination, such risks will be minimized if not totally eliminated. Small spills, should it drop into the wetland, will have minimal impact due to huge expanse of the wetland comparatively. Nevertheless, it is important that temporary spill barricades/ barriers or low walls be installed during construction stage and recommendatory to have permanent ones be installed as part of the mitigation measures during operations phase.

Noise and vibration may have short-term impacts to avian species and some small faunal species in the wetland. It is also essential that workers are advised not to disturb any existing faunal habitats especially during breeding seasons. Furthermore, vegetation in the vicinity of the wetland should not be disturbed, especially if they are outside of the construction corridor. Any vegetation that will be affected should be transplanted in the vicinity of the disrupted area.

The western boundary Shirvan Natural Park is located around more than a kilometer east of the road, with some private plots in between developed into farmlands and fishponds. These features have been there for a number of years already. During the road construction, these land use features will serve as buffers to any impacts to deter any further intrusion into the fringes of the protected area. The Contractor should also be reminded of the presence of a protected volcano within the national park, and its vicinities should be excluded from being used as road material sources.

Impacts on existing trees along the project road should be considered with care, especially for mature and ancient trees. The final alignment in the detailed design should be able to determine if certain trees would be cut. For the moment, it would seem that any planted trees along the corridor will not be affected. Should trees be affected, mature trees should be balled out for replanting, or replacement with at least three (3) for every tree that will be cut down. This should be done in coordination with appropriate government agencies (e.g., Greening, Landscape Construction of Azerbaijan OJSC, under the MENR, Local Executive Power, etc.).

The Contractor should carefully consider that the placement of any ancillary facilities should be outside and at considerable distance from any natural habitat areas. Prior to establishments of these ancillary facilities, plans should be submitted to the Construction Supervision Consultant for their verification.

4.4 Impact on Water Resources

As discussed in previous sections, the most critical water body that will have to be protected from any contamination and pollution will be the Makhmudchala wetland. This can be due to spills from liquid, pavement or embankment materials. Extra diligence to ensure no liquid or solid droppings get into the wetland. Any droppings should be removed by the Contractor as soon as possible to avoid any contamination issues. The Construction Supervision Consultant should also be diligent in checking the area during construction at this area. In addition, the Contractor should take into consideration the impacts to any flora and fauna in the wetland or any smaller water bodies close to the road. Construction schedules and activities (e.g., generation of noise, elevated vibration levels, etc.) should consider seasonal restrictions pertaining to species migrations and breeding.

As intended, the road rehabilitation works will follow the same alignment as the old M3, and with sufficient and diligent implementation of measures impacts to the main wetland will be avoided or minimal. The old M3 road had been in the same spot of the wetland's western edge for several decades already such that habitats of faunal species are expected to have naturally established in the wetland interior. Accordingly, no new areas of the wetland will be affected. Hence, there will be no need to engage a biodiversity specialist to come up with a separate Biodiversity Management Plan. The Supervision Consultant Environmental Specialist should exert more efforts ensuring the ESMP is followed at this area of the project road.

Similarly, other water bodies (private ponds, irrigation canals, small impoundments, etc.) situated near the project road should also be under diligent watch of the Contractor and Consultants. Construction methods should ensure in the "Method Statement" on how to avoid contaminating any water bodies along the project road. In addition, the Contractor should be made aware that the groundwater is close to the surface such that land spills of any contaminant should be avoided. Clean-up operations should be done as soon as spills occur.

Construction at or near bodies of water such as streams, should be done as much as possible during dry seasons where the disturbance to water quality will be negligible. To assure minimal impacts, the Contractor should do the following:

-) Install cofferdams, silt fence, sediment barriers or other appropriate devices to prevent migration of silt during excavation and boring operation within rivers, streams, ponds or wetlands.
-) Dewatering and cleaning of cofferdams will be performed to prevent siltation, by pumping from cofferdams to a settling basin or a containment unit.

-) Discharge of sediment-laden construction water (e.g., from areas containing dredged spoil) directly into surface watercourses will be forbidden.
-) Sediment laden construction water will be discharged into settling lagoons or tanks prior to final discharge.
-) Disturbance (e.g., generation of noise, elevated vibration levels, etc.) to any flora (regeneration or propagation seasons) and fauna (migration, nesting and breeding seasons) should be minimized.

4.5 Climate Change Impacts

In 2017, Azerbaijan produced only 0.17% of the total greenhouse gas (GHG) annual emissions and is not a major contributor to climate change. Based on a study¹⁴ national greenhouse gas inventory, it showed that the Transport Sector contributes only around 10.39% of the total greenhouse gases emissions. Within the Transport Sector, the road transport contributes the largest greenhouse gases emission, which was estimated to be around 91.27%. This was followed by Domestic Aviation at 6.37%, shipping at 2.18% and rail at 0.18%. Consequently, the contribution of road transport to the national level for greenhouse gas is 9.48%. Applying that percentile to a 2016 total emission of 74.0 metric ton (Figure below), amounts to 7.017 metric ton.

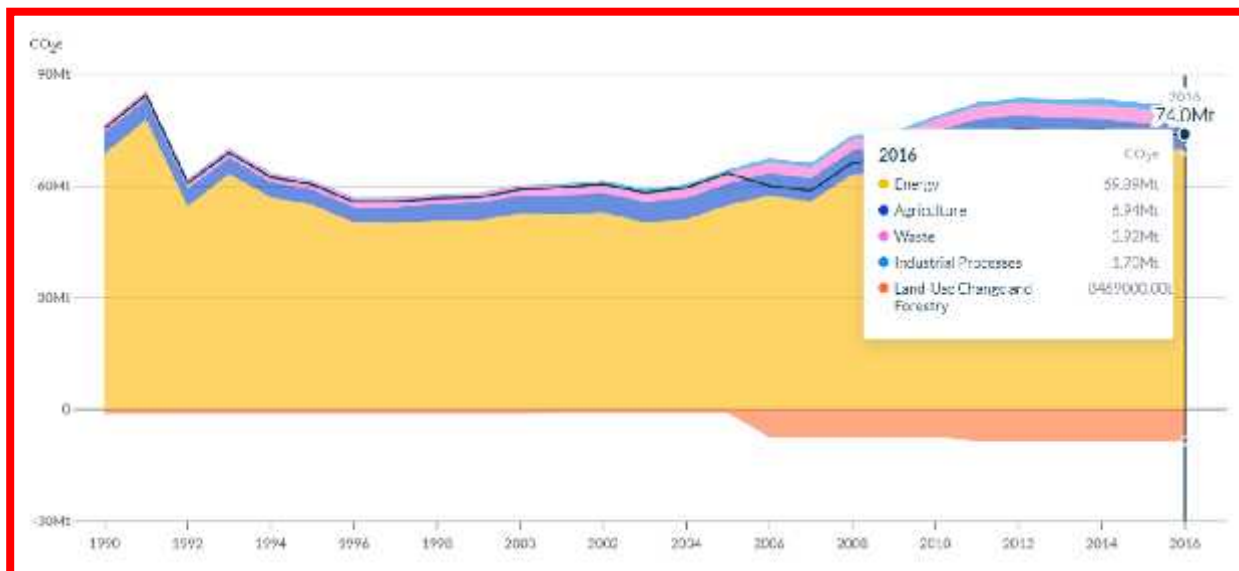


Figure 10: Historical Emissions for Azerbaijan

The traffic in the M3 compared to the entire traffic in Azerbaijan is so small that the contribution to greenhouse gas will be so miniscule. Furthermore, as mentioned in the Pre-Feasibility Study, with the operation of the new M3 Motorway only 30% of the traffic will remain. Hence, the project road’s greenhouse gas contribution will be further decreased. Overall, the RCDP Subcomponent 1.1 contribution proves to be negligible.

On the other hand, the impact of Global Warming to road infrastructure will be considerable as presented with the following scenarios:

-) The number of summer days is expected to increase and the number of frost and ice days are expected to fall significantly.
-) There is little seasonal variation in the average monthly precipitation, but there will be annual Maximum 5-day Rainfall (25-yr Return Level) will rise by 6.98mm (-18.24mm to 77.74mm) in 2040-2059 (highest emission scenario)
-) There will be 1.5–2 m rise in Caspian Sea level by 2050.

¹⁴ Third National Communication to the United Nations Framework Convention on Climate Change. Republic of Azerbaijan (MENR – 2015)

All of these factors should be taken into consideration in the hydrologic study during the detailed design stage for water bodies crossing the road such as rivers, canals, ponds, etc. These factors will be for more significant to Makhmudchala wetland as this has connection other bodies with links to the Caspian Sea. The sea level rise in the Caspian will result in elevating the water level of Makhmudchala wetland. Hence, for the road to provide a year-round access, it is essential that the correct road elevation is properly determined.

4.6 Impacts from Natural Hazards

For the Yenikend-Bilasuvar road, only a few natural hazards can be considered as significant during the actual construction – water crossings and weather conditions. The road alignment traverses a flat terrain and crosses around six (6) major waterways where, bridges will either be reconstructed or repaired depending on the decisions during the detailed design. The Kur River Bridge, being newly reconstructed, will not be part of the project works. The presences of water constitute a natural hazard, where construction activities will be perceived as hazardous due to potential occurrence of falling from heights. This type of hazard however is being considered in the Occupational Health and Safety Risks.

In the case of the weather, since this hazard uniformly affects the locality of the rayons, it is not unique to the project road construction. Hence, during inclement weather conditions and extreme temperatures, the Contractor should take necessary precautionary measures with regards to occupational safety with due regard to local weather advisories. In the interest of general safety of work personnel, the Contractor will be expected to be responsible for the safety of his work force.

4.7 Labor, Health and Safety Measures

During construction, labor, health and safety risks to workers and project affected communities are elevated. Appropriate measures should be established including during the tendering period to clarify responsibilities of the Contractor with due supervision of the SAAAR-PIU (or through CSC) for sufficient compliance. This is to ensure that the health, safety and welfare of everyone are protected. The Contractor will prepare detailed Contractor's Environment, Social Management Plan (CESMP) containing provisions for health and safety consistent with this ESMP to detail the safety measures, materials, personnel and budget that will be put in place to ensure health and safety for workers and communities. The plan will also include emergency and incident notification measures, on-site supervision, monitoring and reporting on health and safety arrangements.

4.7.1 Labor Risk and Measures

The labor risk for RCDP is elaborated in the Labor Management Plan (LMP). The key risks and impacts would be related to the RCDP Subcomponent 1.1 include exposure to physical, chemical and biological hazards during construction activities, use of heavy equipment, falling from heights, falling objects hazards, inhalation of noise and dust, exposure to electrical hazards from the use of tools and machinery. The other risks associated with the proposed project activities are:

-) **Labor risks associated with contracted workers.** It is expected that road renovations/reconstruction and services will be implemented by international and/or local contractors and where possible contracted workers will be hired internationally and/or locally. However, the Contractor will be required to have a written contract with their workers materially consistent with objective of ESS2, following procedures as specified in the World Bank's Procurement Regulations and required by the Azerbaijan Labor Code and other related laws.
-) **Labor risks including labor influx and associated SEA/SH risks** and child labor are considered minimal due to the due to existing laws. As added safety net, the civil works

bidding documents should carry provisions for contractors to commit against the use of forced labor. The SAAAR-PIU's staff in charge of contractor supervision will monitor and report the absence of forced labor, GBV. A locally based project specific GRM will be established to process workers complains and community grievances due to labor influx, as this will be expected.

-) **Employment Risks** may denote that some direct or contracted workers either have no contract or have a contract with ambiguous terms and conditions, thus leading to workers' unfair treatment. As measures against this, all the project workers to be hired, whether direct, contracted or sub-contracted, will be employed based on the principles of nondiscrimination and equal opportunity (*ESS2 pars 13-15*). The PIU (and the CS Consultant) will assess the contractor's internal HR procedures to ensure consistency with ESS2.
-) **Overtime work risks.** For some possibility of occurrence, issues may arise pertaining to unaccounted working hours and lack of compensation for overtime work in Azerbaijan, which is violation of the Labour Code. Also, there may be risk of failure to pay individuals who do formal contracts. As part of the measures, the project's SAAAR-PIU will seek to address these risks through: (1) making sure that all direct workers, part-time, assignment-based construction workers have written contracts with overtime work accounting provisions construction; (2) establishing a Grievance Redress Mechanisms (GRM) for direct workers and contracted workers (*ESS2 C pars 21-23*).

4.7.2 Health and Safety Risk and Measures

4.7.2.1 Occupational Health and Safety Risks

The Occupational Health and Safety (OHS) risks for Subcomponent 1.1 are considered low to moderate and associated with type of works to be implemented in the project areas. The terrain of the project area is generally flat and the construction corridor follows the same alignment as the existing roads. The possible risks that may arise in this project are as follows:

1. The conduct of hazardous work, such as use of heavy machinery, or use of hazardous materials.
2. Infection of disease, such as COVID-19.
3. Possible accidents or emergencies, especially when working over water bodies (rivers, canals, wetlands, etc.).
4. Accident involving motorists at the project road while under construction.

Many workers will be exposed to occupational health and safety hazards, including but not limited to:

- Z *General earthworks*
- Z *Pavement construction - asphaltting, concreting, etc.*
- Z *Bridge construction works – falling into water, substructure and superstructure works*
- Z *Installation of road furniture and signages – passing traffic safety, excavations hazards,*
- Z *Falling from elevated structures*
- Z *Electrical works*
- Z *Exposure to chemicals (as paints, solvents, lubricants, and fuels,)*
- Z *General Driving accidents*
- Z *Lifting of heavy structures*
- Z *Exposure to construction airborne agents (dust, silica and asbestos)*
- Z *Ergonomic hazards during construction*
- Z *Welding hazards (fumes, burns and radiation)*
- Z *Steel erection hazards etc.*
- Z *Building and facility construction – camps, asphalt plants and cement batching plants*

The Contractor to be hired for road reconstruction works under the Subcomponent 1.1 will be required to develop and implement written labor management procedures, including procedures to establish and maintain a safe working environment as per requirements of ESS2. To ensure that measures will

be set in place during construction, The Contractors and sub-contractors will be required to ensure workers will use required safety gears, receive safety training module and other preventive actions as provided in the Project's Environmental and Social Management Framework (ESMF). Contractors for Subcomponent 1.1 will be providing their own Labor Management Plan which shall also be followed by their subcontractors to promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions.

4.7.2.2 Health and Safety at Camps and Facilities

Work camps and construction sites need to be properly managed in terms of general sanitation in order to avoid any health and safety hazards to surrounding communities. The Contractor should designate a qualified environmental, health and safety personnel who will anticipate and address hygienic issues in coordination with the MOH's Regional Disinfection Centre and the local health and safety officer. In the event, the COVID-19 pandemic will still be ongoing precautionary measures against spread of viral infection should be included along with maintaining good lines of communication with relevant health and government authorities. Extra precautions should be exercised to prevent the entry and transmission of diseases into the work camp and the surrounding communities. It will be the responsibility of the Contractor to provide the following:

- (i) Adequate health care facilities (including first aid facilities) within construction sites and work camps;
- (ii) Training of all construction workers in basic sanitation and health care matters, and on the specific hazards of their work;
- (iii) Issuing personal protection gadget, gears, clothing and equipment for workers, such as safety boots, helmets, gloves, protective clothing, goggles, and ear protection in accordance with SNIP III 4-80;
- (iv) Clean drinking water to all workers at all times;
- (v) Adequate protection for the general public, including safety barriers and marking of hazardous areas in accordance with safety regulations for construction, rehabilitation and maintenance, 1978;
- (vi) Safe access through the construction site to people whose residences/shelters and routes are temporarily severed by road construction;
- (vii) Adequate drainage throughout the camps to ensure that stagnant water bodies and puddles that may serve as breeding ground for any disease vectors do not form; and
- (viii) Sanitary latrines and garbage bins in construction site, which will be periodically maintained and cleared for safe disposal by the contractors to prevent outbreak of diseases. Where feasible the contractor will arrange for safe disposal of waste generated at the work sites into existing waste collection systems and disposal facilities of nearby communities.
- (ix) Provision of measures for preventing COVID-19 viral infection among workers at work and in living quarters.

As part of the general health preparation, the Contractor should coordinate this with the AIDS Centre in Baku to obtain practical advice regarding general health care. Awareness campaign on the avoidance of HIV/AIDS and STD involving both the local community and the construction workers should be undertaken in conformance to the requirements of the Department of Hygiene and Environmental Protection.

Applicable HIV/AIDS prevention shall be adopted as part of the RCDP Subcomponent 1.1 intervention and incorporated as EMP activities. These activities will focus primarily on information campaign, condom distribution for the contractor's workers and staff as well as liaison and coordination with the local and national health authorities especially the AIDS Monitoring Centers for monitoring and appropriate action.

4.7.2.3 General Community Impacts

To avoid any conflicts between construction workers and nearby communities with respect to health (or even social) amenities, the Contractor shall provide temporary worksite facilities such as health care, eating space, and praying places preferably within the work camp. Likewise, in anticipation of effectively handling social issues, the contractor shall also submit to SAAAR-PIU and CSC a plan (mechanism and organizational structure) for handling and resolution of communities' grievances arising from the construction processes consistent with the RCDP Grievance Redress Mechanism (GRM). Avenues for dialogues and consultations should be provided at all times to deal with community issues. Among the considerations to be brought forward in this respect consist of the following:

-) In bidding documents and contracts, the Contractor will be required to implement the Labor Management Plan and Codes of Conduct and Action Plan to Prevent Gender Based Violence.
-) The Contractor must arrange for trainings on GBV/IEC campaign to be provided by a recognized agency or NGO (e.g., "Woman Association for Rational Development" or any recognized and credible women organization in Azerbaijan).
-) The cost of the campaign shall be funded by the Contractor from the provisional sum provided in the bill-of-quantity. The contractor shall ensure that at least one refresher for workers is conducted each month to review materials provided.
-) SAAAR, in collaboration with contractors and other stakeholders such as local government and SEA/SH service providers, will ensure that the project grievance redress mechanism (GRM) and workers' GRMs include protocols, training, and accountability mechanisms as relevant to ensure that grievances related to SEA/SH can be accepted and handled adequate with due confidentiality and ethical standards.

Whenever possible, the Contractor shall employ local labor to benefit local communities and to promote the overall acceptance of the project. For the Yenikend-Bilasuvar Road the Contractor shall look into the possibility of hiring local groups to undertake cleaning of drains during this construction period. In addition, at the completion of the project, the RMU-SAAAR should also look into the possibility of employing the local people for the maintenance of roadside drains.

During the construction phase, it will be expected that existing traffic will be disrupted and local accessibility will be impaired, which can cause problems with the local community. To mitigate this situation the Contractor should: (1) Submit a traffic management plan to local traffic authorities prior to mobilization; (2) Provide information to the public about the scope and schedule of construction activities and expected disruptions and access restrictions, such as billboards and signages; (3) Allow for adequate traffic flow around construction areas; (4) Provide adequate signalization, appropriate lighting, well-designed traffic safety signs, barriers/fences and flag persons for traffic control; and (5) Provide temporary access where accessibility is temporarily restricted due to civil works.

Should the Contractor use any areas for borrow materials, any access roads should be maintained during the construction phase and rehabilitated at the end of construction by the contractor and his workers to the satisfaction of the local authorities and in compliance with the contract. Compliance shall be monitored by the construction supervision engineer.

Since there are a number of establishments along the road, the Contractor should be able to maintain accessibility to these establishments to minimize economic impacts on such businesses. Along the alignment itself, no impacts on cultural property, e.g., museums, cemeteries, and cultural monuments, adjacent to the ROW are anticipated. However, access by the local community to these areas should be maintained by the Contractor.

4.8 Land Acquisition, Land Use Restrictions, and Involuntary Resettlement

As stated in the Pre-Feasibility Study, SAAAR intends rehabilitate the project road within the existing ROW and the construction corridor close to existing one to minimize property impact. During the detailed engineering, it will be verified if it will be necessary to acquire some lands adjacent to the

road. Any land acquisition should follow the Resettlement Policy Framework (RPF) and corresponding Resettlement Plan be drafted in accordance with ESS5. In addition, other features along the right-of-way should be noted such as roadside facilities (bus stops, water pumps, utility lines, etc.), trees, fences, and others. This is to supplement the identification of features in survey done during the Pre-Feasibility Study stage and to be further refined in the Feasibility Study and Detail Design stage.

4.9 Public Information and Community Relations

Provision of timely information for the project and maintaining good community relations during project execution are among the keys to ensure the success of the project in terms of providing the intended outputs and outcome as well as minimizing social conflicts and grievances. The essential information on GRM shall be announced extensively in the communities through multiple channels consistent with the SEP. Accordingly, the Contractor and Construction Supervision Consultant shall be familiarized with the GRM (with training, if needed) with regards to their roles and responsibilities including diligent record-keeping and logging of all grievances.

4.9.1 Public Information

The disclosure of project information to the public is described in detail in the Stakeholder Engagement Plan, in accordance with ESS10. The overall objective of this Stakeholder Engagement Plan is to establish an organized program for stakeholder engagement, including public information disclosure and consultation, throughout the entire project cycle. Accordingly, the within the project cycle appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format stakeholder engagement and Information Disclosure. As explained in ESS10 “meaningful consultation” is a two-way process, that is based on the prior disclosure and dissemination of relevant, transparent, objective, meaningful and easily accessible information in a timeframe that enables meaningful consultations with stakeholders in a culturally appropriate format, in relevant local language(s) and is understandable to stakeholders.

The recommended methods to be used as part of Information Disclosure to the public will be:

-) **Public/community meetings** – this will be in terms of unrestricted meetings with the Project-Affected Parties at the rayon level prioritizing on those vulnerable groups and in which the general public can raise concerns and provide comments. Depending on the level of interest on the RCDP, separate meeting for women and important sectors for a more focused discussion. These meetings can be scheduled on a semiannual basis.
-) **Communication materials** – are printed materials consisting of brochures, flyers, posters, etc. to be produced by the SAAAR-PIU and to be made available at the Executer Power office in Salyan and Bilasuvar. A “Public Relations Kit” will be designed specifically and be made available both in print and online form.
-) **Project Website** – SAAAR/ PIU will present project updates in its website (<http://www.aayda.gov.az/az>) regularly (at least on a quarterly basis) with key project updates and reports on the project’s performance both in Azerbaijani and English. The website can also be utilized to provide information regarding the grievance mechanism for the project.
-) **Mass/social media communication – Whenever the need arises**, the project may arrange for production of video materials (for video-sharing platform, e.g., YouTube) or documentary broadcast on TV/cable TV and which will entail description of the project, advance announcement of the forthcoming public events or commencement of specific Project activities.
-) **Information Desks** - During the initiation of the RCDP, an “Information Desks” in each Rayon (Salyan & Bilasuvar) will be arranged with Executive Powers to provide local residents with information on stakeholder engagement activities, project interventions, contact details of the Focal Point Person, etc. The FPP will set up these information desks in Rayon offices where they can meet and share information about the project with PAPs and other stakeholders.

RCDP brochures and fliers on various project related social and environmental issues will be made available at these information desks.

4.9.2 Community Relationships

Maintaining good community relationship is essential for the success of the project. The SEP provides the fundamentals for arriving at and maintaining community relationships. This is grounded on transparency, through provision of appropriate project information and maintain the lines of communication open. The Grievance Redress Mechanism (GRM) shall serve a framework by which SAAAR-PIU will respond to concerns and grievances of project-affected parties related to the environmental and social performance of the project in a timely manner. The grievance process shall be explained to the community and shall be accessible to all project-affected parties, at no cost, without retribution and will not prevent access to judicial or administrative remedies. Handling of grievances will be done in a culturally appropriate manner and be discreet, objective, sensitive and responsive to the needs and concerns of the project-affected parties. The mechanism will also allow for anonymous complaints to be raised and addressed.

The resolution of project related issues will establish community trust and confidence to the main players of the project. Satisfaction of the target beneficiaries will be attained by maintaining good community relations within the entire project cycle.

5 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

As per ESS1- Annex 1 par. 5, an Environmental and Social Management Plan (ESMP) is an instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental and social impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures. ESS1- Annex 1 par. 14 also states that the (ESMP) consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. It also includes the measures and actions needed to implement these measures

Following ESS1 and with linkages to other ESSs, an environmental and social risk and impact assessment was done on RCDP Subcomponent 1.1 based on existing information and field verification site inspection. Subsequent information to be obtained in Feasibility Study and Detailed Engineering Design shall be utilized to update the PESMP prior to project tendering. The current PESMP has been devised to ensure proper response with the identified project impacts, which may arise during the construction and operation phase of the project road. Prior to the construction, the SAAAR-PIU with the assistance of the Construction Supervision Consultant will do the following for the Project Road:

-) Establish baseline information on the existing environmental conditions and parameters for the specific road project;
-) Develop an environmental auditing protocol for the construction period as well as a detailed monitoring and management plan;
-) Provide guidance and formulate a report outline that will be used by the Contractor as a guide in the preparation of monthly environmental progress reports; and
-) Undertake regular and periodic monitoring of Contractor's implementation of the mitigation measures during the construction stage, consistent with the monitoring program, and submit to SAAAR-PIU quarterly monitoring reports. Special separate reports should be prepared in the event a significant environment related incident will arise.
-) The SAAAR-PIU will provide the WB a summary of the monitoring results on a quarterly basis.

In addition, environmental and social management activities should form part of the Internal Monitoring System in accordance with the WB ESF-ESSs. The purpose of such system is to track progress of as well as changes in civil work activities as well as monitor effects and impact of the road construction and rehabilitation on the households and communities along the road. The SAAAR-PIU will be responsible for the establishment of the monitoring system with the assistance of the Supervision Consultant and the Civil Works Contractor, whose scope will be specified in the terms of reference for the work contract.

5.1 Mitigation Plan

The following Table shows the Environmental and Social Risks and Impacts and Mitigation Measures for the Yenikend-Bilasuvur road reconstruction on various stages – preconstruction, construction and operation. These show mitigation activities, methods, and project agencies’ responsible for implementation and monitoring of mitigation measures.

Table 17: Environment and Social Risks and Impacts and Mitigation Measures for Subcomponent 1.1

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	Responsibility / Project Stage
ENVIRONMENT				
<u>Design and pre-construction phase - Topography and Soils</u>				
Materials Sources (approved selected material sources)	Impacts to resources such as gravel and suitable soil other quarried/ excavated materials will occur due to extraction or exploitation of material sites and transportation of materials to the job site.	<p>To mitigate potential impacts to and/or those resulting from the area’s geologic characteristics and resources, the Project must:</p> <ul style="list-style-type: none">) Should the Contractor, decide to operate his own materials sources (quarries and borrow pits), adopt contract provision specifying that the contractor should present plan for the exploitation and reinstatement and obtain all necessary permits pertaining to the operations of such materials sources.) Adopt contract provisions specifying that only licensed facilities (quarries and borrow pits) in compliance with all applicable regulations and industry standards will be used as the sources of quarried materials. The bid and contract documents must state that selection of the quarries requires the review and written approval of the Construction Supervision Consultant (CSC) to ensure that avoidable adverse impacts are minimized.) Adopt Contract provision requiring the Contractor to come up with material extraction plan that minimizes wastage and promote conservation of resources.) The use of materials from old pavement should be assessed and when proven to useful should be processed and reused in the pavement mixture. <p>(Indicative Cost: Part of Designer’s Scope/Budget)</p>	ESS 1, and 3	<u>SAAAR and Design Consultants / During Design Stage</u>
<u>Design and pre-construction phase - Noise and vibration</u>				
Noise Avoidance prior to Construction (populated along the	Noise Generation – work area will be the primary sources of noise	<p>To minimize Noise:</p> <ul style="list-style-type: none">) Guidelines should be specified in Technical Specification;) Provide specifications for baseline measurement for Air Quality to be done by the Contractor in approved locations by the CS Consultant; and) Contractor to prepare Noise Management Plan as part of the ESMP. <p>(Indicative Cost: Part of Designer’s Scope/Budget)</p>	ESS 1	<u>SAAAR and Design Consultants / During Design Stage</u>

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
<i>project road)</i>				
	<u>Design and pre-construction phase - Waste management</u>			
Water Quality – Avoidance of Contamination (Contractor's Camp)	Decisions made in the Pre-Construction Stage in regard to the sites and conditions (or lack of conditions) imposed on waste generating aspects of the Project such as construction camps, and the disposal of solid waste generated by the Project will have a significant effect on the impacts of the Project.	<p>Sites for the disposal of large volumes waste must be determined in the Pre-construction Stage. Specific contract provisions ensure that construction camps and other potential sources of secondary impacts are properly sited and provided with drainage and wastewater facilities. The following provisions are stipulated in regard to:</p> <p>Construction Camp Wastewater Disposal and Site Drainage Systems. The following conditions must apply and form part of the Technical Specifications:</p> <ul style="list-style-type: none">) <u>Explanations of Proposed Site Drainage Systems</u>. Locations likely to be subject to water quality impacts or significant runoff (construction camps, staging areas, etc.) and an explanation of the proposed site drainage system must be indicated in subsequent SSESMP (after the Detailed Design).) <u>Wastewater</u>. Wastewater arising on the site must be collected, removed from the site via a suitable and properly designed temporary drainage system and disposed of at a location and in a manner that will cause neither pollution nor nuisance. The site plan required by SSESMPs must indicate the system proposed and the locations of related facilities in the site, including latrines, holding areas, etc. There must be no direct discharge of sanitary or wash water to surface water. Disposal of materials such as, but not limited to, lubricating oil and onto the ground or water bodies shall be prohibited. Liquid material storage containment areas must not drain directly to surface water. Liquid material storage containment areas equipped with drains must be valved, and the valve must be maintained locked in the closed position with supervisory control of the key. Lubricating and fuel oil spills must be cleaned up immediately and spill clean-up materials must be maintained at the storage area.) <u>Drainage</u>. The site plan must be devised to ensure that rain run-off from the construction sites is not deposited directly into any watercourse, stream, or canal and shall indicate the system proposed, including the locations of retention ponds and other facilities. There must be no direct discharge of sanitary wastewater, wash water, chemicals, spoil, waste oil or solid waste to surface water bodies. Fuel, lubricating oil and chemical spills must be contained and cleaned-up immediately. Accumulated cleaned-up material should be transported to appropriate and approved treatment facility for toxic and hazardous waste. Spill clean-up equipment must be maintained on site.) <u>Locations of Fuelling Operations and Liquid and Toxic Material Storage Areas</u>. The site plans must specify the locations for the storage of liquid materials and toxic materials. The following conditions to avoid adverse impacts due to improper fuel and chemical storage. 	ESS 1, 3 and 6	<u>SAAAR and Design Consultants / During Design Stage</u>

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
		<p>) Fueling operations shall occur only within containment areas.</p> <p>) All fuel and chemical storage (if any) must be sited on an impervious base within a bund and secured by fencing. The storage area must be located away from any watercourse or wetlands. The base and bund walls must be impermeable and of sufficient capacity to contain 110 percent of the volume of tanks.</p> <p>) Filling and refueling must be strictly controlled and subject to formal procedures and will take place within areas surrounded by bunds to contain spills / leaks of potentially contaminating liquids.</p> <p>) All valves and trigger guns must be resistant to unauthorized interference and vandalism and be turned off and securely locked when not in use.</p> <p>) The contents of any tank or drum must be clearly marked. Measures shall be taken to ensure that no contaminated discharges enter any drain or watercourses.</p> <p>) Disposal of lubricating oil and other potentially hazardous liquids onto the ground or water bodies must be prohibited.</p> <p>) If accidental spills occur immediate clean-up must be undertaken and all clean-up materials stored in a secure area for disposal to a site authorized to dispose of hazardous waste.</p> <p>) Locations Relative to Watercourses. The site plans must be devised to ensure that, insofar as possible, all temporary construction facilities must be located at least 50 meters away from a water course, stream, or canal.</p> <p><i>(Indicative Cost: Part of Designer's Scope/Budget)</i></p>		
<u>Design and pre-construction phase - Transportation of Construction Materials and Wastes</u>				
Routes for Transport	Specifying locations manner of transporting materials into the worksites – The design engineer should establish clear guidelines for transporting construction materials	<p>To minimize impacts to communities and natural surroundings:</p> <p>) Local road and community regulations should be adhered to when using local routes for transport purposes for the project (Subcomponent 1.1).</p> <p><i>(Indicative Cost: Part of Designer's Scope/Budget)</i></p>	ESS 1, 3, 4 and 6	<u>SAAAR and Design Consultants / During Design Stage</u>
<u>Design and pre-construction phase - Hydrology and water resources</u>				
Water Quality – surface contamination (Contractor)	Surface water contamination: The Contractor's work activities and facilities are the primary source of contamination. Discharges directly into the water or	<p>To eliminate threat of surface water pollution:</p> <p>) Prevent inappropriate siting of Contractor's facilities (Contractor's Camp, equipment yard, asphalt and concrete batching plants, quarry/borrow pits), the Technical Specifications on siting them should be prepared properly.</p>	ESS 1,3 and 6	<u>Contractor/ During Construction</u>

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
<i>r's facility sites)</i>	indirectly onto the ground that will finally find their pathways into the river will be the causes of contamination.	<ul style="list-style-type: none">) Prevent inappropriate siting of construction equipment washing area, to prevent discharge of generated from washing waste water to the nearby water bodies or water channels) Baseline measurement for Water Quality should be done by the Contractor in locations specified by the CS Consultant.) Contractor should provide layout plans for installation of or strategies for treatment for wastewater from his facilities. <p><i>(Indicative Cost: Part of Contractor's Scope/Budget)</i></p>		
Flooding – Drainage (depressed spots)	Drainage – Proper drainage design is important to maintain the structural integrity of the road and this would mean adaptable to worsening weather condition.	<p>To ensure safe and functional drainage works, consideration in the design phase will be given to the issue of drainage and culverts to ensure that drainage patterns are improved from the existing conditions and that increased run-off does not occur or result in flooding of areas previously undisturbed.</p> <p><i>(Indicative Cost: Part of Designer's Scope/Budget)</i></p>	ESS 1, 3 and 4	<u>SAAAR and Design Consultants / During Design Stage</u>
Flooding – (climate change not part of previous design practice)	Insufficient assessment of climate change impacts lead to undersized waterways and drainage works and which can result to localize flooding.	<p>Hydrologic Study to be done as part of detailed design work– detailed study on the impacts of climate change to hydrology, capacity of waterway infrastructure, flood elevations and drainage works.</p> <p><i>(Indicative Cost: Part of Designer's Scope/Budget)</i></p>	ESS 1, 3 and 4	<u>SAAAR and Design Consultants / During Design Stage</u>
Service Quality – at Bridge Sites	Bridge Construction – Bridge structural design should be made to provide sufficient service life.	<p>To ensure safe and functional works:</p> <ul style="list-style-type: none">) All new bridges must be designed for the life expectancy of 75 years. The bridge rehabilitation and strengthening works must be designed for the life expectancy of 50 years.) The design loading and design of all structural components must conform to the bridge design standards provided in the Employer's Special Requirements.) Finally, the bridge design and layout must be aesthetically pleasing and in harmony with the existing environment. <p><i>(Indicative Cost: Part of Designer's Scope/Budget)</i></p>	ESS 1, and 3	<u>Contractor/ During Construction</u>
Construction phase – Materials Sources				
Materials Sources (approved quarry and pits)	Environmental and Social Impacts associated with use of quarry materials and borrow pits	<p>Prior to opening of any quarry or rock crushing facility, the Contractor will require approval from the relevant Agencies and the CSC to ensure that land owners are adequately compensated for land use and that the sites are not located in an area likely to cause significant detriment to the local environment.</p> <p>To ensure that this is the case Contractors should ensure that quarries and crusher plants are:</p>	ESS 1, 3, 4 and 6	<u>Contractor/ During Construction</u>

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
<i>borrow sites</i>		<ul style="list-style-type: none">) Located at least 300 meters from any residential/settlement area to prevent noise and dust impacts;) Located outside of agricultural land; and) Where possible, located these facilities in government owned lands.) Quarry and borrow pit area should be reinstated prior to the completion of the project.) Initial state of the quarry area shall be documented for future reference during quarry reinstatement activities <p><i>(Indicative Cost: Part of Contractor's Scope/Budget)</i></p>		
Hauling Routes (<i>routes used</i>)	Physical environmental Impacts associated with haul route is expected, especially for placement of construction materials and equipment	<p>Prior to commencement of construction, the actual state of all haul routes (existing and planned) should be assessed and photographed. Where required, appropriately sited haul roads should be constructed and used to minimize soil compaction and loss of agricultural land. The Contractor should be required to return all temporarily used haul roads/construction traffic routes to their original state. In cases where hauling roads pass through intensively used pasture land, protective animal fences need to be set up along such roads to prevent collisions with local livestock.</p> <p><i>(Indicative Cost: Part of Contractor's Scope/Budget)</i></p>	ESS 1, 3, 4 and 5	<u>Contractor/</u> During Construction
Handling of Hazardous Materials (<i>Camp or at fuel refilling areas</i>)	Contamination due to Spills or Hazardous Materials – Improper handling of hazardous materials can cause them to drop onto the ground which can result to soil contamination.	<p>The Contractor shall ensure that:</p> <ul style="list-style-type: none">) All fuel and chemical storage (if any) shall be sited on an impervious base within bund and secured by fencing. The storage area shall be located away from any watercourse or wetlands. The base and bund walls shall be impermeable and of sufficient capacity to contain 110 percent of the volume of tanks.) The construction camp maintenance yard shall be constructed on impervious Layer with adequate drainage to collect spills; there shall be no vehicle maintenance activities on open ground.) Filling and refueling shall be strictly controlled and subject to formal procedures. Drip pans shall be placed under all filling and fueling areas. Waste oils shall be stored and disposed of by a licensed contractor.) All valves and trigger guns shall be resistant to unauthorized interference and vandalism and be turned off and securely locked when not in use.) The contents of any tank or drum shall be clearly marked. Measures shall be taken to ensure that no contaminated discharges enter any soils.) No bitumen drums or containers, full or used, shall be stored on open ground. They shall only be stored on impervious Layer. 	ESS 1, 3 and 4	<u>Contractor/</u> During Construction

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
		) Areas using bitumen shall be constructed on impervious Layer to prevent seepage of oils into the soils (approximate cost/budget - \$500) (Indicative Cost: Part of Contractor's Scope/Budget)		
Construction phase- Air quality and Climate				
Air Quality – Dust (project and access roads)	Generation of Dust – Spots cleared of vegetation, hauled embankments, excavations are exposed and in dry season will be sources of dust in the area and become an issue to the environment and to the local population.	To suppress dust there shall be watering of unpaved haulage and transport routes regularly as needed. (Indicative Cost: Part of Contractor's Scope/Budget)	ESS 1, 3 and 4	<u>Contractor/</u> During Construction and Maintenance
Air Quality – Emissions (project and access roads)	Emissions from equipment and facilities – equipment, trucks and machinery will be the sources of emissions in the area. It is important to maintain the good quality of air in the surroundings.	To minimize emission: All machinery and vehicles must be in good technical conditions. (Indicative Cost: Part of Contractor's Scope/Budget)	ESS 1, 3 and 4	<u>Contractor/</u> During Construction and Maintenance
Air Quality – Stationary Sources (Contractor's Facilities and Plants)	Air quality impacts from stationary sources – Stationary sources like asphalt and cement batching plants will generate emissions which are unusual in the area and degrade the pristine quality of air in the surroundings.	Initial Air Quality measurements shall be undertaken before commencement of construction works in the areas agreed with the Supervision Engineer Locations for quarry sites, borrow pits, asphalt and concrete batching plants must be approved by the Engineer and relevant agencies during the Preconstruction phase. Efforts should be made to ensure that these facilities are as near to the Project road as practical to avoid unnecessary trips and potential dust issues from vehicle movements during construction works. In addition, no quarry, borrow pit or asphalt plant shall be located within 300 meters of any residential/settlement area, protected area or sensitive receptor. (Indicative Cost: Part of Contractor's Scope/Budget)	ESS 1, 3 and 4	<u>Contractor/</u> During Construction and Maintenance
Waste Management (Camp and Work Sites)	Open burning of waste materials – Contractor's burning of materials on site will contribute to fouling of air in the area	The Contractor shall ensure no burning of debris or other materials will occur on the Site without permission of the Engineer. (Indicative Cost: Part of Contractor's Scope/Budget)	ESS 1, 3 and 4	<u>Contractor/</u> During Construction

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
Air Quality – Fuel Emissions (Camp and Sites)	Fuel Emissions – the use of fuel will result in generation of contaminated emissions that can harm the ecosystem and result in illnesses to local population	Contractor shall ensure that no furnaces, boilers or other similar plant or equipment using any fuel that may produce air pollutants will be installed without prior written consent of the Engineer. <i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i>	ESS 1, 3 and 4	<u>Contractor/</u> During Construction
Air Quality – Exhaust Emissions (Camp and Work Sites)	Exhaust emissions from the operation of construction machinery – the operation of machinery generate emissions that can harm the ecosystem and result in illnesses to local population.	The Contractor shall ensure construction equipment shall be maintained to a good standard and fitted with pollution control devices. The equipment (including the pollution control devices) will be checked at regular intervals by the Engineer to ensure they are maintained in working order and the inspection result will be recorded by the Contractor & Engineer as part of environmental monitoring. In addition, the Contractor shall: <ul style="list-style-type: none">)] Discourage of the idling of engines;)] Prohibit of the use of equipment and machinery that causes excessive pollution (i.e., visible smoke) at project work sites;)] Ensure material stockpiles being located in sheltered areas and be covered with tarpaulins or other such suitable covering to prevent material becoming airborne. <i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i>	ESS 1, 3 and 4	<u>Contractor/</u> During Construction and Maintenance
Air Quality – Fugitive Emissions (Contractor’s Facilities and Plants)	Fugitive emissions from asphalt and cement batching plants – the operation of plants generate emissions that can harm the ecosystem and result in illnesses to local population	The Contractor shall ensure that conveyor belts at ancillary facilities (e.g., quarries) shall be fitted with wind-boards, and conveyor transfer points and hopper discharge areas shall be enclosed to minimize dust emission. All conveyors carrying materials that have the potential to create dust shall be totally enclosed and fitted with belt cleaners. <i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i>	ESS 1, 3 and 4	<u>Contractor/</u> During Construction and Maintenance
Air Quality – Dust at Haul Roads	Dust generated from haul roads, unpaved roads, exposed soils and material stock piles – During construction some spots cleared of vegetation, hauled embankments, and excavations are exposed and in dry season will be sources of dust in the area and become an issue to the	<ul style="list-style-type: none">)] The Contractor shall ensure that the following dust suppression measures shall be instituted:)] All trucks used for transporting materials to and from the site will be covered with canvas tarpaulins, or other acceptable type cover (which shall be properly secured) to prevent debris and/or materials from falling from or being blown off the vehicle(s);)] Areas of reclamation shall be completed, including final compaction, as quickly as possible consistent with good practice to limit the creation of wind-blown dust.)] Hard surfaces will be required in areas with regular movements of vehicles; and)] Effective use of water sprays will be implemented (e.g., all roads within the construction areas of the Site shall be sprayed at least twice each day, and more if necessary, to control dust to the satisfaction of the Engineer). 	ESS 1, 3 and 4	<u>Contractor/</u> During Construction and Maintenance

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
	environment and to the local population.	) (Indicative Cost: Part of Contractor’s Scope/Budget)		
	) Construction Phase – Solid Waste Management			
General Environmental quality (Contractor’s Facilities and Plants/ routes & worksites)	<p>For the work sites and facilities, improper management of solid waste result in contamination of the surroundings, water resources, and even biota in the vicinity.</p> <p>During transport of solid waste materials to disposal sites, droppings of solid waste will result to spot contamination and possibly pollution of the natural surroundings.</p> <p>When disposing solid waste, inadvertent dumping and improper disposal in unpermitted sites will result in contamination of the environment’s land and water resources.</p> <p>During the entire construction period, absence of Solid Waste Management Plan will result in poor control of solid waste generated by the project and its ancillary facilities, resulting in local contamination and potential pollution of the work sites and its vicinities.</p>	<p>Foremost of all, the Contractor should establish a solid waste management plan to be implemented in all work facilities and sites. This shall be adhered to by every workers for the project.</p> <p>Proper SWM will include minimization of waste, sorting, reusing/recycling and proper disposal in accordance to regulations. Interaction with the local executive power on the use of local disposal facilities should be established.</p> <p>During transport, garbage hauling trucks should be sufficiently covered to avoid droppings along the route to the disposal sites.</p> <p>) Proper disposal protocol should be followed in accordance with local regulations.</p>	ESS1, 3 and 6	<u>Contractor/</u> During Construction and Maintenance
	Construction Phase - Water Quality			
Water quality – Natural	The project alignment in some locations runs close and crosses river and irrigation	No construction of bridge substructures (foundations) should be allowed during the spawning period (around May to July). Crane barges and other vessels involved in bridge construction can also impair water quality and endanger the local fish by leaking oil. Officers	ESS1 and 6	<u>Contractor/</u> During Construction

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
Water Quality (Water crossings along the project road)	<p>channels at which bridges, and box culverts will be reconstructed. Most important water source is Kura river, also one of most important ecological features in the study area are the wetlands. Within the studied corridor Mahmudchala wetlands (designated as Ramsar sites due to their important bird populations) extend from the Shorsulu to Bilasuvar. Potential impacts to surface water will be mainly during the bridge construction works. Pollution from highway runoff and potential spillage of hazardous substances resulting from traffic accidents will have both short term and long term, cumulative water quality impacts on the wetlands. Construction activities can directly contaminate the irrigation canals, as well as adjacent wetlands during the bridge construction and consequently affect the biological species in this area.</p>	<p>of these construction vessels should exercise the utmost care in avoiding collisions and other accidents that could lead to water pollution. Restoration works are to envisaged: backfilling during the construction of supporting structures; cleaning of the river bed and the flood plain from cluttering of the objects, extracting and hauling piles of scaffolding and temporary supports; dismantling of temporary facilities on the construction site and land reclamation, including borrow area and access roads; erosion control measures, such as sodding of embankments. Special care (e.g., minimizing noise generation, avoidance of nesting areas, avoidance of water contamination, etc.) needs to be taken when working in the wetlands due to the national importance of wintering and breeding birds and the regional importance of the plant communities. Water quality monitoring to be undertaken before starting of bridge construction works and periodically during the construction. (Indicative Cost: Part of Contractor’s Scope/Budget)</p>		and Maintenance
	Drainage – The site should be well maintained, and this includes establishing good drainage at work camps. This is important to maintain livable	<p>During the construction phase the Contractor is required to construct, maintain, remove and reinstate as necessary temporary drainage works and take all other precautions necessary for the avoidance of damage by flooding and silt washed down from the Works the Contractor shall ensure provision/or performance of the following: J Contractor should provide additional measures to catch debris from falling into the river;</p>	ESS 1, 3 and 4	<u>Contractor/</u> During Construction

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
	condition and sanitary place for workers.	<ul style="list-style-type: none">) As much as possible construction should be undertaken during the dry season to minimize the threat to water contamination;) Excavation methodologies should be done to minimize stockpiling near flowing water;) Temporary rock protection should be provided to prevent soil materials to be washed away.) Monthly monitoring of water quality should be done to determine the status of water quality. Monitoring parameters will be BOD, COD, Turbidity, Oil and Grease, Petroleum components at rivers.) When casting structural elements on site, spillage into the water should be prevented by installing proper measures to catch any spill;) Structural elements should be casted far from the river to prevent concrete mix from getting into the water. <p><i>(Indicative Cost: Part of Contractor's Scope/Budget)</i></p>		
Water Quality – Camps and Facilities	Water Contamination issues at Construction Camps and Storage Areas - Waste water that will be generated at work camps due to a lot of people staying whether short-term or long term will contaminate the immediate surroundings which can harm both the man and ecosystem if no treatment is provided prior to discharge.	<p>The Contractor shall ensure the following conditions are met:</p> <ul style="list-style-type: none">) Wastewater arising on the site shall be collected, removed from the site via a suitable and properly designed temporary drainage system and disposed of at a location and in a manner that will cause neither pollution nor nuisance.) There shall be no direct discharge of sanitary or wash water to surface water. Disposal of materials such as, but not limited to, lubricating oil and onto the ground or water bodies shall be prohibited.) Prevent washing of construction equipment in the place other than designated washing area within the Camp, and which should be at considerable distance from any water body.) Washing water shall be collected from concrete platform via drains leading to sedimentation basin, where sediments will be allowed to settle and the water clarified. Once the water is clarified, it shall be reused for washing. Sediments shall be collected and can be used for other construction purposes. <p><i>(indicative cost estimate: \$500)</i></p>	ESS 1, 3 and 4	<u>Contractor/</u> During Construction
Water Quality – Mitigation of	Impacts related to wastewater and solid waste disposal could occur in the Construction Stage due to a failure to properly plan or	Mitigation action of potential impacts related to wastewater and solid waste disposal during construction requires strict application of all conditions to the review of the ESMP by the CSC prior to approval and strict supervision during the course of the work. Unannounced site inspections must be undertaken as a routine part of supervision activities.	ESS 1, 3 and 4	<u>Contractor/</u> During Construction

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
Contamination (Contractor's Camp)	implement the safe guards required by the ESMP or because of unanticipated circumstances or accidents. Potential impact from improper disposal for waste materials from scrapping asphalt road bed Waste in Construction Camps and other ancillary facilities – Waste generated when managed improperly will contaminate the surroundings. This impact is considered slight to moderate.	ESMP for waste management with all details for disposing these wastes should to be prepared by the contractors and has to be approved by supervision consultant The Contractor will be required to coordinate all construction camp activities with neighboring land uses. The Contractor shall also be responsible to maintain and clean-up campsites and respect the rights of local landowners. If located outside the Row, written agreements with local landowners for temporary use of the property will be required and sites must be restored to a level acceptable to the owner within predetermined time period. <i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>		
Water Quality – Mitigation of Silt Contamination (Waterways)	Spoil – Since the worksite crosses waterways, unplanned dumping of spoil may lead to contamination of the river. This impact is considered slight to moderate.	Under no circumstances shall the Contractor dump excess materials on private lands without permission of the owner and approval from the Engineer. In addition, excess spoil shall not be dumped or pushed into waterways at any location. <i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>	ESS 1, 3 and 4	<u>Contractor/</u> During Construction
Water Quality – Mitigation of Substance Contamination (Camps and Worksites)	Inert Solid & Liquid waste – Improper management of such waste will result in contamination of the soil and water resources in the area. This impact is considered slight.	The contractor shall be responsible for the following: <ul style="list-style-type: none">) Provide refuse containers at each worksite; <i>(indicative cost estimate: \$300)</i>) Maintain all construction sites in a cleaner, tidy and safe condition and provide and maintain appropriate facilities as temporary storage of all wastes before transportation and final disposal;) Train and instruct all personnel in waste management practices and procedures as a component of the environmental induction process; and collect and transport non-hazardous wastes to all approved disposal sites. The sites for waste disposal shall be agreed with the local municipal authorities and Concerned Agencies. A specialized company may be contracted, if available to ensure collection of domestic and general waste from camps and temporary storage areas and transportation to landfills approved and licensed by the Concerned Agencies. Such disposal facilities appropriate for WB 	ESS 1, 3 and 4	<u>Contractor/</u> During Construction

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
		funded project should comply with local legislations on proper siting (e.g., sufficient distance from residences, waterbodies, free from flooding, etc.) and operations (garbage provided periodically with soil cover, with signages and well-fenced to deter people and astray animals, allowing only residual wastes as much as possible, with sufficient operational supervision of local authorities, etc.). These types of facilities should be identified in the C-ESMP. <i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>		
Water Quality – Mitigation of Asphalt Contamination <i>(Camps and Worksites)</i>	Asphalt – Waste from the operation of asphalt plant can cause serious damage to the environment. This impact is considered slight to moderate.	Waste from the operation of asphalt should be managed properly. Reinstatement of the site will be necessary after the project. <i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>	ESS 1, 3 and 4	<u>Contractor/</u> During Construction
Water Quality – Mitigation of Hazardous Materials Contamination <i>(Camps and Worksites)</i>	Contamination of Surface water and Groundwater resources	Hazardous chemicals and liquids (even solids) should be inside roofed and sufficiently sealed, banded and containment works (shelters or sheds or buildings). Containers should be those recommended by manufacturers and appropriate to safely contain materials that are corrosive, reactive or with low flash points. Any spills on the ground should be removed immediately and stored in appropriate containers and to be disposed in approved facilities (e.g., toxic and hazardous facility in Sumqayit, which was constructed under the WB Urgent Environmental Investment Project ¹⁵) Spill Prevention Plan should be drafted and established by the Contractor prior to commencement of works <i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>	ESS 1, 3 and 4	
	Hazardous Waste – Improper management of hazardous waste will result in serious damage to the environment.	Management, handling & storage protocols for hazardous waste will be outlined in the Contractor's Waste Management Plan. Disposal locations of hazardous wastes should be agreed with the Concerned Agencies [mainly MENR, with Ministry of Health (for processing), and Ministry of Emergency Situations]. The Contractor shall collect hydrocarbon wastes, including lube oils, for safe transport off-site for reuse, recycling, treatment or disposal at the temporary storage sites and further at the locations approved by mentioned Concerned Agencies or pass it to the licensed operator having environmental permit on operation of the hazardous wastes.	ESS 1, 3 and 4	<u>Contractor/</u> During Construction

¹⁵ World Bank (2005) Urgent Environmental Investment Project: Environmental Protection – Priority Directions and Actions, Baku, 2005.

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
		Following the WBG General EHS Guidelines, an Environmental Response Plan (ERP) should be developed by the Contractor when handling hazardous material. <i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>		
Water Quality – Mitigation of Debris Contamination (Camps and Worksites)	Road and bridge debris during dismantling – Improper removal, transport, stock storage and unplanned disposal will result in contamination of the natural surroundings. This impact is considered slight to moderate.	Method Statements, as part of the C-ESMP, for removal, transport and stockpile storage should be provided by the contractor with assurance that no contamination will result from these activities. Permit from relevant agencies for temporary stockpile and storage, as well as final disposal should be secured. The sites should be inspected regularly to determine if contamination is occurring outside storage or disposal sites. <i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>	ESS 1, 3 and 4	<u>Contractor/</u> During Construction
<u>Construction phase – Erosion</u>				
Geohazards – Soil Conservation (Worksites)	The increase in rainfall due to climate change will increase the erosion of cut areas and de-vegetated sites, destabilized fill embankments and weaken underlying structures. For the project road the potential geo-hazards consist of river bank and road edge erosion.	The Contractor will be responsible for ensuring: <ul style="list-style-type: none">) Material that is less susceptible to erosion will be selected for placement around bridges and culverts.) Re-vegetation of exposed areas including; (i) selection of fast growing and grazing resistant species of local flora; (ii) immediate re-vegetation of all slopes and embankments if not covered with gabion baskets; (iii) placement of fiber mats to encourage vegetation growth, although due to the arid conditions in most of the road, this may only be feasible where there is regular rainfall or other natural water supply. <i>(Indicative Cost: Budget to be determined in the Detailed Design Stage by Consultant)</i>	ESS 1, 3 and 6	<u>Contractor/</u> During Construction
<u>Construction phase – Noise and Vibration</u>				
Noise / Vibration during construction (Work sites)	Construction Noise and Vibration - Heavy equipment and trucks cause most of the noise in the construction sites, especially when they are out of proper maintenance.	The Contractor shall ensure provision of the following: Vibration: <ul style="list-style-type: none">) The bidding documents for civil works will require that the Contractor submit to the Engineer for review and approval a written Construction Vibration Management Plan (CVMP) detailing the procedures for vibration monitoring and control. The CVMP plan will include the requirement for trial construction sections to determine the likely magnitude of vibrations at defined distances from a vibration source. These programs would be reviewed and approved by the Engineer to ensure compliance with contractual specifications, including the ESMP. The maximum permissible vibration limit set at 0.25 inch/s must not be exceeded within the defined contour (7.5m from the road edge) where houses may be at potential risk of damages; 	ESS 1, 3 and 4	<u>Contractor /</u> During Construction and Maintenance

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
		<ul style="list-style-type: none">) Where the results of the vibration monitoring, or from a trial construction section, show that the specified construction vibration limit is reached at a particular location, the Contractor would be directed by the Engineer to suspend the construction activities that generate the excessive vibration at such location, and with the approval of the Engineer take mitigative actions necessary to keep the construction vibration within the specified limit;) Such actions may include, alternative construction methods such as: (i) decrease of vibration emission from the particular equipment item; (ii) substitution of the particular equipment item at such location by other equipment capable of variable vibration control; (iii) use of smaller equipment; (iv) compaction without vibration rollers; (v) decreasing the thickness of material layers below the maximum thickness permissible under the specification; (vi) building wave barriers (trench or ditch) where appropriate; (vii) change the pavement type for example from flexible to rigid pavement, (viii) any other method of Contractor’s choice that may be used while ensuring compliance with the specification for the material that is being compacted;) Once work in a particular section of the road has been scheduled, nearby residents and property owners should be notified about the specific times and dates that vibration generating activity will occur;) Use of low volume charges will reduce the potential for vibration induced damage to structures; and in the event of damage proven to be due to the contractor’s activities, owners of structures will be fully compensated;) Monthly Instrumental Vibration monitoring. <p>Noise:</p> <ul style="list-style-type: none">) Source Controls, i.e., requirements that all exhaust systems will be maintained in good working order; properly designed engine enclosures and intake silencers will be employed; and regular equipment maintenance will be undertaken;) Site Controls, i.e., requirements that stationary equipment will be placed as far from sensitive land uses as practical; selected to minimize objectionable noise impacts; and provided with shielding mechanisms where possible;) Work near Sensitive Receptors shall be limited to short term activities;) Time and Activity Constraints, i.e., operations will be scheduled to coincide with periods when people would least likely be affected; work hours and work days will be limited to less noise-sensitive times. Hours-of-work will be approved by the Engineer having due regard for possible noise disturbance to the local residents or other activities. 		

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
		<ul style="list-style-type: none">) Construction activities will be strictly prohibited between 10 PM and 6 AM near the residential areas. When operating close to sensitive areas such as residential, nursery, or medical facilities, the Contractor’s hours of working shall be limited to 7 AM to 6 PM;) Community Awareness, i.e., public notification of construction operations will incorporate noise considerations; methods to handle complaints will be specified. Sensitive receptors will be avoided as possible (i.e., aggregate crushers, operators, etc.). Disposal sites and haul routes will be coordinated with local officials;) Temporary noise barriers will be utilized for those areas where sensitive receptors are significantly affected during construction. Temporary barriers are typically constructed from plywood and should be at a minimum 2.50 m high to screen acoustic line-of-sight between the receiver and the noise source. Solid plywood site hoarding can often be effective as a temporary noise barrier; Construction noise barriers should be implemented if effective and practicable. This would be decided on a case-by-case basis;) Monthly Instrumental Noise Monitoring <p><i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i></p>		
	<u>Construction phase – General Contamination</u>			
<p>General Contamination – Mitigation from Droppings and Spills (Worksites)</p>	<p>The transport of construction materials and waste may result in the following:</p> <ul style="list-style-type: none"> - Droppings of materials to be brought to the site can become community and motorist hazards - Droppings of waste will result to spot contamination and possibly pollution of the natural surroundings. - Spills from haul trucks can be source of ecological, biological and socioeconomic harm in the area. - Dust from uncovered trucks can cause health problems to the people. 	<p>The Contractor shall ensure provision/ performance of the following:</p> <ul style="list-style-type: none">) Liquids transported to or from the sites should be placed in sealed containment;) Soil, gravel and stone should be covered with tarp or any material that can effectively prevent the dropping;) Drivers should abide by safe driving practices, especially through communities;) Driver and Contractor’s personnel should ensure that materials are being safely loaded, hauled and unloaded.) Emergency spillage and clean-up procedure should be drafted by the Contractor and approved by the Engineer <p><i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i></p>	<p>ESS 1, 3, 4 and 6</p>	<p>Contractor/ During Construction</p>

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
Construction phase - Flora and Fauna				
Floral Impacts (Worksites)	<p>Preliminary assessments did not indicate the presence of unique plant habitat within the area of influence. Most plants are ubiquitous native species, which are highly tolerant of grazing, compaction, and other physical disturbances.</p> <p>In the design it is important to avoid affecting trees, vegetation, fauna species and their natural habitats when possible.</p>	<p>Mitigation will require action to ensure that losses are kept to a minimum. Bid/contract documents will specify roadside plantings and replacements as part of the road design and contain enforceable provisions in contract specifications to minimize plant loss. Designs shall ensure that there will not be any impact to wildlife through adequate survey of the area.</p> <p>To minimize any loss of plantations alongside the road, it is recommended that the regional branch of the State Topography and Lands Committee is contacted. This organization should have records of all plantations and their exact location. Based on this information, the potential impact of the road upgrading works in the relevant sections can be assessed and ways by which the impact may be minimized will be identified. Owing to the fact that some portions of the lands immediately adjacent to the road may be under the ownership of the State Forest Fund, any potential vegetation losses may require approval from that department. Where the loss of such plantations cannot be avoided, their replacement should be envisaged in the design and budget. In addition, the Greening, Landscape Construction of Azerbaijan OJSC, under the MENR should also be notified for their role in greenery works along the highways. The use of wood cut from live trees whether from roadside plantations or other sources by the workforce for fuel-wood or construction purposes should be prohibited.</p> <p><i>(Indicative Cost: Scope/Budget to be determined in the Detailed Design Stage by Consultant)</i></p>	ESS 1, 3 and 6	Contractor/ During Construction
Floral habitats (Worksites)	<p>Unavoidable impacts to area vegetation will occur due to construction activities. Possible loss of flora</p> <p>The existing water bodies (river, creeks, gullies, lakes, ponds, canals and ditches) along the project road should be given special consideration as they could be habitats of faunal species. During reconstruction, wildlife may be affected through direct physical impact on their natural or secondary terrestrial and aquatic habitats, e.g., during site</p>	<p>The Contractor shall ensure the following conditions are met:</p> <ul style="list-style-type: none">) The vegetation of undisturbed portions of the alignment consists mainly of low diverse semi-arid vegetation. There are no known reports of threatened or endangered plant species or habitats, in particular within the studied section.) The alignment does not pass through any protected areas. There are no known populations of threatened fauna species in the immediate vicinity of the road. Impacts on ecology and wildlife due to road improvements will not be significant.) All works will be carried out in a manner such that damage or disruption to vegetations are minimized.) Trees and bushes will be demarcated and cordoned off.) Cutting down will not be take place without the prior approval of the relevant Local Authorities.) Plantations will be conducted after technical works have been completed.) Planting time will be restricted to spring (March) and/or autumn (September till October). 	ESS 1, 3 and 6	Contractor/ During Construction

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
	clearance, construction of structures on watercourses and through noise and disturbance from moving machinery and workforce	<ul style="list-style-type: none">) Plantings shall be within the existing Right of Way (ROW) at the locations where tree losses occur;) Trees to be planted will have the following parameters: 1.5 – 2 m height, age 5 – 6 years;) No ancient trees will be cut down or impacted by the construction or operation;) Trees and shrubs will only be felled or removed if they impinge directly on the permanent works or necessary temporary works;) Trees and bushes outside the construction width but within the road reserve will be generally preserved from damages;) Trees immediately adjacent to the required construction corridor will be lopped;) Habitat destruction will be minimized during construction;) Final forming and re-vegetation will be completed after regeneration of stabilizing ground cover.) In case of any unexpected need for tree cutting, Contractor should prepare Tree Cutting and Planting Plan including the following: <ul style="list-style-type: none">) Each tree removed by the Contractor should be replaced by the same species (1:3) or other at suitable locations, all as designated by the relevant authorities (number of trees for replacement should be agreed with authorities).) Tree translocation should be explored and done whenever feasible.) Dead saplings should be replaced as soon as possible.) No trees should be cut in the area without written permission from the Engineer.) Work crews should be alerted that faunal species should not be killed and be allowed to escape during work execution. At best, disturbance should be in such a way as to provide enough escape corridor to allow for animals to move on their own. Should animals be unintentionally be trapped in the work area/s, workers should find ways to enable these animals to escape unharmed. <p><i>(Indicative Cost: Trees to be planted may subject to actual computation by Detailed Design Engineer)</i></p>		
Construction phase – Impacts on Mahmudchala Wetland				
Biodiversity – Habitats Conservation	Construction activities at the vicinity of the Mahmudchala wetlands (designated as Ramsar sites due to their important bird populations) can disturb species in the area and affect habitats.	<p>The Contractor will be responsible for ensuing:</p> <ul style="list-style-type: none">) Special care (e.g., minimizing noise generation, avoidance of nesting areas, avoidance of water contamination, etc.) needs to be taken when working in the wetlands due to the national importance of wintering and breeding birds and the regional importance of the plant communities.) Water quality monitoring to be undertaken before starting of bridge and road construction works and periodically during the construction. 	ESS 1, 3 and 6	<u>Contractor/</u> During Construction

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
		<i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>		
	Construction phase - Disruption of Traffic			
Disruptions of Traffic (Along project road and Worksites)	During construction stage, the existing traffic flows will be impeded by construction works on the road pavement, widening operations, and construction or reconstruction of drainage structures. In addition, vehicles involved in construction will increase traffic flows. These will result in congestion, delays and increase in noise and exhaust emissions. In built up areas, the pedestrian traffic will need to be given special attention to ensure safety of road user.	Contractor shall prepare Traffic Management Plan to avoid or mitigate all possible negative. But in general, following mitigation measures will need to be adopted: <ul style="list-style-type: none">) providing advance information to the public about planned reconstruction works;) planning reconstruction activities to minimize disruption and maintaining at least one open lane where there is no viable alternative route;) signing of temporary traffic diversions in close coordination with local authorities;) use of flagmen and temporary traffic lights to control traffic flows at constricted sites, including safe crossing for pedestrians and) limiting, to the extent practicable, the movement of large trucks to off-peak traffic times. <i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>	ESS 1, 2 and 4	<u>Contractor/</u> During Construction
	Construction phase – Workers' Health and Safety			
Work Conditions	<i>Health and Safety of workers</i> Z Risk to health and lives if Sanitary work and living conditions are not provided	<ul style="list-style-type: none">) Provide adequate housing for all workers at the construction camps and establish clean canteen/ eating and cooking areas.) Portable lavatories (or at least pit latrines in remote areas), male and female, shall be installed and open defecation shall be prohibited and prevented by cleaning lavatories daily and by keeping lavatory facilities clean at all times.) Provide separate hygienic sanitation facilities/ toilets and bathing areas with sufficient water supply for male and female workers.) Toilet facilities for women should be accessible from place of work.) Establish an internal workers' grievance mechanism. <i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>	ESS 1, 2 and 4	<u>Contractor/</u> During Construction
	<i>Safety of Workers</i> Potential sexual exploitation and abuse/sexual harassment (SEA/SH) risks for workers or community members	<ul style="list-style-type: none">) Provide sensitivity seminar to all workers regarding SEA/SH) Ensure that SEA/SH complaints are handled appropriately.) Provide sufficient information (leaflets, booklets, etc.) regarding SEA/SH. <i>(Indicative Cost: Part of Contractor's Scope/Budget)</i>	ESS 1, 2, 4 and 10	<u>Contractor/</u> During Construction

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
	<i>Health and Safety of workers</i> COVID transmission risks	<ul style="list-style-type: none">) Contractors should ensure that all workers are hired locally to the extent possible.) Contractors should provide training to all workers on signs and symptoms of COVID-19, how it is spread, how to protect themselves (including regular handwashing and social distancing) and what to do if they or other people have symptoms, as well as policies and procedures listed here. Training of workers should be conducted regularly, providing workers with a clear understanding of how they are expected to behave and carry out their work duties. Training should address issues of discrimination or prejudice if a worker becomes ill and provide an understanding of the trajectory of the virus, where workers return to work. Training should cover all issues that would normally be required on the work site, including use of safety procedures, use of construction PPE, occupational health and safety issues, and code of conduct, taking into account that work practices may have been adjusted.) A summary of basic guidelines and COVID-19 symptoms should be displayed at all civil works sites, with images and text in local languages.) Workers who are sick or showing possible symptoms should not be allowed on work site, should be isolated and referred to local medical facilities immediately.) Contractors should review worker accommodation arrangements to see if they are adequate and designed to reduce contact with the community.) Contractors should review work arrangements, tasks and hours to allow social distancing.) Contractors should provide workers with appropriate forms of personal protective equipment, and with designated bins to dispose of such equipment.) Contractors should ensure handwashing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places at the work site; where there is a toilet, canteen or food distribution, or provision of drinking water; in worker accommodation; at waste stations; and in common spaces. Where handwashing facilities do not exist or are not adequate, arrangements should be made to set them up. Alcohol based sanitizer (if available, 60-95% alcohol) can also be used.) Contractors should together implement a communication strategy with the community in relation to COVID-19 issues on the site.) Workers will be allowed remove themselves from a work situation which they have a reasonable justification to believe presents an imminent and serious danger to their life or health (with no reprisal for reporting or removing themselves). <p><i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i></p>	ESS 1, 2 and 4	<u>Contractor /</u> During Construction
	Construction phase - Occupational Health and Safety			
Occupational Health Safety	<i>Occupational Health and safety of due to works</i>	<ul style="list-style-type: none">) Health and Safety Training and Toolbox Talks to workers prior to construction) Sufficient safety signages should be installed in conspicuous spots) Provision of information materials (leaflets, booklets, etc.) regarding safety 		

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
	<p>Z Potential injury due works (e.g., falling in excavations, falling objects, accidents caused by project vehicles and equipment, etc.)</p> <p>Z Potential injury due to operations of equipment</p>	<p>Regular provision of safety seminars to workers</p> <p>Ensure provision of safety measures (safety lines, watchmen or flagmen, etc.) at critical construction sites</p> <p>Safety of operators and workers during usage of equipment</p> <p><i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i></p>		
<p>Health and Safety of Workers (at worksites and camps)</p>	<p><i>Main risks during the construction stage may arise from:</i></p> <p>Z Failure to implement measures to avoid accidents and injuries involving workers</p> <p>Z Infection of sexually transmitted or other diseases by non-local workers;</p> <p>Z Outbreaks of diseases such as malaria, diarrhea, etc. In the labor force;</p> <p>Z Inadequate sanitation in worker’s camp (discussed in section on Worker’s Camp);</p> <p>Z Pressures on existing health systems at the local level.</p>	<p>Appoint a qualified Environmental Health and Safety Officer (EHSO).</p> <p>Conduct health and safety trainings (i.e., construction related injuries, facility and equipment safety, health and safety measures, prevention of HIV/AIDS, and common diseases. Protection against COVID-19 virus.</p> <p>Provide sufficient fire protection implements at the work areas and at construction and workers camps.</p> <p>Provide first aid kits for workers. In addition, the contractor shall prepare emergency procedures detailing arrangements with community health center(s) or nearest hospital(s) to accommodate emergency cases from the work location.</p> <p>Provide workers with appropriate Personal Protective Equipment and enforce use.</p> <p>Install sign boards, lighting system at the construction sites, and facilities.</p> <p>Strictly impose speed limits on construction vehicles.</p> <p>Educate drivers on safe driving practices.</p> <p>Barriers (i.e., temporary fence) shall be installed at construction areas for workers’ and public’s protection.</p> <p>Ensure that contractors have valid insurance that can appropriately cover compensations and medical expenses in the event of injuries of workers, including third parties (e.g., residents in the communities).</p> <p>Provide sufficient lighting at night as well as warning signs at construction sites.</p> <p><i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i></p>	<p>ESS 2 and 4</p>	<p><u>Contractor</u> (to implement measures) and <u>SAAAR</u> (for LMP) / During Design Stage, Construction and potentially during Maintenance</p>
Construction phase – Workers’ Employment Rights				
<p>Labor rights, gender and non-discrimination (at</p>	<p><i>Non-compliance Risks:</i></p> <p>Risks of not complying with labor code, paying workers inadequate rates, discrimination of women, those with disabilities or other vulnerable persons.</p>	<p>SAAAR will cause the Contractor to establish LMP for RCDP which should be adhered by all contractors/ sub-contractors</p> <p>Ensure compliance to Azerbaijan Labor Code</p> <p>Ensure protection of rights of workers</p> <p>Establish an internal workers’ grievance mechanism</p> <p><i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i></p>	<p>ESS 2</p>	<p><u>Contractor</u> (to implement measures) and <u>SAAAR</u> (for LMP) /</p>

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
<i>worksites and camps</i>				During Design Stage, Construction and potentially during Maintenance
	<p><i>Gender Based Violence Risks:</i></p> <p>Z Risk of occurrence of GBV related issues occurring at the work place</p> <p>Z Risk of occurrence SEA/SH incidences</p>	<p>) The Contractor must arrange for trainings on GBV/IEC campaign to be provided by a recognized agency or NGO (e.g., “Woman Association for Rational Development” or any recognized and credible women organization in Azerbaijan).</p> <p>) The cost of the campaign shall be funded by the Contractor from the provisional sum provided in the bill-of-quantity. The contractor shall ensure that at least one refresher for workers is conducted each month to review materials provided.</p> <p>) SAAAR, in collaboration with contractors and other stakeholders such as local government and SEA/SH service providers, will ensure that the project grievance redress mechanism (GRM) and workers’ GRMs include protocols, training, and accountability mechanisms as relevant to ensure that grievances related to SEA/SH can be accepted and handled adequate with due confidentiality and ethical standards.</p> <p>) Internal GRM functions will be strengthened to ensure timely, impartial, independent and fair investigations for SEA and SH that should be safe, gender-sensitive, and appropriate to the context; and thus, maintaining neutrality and confidentiality before and during deliberation of matters.</p> <p><i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i></p>	ESS 2	<u>Contractor</u> (to implement measures) and <u>SAAAR</u> (for LMP) / During Design Stage, Construction and potentially during Maintenance
		<u>Construction phase - Community Health and Safety</u>		
Community Safety in active work sites	<p><i>Health and safety of communities/residents due to works</i></p> <p>Z Potential injury due works (e.g., falling in excavations, falling objects, accidents caused by project vehicles and equipment, etc.)</p>	<p>) General public should be forewarned prior to construction</p> <p>) Sufficient safety signages should be installed in conspicuous spots</p> <p>) Provision of information materials (leaflets, booklets, etc.) regarding safety</p> <p>) Provision of safety seminars to workers</p> <p>) Ensure provision of safety measures (safety lines, watchmen or flagmen, etc.) at critical construction sites</p> <p><i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i></p>	ESS 1, 2 and 4	<u>Contractor/</u> During Construction/ <u>SAAAR/</u> During Construction for the GRM
	<i>Health and safety of communities/residents due to works</i>	) General public should be forewarned prior to construction	ESS 1, 2 and 4	<u>Contractor/</u> During

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
	Z Disruption or elimination of usual common or public access to public places or buildings	<ul style="list-style-type: none"> J Sufficient safety signages should be installed in conspicuous spots showing alternate access routes J Provision of information materials (leaflets, booklets, etc.) regarding safety J Ensure provision of safety alternate access to the public prior to site construction. <i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i>		Construction/ <u>SAAAR</u> / During Construction for the GRM
<u>Construction phase - Community Relations</u>				
Community Grievance	<i>Risk of Project related complaints and grievances unresolved:</i> Z Potential complaints from Project-Affected Persons	<ul style="list-style-type: none"> J General public should be sufficiently informed prior to construction about the project including the process of GRM for their relevant concerns J Contractor will cooperate with SAAAR-PIU in the establishment of GRM and comply with all the requirements in resolving grievances <i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i>	ESS 1, 2 and 10	<u>Contractor</u> / During Construction/ <u>SAAAR</u> / During Construction for the GRM
Job competition (in the rayons)	<i>Influx of non-local labor:</i> Z Deprivation of job opportunities to local population Hostility with local residents	<ul style="list-style-type: none"> J Minimize labor influx as much as possible promoting local recruitment J Provide preference to local labor if workers met qualifications or necessary skills J Employ local labor whenever possible <i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i>	ESS 1, 2 and 4	<u>Contractor</u> / During Construction
<u>Construction phase – Preservation of Cultural Heritage</u>				
Cultural Heritage (Worksites)	<i>Potential Disturbance or Damage to cultural sites:</i> Z Disturbance to services or damage to structures	<ul style="list-style-type: none"> J SAAAR will cause the Contractor to undertake screening to assess whether tangible or intangible cultural heritage is impacted. J If cultural heritage is impacted, SAAAR will cause the Contractor to prepare Cultural Heritage Management Plans to ensure impacts and mitigation measures are properly identified and assessed. J If there is a Chance Find of cultural heritage artifacts, all civil works will be suspended and SAAAR will notify Institute of Archaeology and Ethnography of the Azerbaijan National Academy of Sciences and the Ministry of Culture and Tourism <i>(Indicative Cost: Part of Contractor’s Scope/Budget)</i>	ESS 8	<u>Contractor</u> (to implement measures) and <u>SAAAR</u> (for Heritage Mgmt. Plan) / During Design Stage, Construction and potentially during

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
				Maintenance
Construction phase - Decommissioning Work Sites				
Site Reinstatement (Within the construction corridor, camps and facilities)	The decommissioning of work camp sites requires particular attention. The ESMP shall make particular reference to prescribe good practices for the decommissioning of work sites, both the construction sites, the work camp, storage and stockpiling facilities, and the borrow pits.	<ul style="list-style-type: none">) To achieve proper decommissioning of all work sites, the Contractors will be obliged to present their activities and solutions on the proper execution of such tasks as outlined in the ESMP.) The decommissioning of work camp sites requires particular attention. Tidy clearing of all sanitary and waste management facilities, grade the soil to natural ground levels, re-establishment of natural vegetation and waterways are the focal points as these are often a source of environmental pollution and a public eyesore. Options need to be explored which would allow the use of workers dormitories, fuel station, workshops, drainage facilities etc. for other purposes as suggested by local leaders. Good landscaping is required to re-install former work camp sites into places where the local communities would meet the desired landscape aesthetics. (Indicative Cost: Part of Contractor's Scope/Budget) 	ESS 1, 2 and 4	<u>Contractor/</u> During Construction
Operations and Maintenance Phase – Air Quality				
Air Quality – air emissions from traffic (Project road)	Air quality impacts from Vehicle movements – During the operations of the road, vehicles that will pass through the road will generate exhaust emissions.	Trees should be planted along the corridor to serve as carbon sink for vehicular emissions. (indicative cost estimate: \$5 per tree sapling) SAAAR to specify limits for vehicle emissions.	ESS 1 and 4	<u>SAAAR to promote policy limiting emission and install signs; local Police to apprehend violators</u>
CO2 emissions from Vehicles (along the project road)	Emission from future traffic going to new M3 Motorway: - <i>Perceives to be less due to the operation of the New M3 motorway</i>	No measures necessary as this is positive impact on the project area	ESS 1 and 4	

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	<u>Responsibility / Project Stage</u>
Water Quality – Mitigation of General Contamination	Impacts related to wastewater and solid waste disposal could extend into the Post-Construction/ Operational Stage due to improper discharges from site facilities or because of unanticipated circumstances or accidents	To mitigate potential impacts related to wastewater and solid waste disposal extending into the Post-Construction/Operational Stage, contracts stipulate that one year into the operating period a final inspection is required and Contractor’s final payment is released only after a fully compliant audit is recorded. Any impacts related to wastewater and solid waste disposal are part of the final inspection process and final payments will not be made until outstanding issues are resolved.	ESS 1 and 4	<u>SAAAR/</u> During Operations
Flora and Fauna Impact (Water crossings and wetland)	No significant adverse impacts to flora and fauna are expected in the Post-Construction / Operational Stage of the Project.	Motorist should be notified by road signs of possible presence of fauna species and prohibit harming them. Recording of accidents (species, locations) is recommended for further improvement of condition and for implementation of additional mitigation measures.	ESS 1, 4 and 6	<u>SAAAR/</u> During Operations
Operations and Maintenance phase - Ecological Considerations				
Impacts to fauna (wetland, lakes and ponds)	<i>Impacts to Fauna:</i> - Presence of travelling public create impacts - Due to heightened interest of people for gathering and hunting flora and fauna	) Motorist should be notified by road signs of their proximity to any sensitive area) Motorist should be notified by road signs of their possible presence and prohibit disturbing and harming them (near wetlands)	ESS 1 and 3	<u>SAAAR</u> to install signs where wildlife may be expected and prohibit harming them
Floral Vegetation (along road corridor)	Impacts to planted replacement trees and/or installed Greenery	) Contractor should provide maintenance during Defect Liability Period (DLP)) Maintenance of planted trees or vegetative covers along embankment slopes to prevent erosion after DLP (in coordination with MENR) (<i>indicative cost estimate: \$5 per tree sapling</i>)	ESS 1 and 3	<u>Contractor</u> to maintain trees/greenery within LDP <u>SAAAR</u> to maintain trees/greenery after LDP
Operations and Maintenance phase – Noise				

Aspect (locations)	Description of Impacts	Potential Mitigation Measure	Reference to WB ESS	Responsibility / Project Stage
Noise levels	Increase noise levels: - Due to higher speed of vehicles in the reconstructed road	) Promote policy of limiting noise emissions in vehicles) Minimization of noise should be maintained by lessened use of horns in vehicles or apprehension of noisy vehicles through road signs	ESS 1 and 4	<u>SAAAR to promote policy limiting noise and install signs; local Police to apprehend violators</u>
Operations and Maintenance phase – Traffic Safety				
Motorist and People's Safety	Speed of vehicles along the rehabilitated road: - Increase speed result to occurrence of road crash, injury or fatality	) Traffic regulations should be enforced at all times) Traffic safety measures should be performed) Regular maintenance should be done	ESS 1 and 4	<u>SAAAR to promote policy safe speed and install signs; local Police to apprehend violators</u>

Prior to construction works at the discretion of the CSC, the following method statements/plans shall be submitted by the Contractor to the for approval:

- | | |
|---|---|
| 1) Air Pollution Control Plan | 2) Site Drainage Plan |
| 3) Dust Suppression Plan | 4) Soil Management Plan |
| 5) Water Management Plan | 6) Spill Prevention Plan |
| 7) Emergency Response Plan | 8) Surface Water Pollution Management Plan |
| 9) Noise Management Plan | 10) Borrow Pit Management Plan |
| 11) Flora and Fauna Protection Plan | 12) Asphalt/cement/concrete management plan |
| 13) Camp and Workshop Management Plan | 14) Community Protection Plan |
| 15) Facility Layout Plans and Plants Operation Plan | 16) Traffic Management Plan |
| 17) Material Source Management and Reinstatement Plan | 18) Worker's Health and Safety Plan |
| 19) Waste Management Plan | 20) Grievance Committee Plan |
| 21) Cultural, Historical, Chance Find Procedures and Protection Plan (referred to Section of Cultural Property) | 22) Others as prescribed by SAAAR |

Other plans may be required by the CSC during the actual construction.

5.2 Monitoring Plan

Part of the requirement of the WB in accordance with ESS1 par. 15 (d) is to “Conduct monitoring and reporting on the environmental and social performance of the project against the ESSs. Further in ESS1 – Annex 1 par. 15 (b) states that “*The ESMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the environmental and social assessment and the mitigation measures described in the ESMP. Specifically, the monitoring section of the ESMP provides (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information.*”

In compliance to the aforementioned stipulations, the objective of the environmental and monitoring is to ensure that all concerned agencies take the specified action to provide the required mitigation, to assess whether the action has adequately safeguarded the P-APs and the environment. Furthermore, it is to determine whether any additional measures may be necessary. Regular inspection of implemented measures by Civil Works Contractors will be conducted by the Construction Supervision Consultant, and overseen by the SAAAR-PIU, as the Implementing Agency (IA). Monitoring during operation stage will later on be conducted by SAAAR.

Table 18: Environment and Social Monitoring Plan for Subcomponent 1.1

Aspect	Parameters to be monitored	Location	Methodology	Timing and Frequency	Institutional Responsibility for Monitoring
Permits/Clearances	Existences of permits from MENR for borrow areas, asphalt plants, disposal sites and tree cutting as well as clearance from the MOH for establishment and operation of work camps.		Inspection	Before commencement of site works or installation of facilities	Contractor to Perform SAAAR-PIU/CSC to check compliance
Contractor's yard	Solid waste handling and disposal facilities Drainage conditions Sanitation facilities and sewage disposal Heath facilities Hazardous wastes management	Contractor's Camp	Inspections, observations	Unannounced inspections during construction. At least once a week	Contractor to Perform SAAAR-PIU/CSC to check compliance

Aspect	Parameters to be monitored	Location	Methodology	Timing and Frequency	Institutional Responsibility for Monitoring
Equipment maintenance and fuel storage areas	Storage and handling practices Condition of storage facilities of fuel, lubricants and paints Spillage Drainage conditions	Contractor's Camp	Inspections, observations	Unannounced inspections during construction. At least once a week	Contractor to Perform SAAAR-PIU/CSC to check compliance
Borrow areas and access roads	Watercourses in the vicinity (obstruction, siltation, etc.) Dust emission along access roads, particularly near settlements.	At site and access roads	Inspections, observations, consultation with nearby communities	Unannounced inspections during construction and after complaint. At least twice a week	Contractor to Perform SAAAR-PIU/CSC to check compliance
Asphalt plant	Surrounding Exhaust fumes	At asphalt and cement batching plant sites	Inspections, observations, consultation with nearby communities	Unannounced inspections during construction and after complaint. At least twice a week	Contractor to Perform SAAAR-PIU/CSC to check compliance
Worker's Safety	Provision and use of appropriate personal safety equipment	Job sites	Inspections; observations and interviews	Unannounced inspections during construction. At least once a week	Contractor to Perform SAAAR-PIU/CSC to check compliance
Air Quality	The following parameters shall be measured by the Contractor: TSP, Sulphur Dioxide (SO ₂), Nitrogen Dioxide (NO ₂) and Carbon Monoxide (CO). Other parameters maybe warranted as and when requested by the Engineer.	Populated area/ Near villages/ Plant areas (or at specified sampling points where there are schools, health care facilities, mosque or populated areas) Asphalt plant/ Cement batching plant	Obtain air samples from the field and analysis in laboratory for air quality measurement	Start of Project / before construction (for baseline) Monthly and Quarterly during construction in the particular areas as needed. End of Project	Contractor to Perform SAAAR-PIU/CSC to check compliance

Aspect	Parameters to be monitored	Location	Methodology	Timing and Frequency	Institutional Responsibility for Monitoring
Noise	The Contractor shall ensure that routine noise monitoring is undertaken throughout the construction period. Parameters to be monitored to establish a baseline include: Laeq 1h (dBA – Average Decibel) Average Daily Noise level	Populated area/ Near villages/ Plant areas (or at specified sampling points where there are schools, health care facilities, mosque or populated areas) Asphalt plant/ Cement batching plant	Noise meter gadget	Monthly throughout construction.	ESS/CSC
Water Quality	The following parameters shall be measured by the Contractor: Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Petroleum Hydrocarbons (TPH). Other parameters maybe warranted as and when requested by the Engineer.	Existing major waterways (canals & rivers) - one sample around 50 m upstream and downstream of the bridge points Perennial water bodies/ wetland – less than 10m from bank of water bodies adjacent to project road	Obtain water samples from the field and analysis in laboratory for air quality measurement	Start of Project / before construction (for baseline) Monthly and Quarterly during construction in the particular areas. End of Project	Contractor to Perform SAAAR-PIU/CSC to check compliance
Community Safety	Traffic safety, safe access, proper fencing of excavation and work areas, COVID 19 safety, signage, GRM information, community notifications, occurrence or absence of any incidents, SEA/SH complaints, etc.	Road Project sites and communities directly and indirectly affected by the construction works	Received information from P-APs, key informants and stakeholders.	Monthly throughout construction.	Contractor to Perform SAAAR-PIU/CSC to check compliance

5.3 Implementation Schedule and Cost Estimates

5.3.1 Cost on Mitigation Measures

Most of the mitigation measures require the Contractors to adopt good site practices, which should be part of their normal construction contract, so there will be no additional costs to be included in the ESMP. Costs of design-related mitigation measures are included in the budgets for the civil works.

The primary environmental impacts that need to be mitigated in the overall implementation of the project will be on any affected trees should there be any need; and sodding or regreening of roadsides which will provide natural covers to embankment works. These trees are mainly common trees such as ash, oak and maple. The detailed design on an RP that will be done for Subcomponent 1.1 will identify individual trees to be cut. In order to have a higher degree of success for replacement of affected trees, three (3) seedlings of the same or similar species is proposed to be planted. Accordingly, an estimated number of trees and cost for planting trees and regreening is shown below.

Table 19: Budgetary Cost for Mitigation of Affected Trees and Regreening

#	Item	Unit	QTY	Rate (USD)	Cost	Remarks
1	Estimated trees to be affected	No.	100			To be verified in the Detailed Design
1.1	For 1:3 Ratio of Replacement	No.	200	24	4,800	
2	Embankment Sodding (for erosion control)	m ²	10,000	3	30,000	
Total Estimated Cost					34,800	

Since the project components such as road section construction and bridges may be at different times, the implementation of the mitigation measures will be done within the construction period prior to the “Handing-Over” of the project to the Client. Conveniently, this works will be done close to the completion of all civil works components.

5.3.2 Budget on Monitoring Activities

The estimated cost for the environmental management and monitoring on the consultancy for the entire project construction period of two (2) years is shown in the Table below. This will include fees and other associated cost for management and monitoring of the construction sites and affected areas in the project road. In addition, the main Contractor shall undertake periodic parametric measurements as basis for action to improve their performance on the implementation of measures. Hence, a budget for periodic parametric measurements is hereby included in the Table below.

Table 20: Budgetary Cost for Environmental Monitoring Requirements

Item	Quantity	Unit Cost	Total Cost
Implementation of EMP		US \$	US \$
International Environmental Specialist (IES)	8 months	20,000	160,000
National Environmental Specialist (NES)	24 months	4,400	105,600
Others (travel, per diem, surveys/interviews, reporting, etc.)	LS	20,000	20,000
Periodic Parametric Measurements (to be part of Contractor's cost)	24 months	6,000	72,000
Total			357,600

5.4 Prevention of HIV/AIDS, COVID-19 Transmission, GBV and SEA/SH

For a project road, the interaction of non-local project workers with local communities may result to some undesirable issues which need to be addressed proactively by the Borrower/Client. Accordingly, several important topics that need to be highlighted for World Bank funded projects pertains to Prevention HIV/AIDS, COVID-19 Transmission, Gender Based Violence (GBV) and Sexual Exploitation and Abuse/ Sexual Harassment (SEA/SH). Recognizing underlying issues in advance will enable the project stakeholders to be well prepared to deal with the relevant impacts and risks.

Part of the project preparation will entail provision of briefings regarding these issues to bring in the necessary understanding and provision of technical support needed to develop plans for addressing them throughout the lifetime of the project cycle. In addition, the plan implementation should be also be evaluated for effectiveness through regular monitoring and reporting.

5.4.1 Prevention HIV-AIDS and COVID-19 Transmission

In terms of HIV/AIDS aspects, available studies indicated that Azerbaijan belongs to the group of low-prevalence countries, with an estimated prevalence rate¹⁶ less than 0.1–0.2 percent. Though this HIV prevalence in Azerbaijan has been considered low, studies also indicated that there had been a high potential for the rapid spread as influenced by socio-economic and socio-cultural factors, including: the challenges of a transitional economy, forced and labour migration, growth of drug use, as well as some socio-cultural norms of behaviour, family, religion, and gender issues. The importance of this issue has been accepted with the establishments of the National AIDS Center and enacting a law on AIDS – “*Law No. 1001-IIIQ of 11 May 2010 to Fight against the Disease Caused by the Human Immunodeficiency Virus (HIV)*”.

On the part of the World Bank, the issues on HIV/AIDS had been mainstreamed by institutionalizing the inclusion of explicit provisions for HIV/AIDS Prevention in the standard bidding documents for civil works projects. These has been the guidance on the implementation of projects being financed by the World Bank. In the new WB ESF, ESS4 provides appropriate guidance in accordance with health, safety, and security risks and impacts on project-affected communities, on account of increase community exposure introduced by the project. With regards to HIV/AIDS, considered as communicable disease, ESS 4 par. 15 states that the Borrower will avoid or minimize the potential for community exposure to communicable and non-communicable diseases that could result from project activities, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups. Further in ESS4 par. 16, the Borrower is required to “take measures to avoid or minimize transmission of communicable diseases that may be associated with the influx of temporary or permanent project labor”.

Accordingly, the following are hereby recommended during construction stage of the project road:

-) The Contractor shall produce and conduct an HIV-AIDS Information, Education and Consultation/Communication (IEC) campaign undertaken by a recognized service provider, with the cost covered in the provisional sum provided in the bill-of-quantities.
-) The Contractor shall undertake measures as specified in the Contract, including the LMP, to reduce the risk of the transfer of the HIV virus between and among the Contractor’s personnel and the local community, to promote early diagnosis and to assist affected individuals. The Contractor shall not discriminate against people found to have HIV/AIDS as part of the undertaking.
-) The IEC campaign shall be conducted during the mobilization of the Contractor in accordance ESS4, targeting groups identified concerning the risks, dangers and impact, and appropriate avoidance behaviour with respect to Sexually Transmitted Diseases (STD) and HIV/AIDS in particular.

¹⁶ Prevalence rate, is the proportion of persons in a population who have a particular disease or attribute at a specified point in time or over a specified period of time.

- J Prior to actual performance of any works, the contractor (and service provider as relevant) shall submit to the SAAAR/PIU for approval an action plan that will indicate:
 - Z The types and frequency of education activities to be done;
 - Z The target groups (as a minimum to all the Contractor's employees, all Sub-Contractors and Consultants' employees, and all truck drivers and crew making deliveries to the project site for construction activities, as well as immediate local communities);
 - Z Whether condoms shall be provided;
 - Z Whether STI and HIV/AIDS screening, testing, diagnosis, counselling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labour shall be provided;
 - Z Budget.

In the face of current pandemic situation, the World Bank support the development of a COVID-19 emergency response plan mainly aimed at project contractors and local communities. The ESMP for the RCDP Subcomponent 1.1 incorporates the necessary provisions to improve the capacities of the project workers to prevent the transmission of the COVID-19 virus in the project site. The ESSs contains provisions pertaining to diseases such as:

- J The OHS measures will be designed and implemented to address **diseases** (ESS2 par.25 (d)).
- J To avoid or minimize community exposure to project-related **diseases** (ESS4 par. 2)
- J The Borrower will avoid or minimize the potential for community exposure to **communicable and noncommunicable diseases** that could result from project activities, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups (ESS4 par. 15).
- J The Borrower will take measures to avoid or minimize transmission of **communicable diseases** that may be associated with the influx of temporary or permanent project labor (ESS4 par. 16).

Accordingly, the measures to be adopted are as follows:

- J To minimize transmission from out of site workers, the Contractors should ensure that all workers are hired locally to the extent possible.
- J Contractors should provide training to all workers on the following:
 - signs and symptoms of COVID-19, how it is spread, how to protect themselves (including regular handwashing and social distancing) and what to do if they or other people have symptoms, as well as policies and procedures listed here.
 - Training of workers should be conducted regularly, providing workers with a clear understanding of how they are expected to behave and carry out their work duties.
 - Training should address issues of discrimination or prejudice if a worker becomes ill and provide an understanding of the trajectory of the virus, where workers return to work.
 - Training should cover all issues that would normally be required on the work site, including use of safety procedures, use of construction PPE, occupational health and safety issues, and code of conduct, taking into account that work practices may have been adjusted.
- J A summary of basic guidelines and COVID-19 symptoms should be displayed at all civil works sites, with images and text in local languages.
- J Workers who are sick or showing possible symptoms should not be allowed on work site, should be isolated and referred to local medical facilities immediately.
- J Contractors should review worker accommodation arrangements to see if they are adequate and designed to reduce contact with the community.
- J Contractors should review work arrangements, tasks and hours to allow social distancing.
- J Contractors should provide workers with appropriate forms of personal protective equipment, and with designated bins to dispose of such equipment.
- J Contractors should ensure that:
 - handwashing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places at the work site; where there is a toilet, canteen or food distribution, or provision of drinking water; in worker accommodation; at waste stations; and in common

spaces. Where handwashing facilities do not exist or are not adequate, arrangements should be made to set them up.

- alcohol based sanitizer (if available, 60-95% alcohol) can also be used.

- J Contractors should implement a communication strategy with the community in relation to COVID-19 issues on the site.
- J Workers will be allowed remove themselves from a work situation which they have a reasonable justification to believe presents an imminent and serious danger to their life or health (with no reprisal for reporting or removing themselves).

The Government of Azerbaijan also came up with policies to mitigate COVID-19 transmission which includes information on key public health measures that aim to prevent the further spread of the disease. It details how the general public and people who (might) have the disease to prevent further spread, as well as measures in place to test and identify cases, trace contacts, and monitor the scale of the outbreak. These policies cover health communication, physical distancing, isolation and quarantine, monitoring and surveillance, and testing. The Contractors should be always updated on the current developments of these relevant policies and regulations during the entire project implementation.

5.4.2 GBV and SEA/SH

The World Bank's vision consisting of "(i) **ending extreme poverty** and (ii) **promoting shared prosperity in all its partner countries**", is also underpinned, among others, by "ensuring social inclusion" and emphasized by "strong concerns for equity". This forms the basis of providing measures against Gender-Based Violence (GBV) whether at the workplace or can be indirectly experienced by household of those part of the project. It would be important that the GBV risks be adequately reflected in all environment and social instruments (i.e., RCDP ESMP, CESMP, SSESMP, etc.), which shall include the GBV mapping in these instruments.

Accordingly, for the RCDP Subcomponent 1.1, it must be considered that project workers must cooperate with relevant entities to bring programs that would help in women empowerment and in addressing the needs of abused women. Women empowerment programs may be done through media, education, advertisements, and in funding programs that would help and support the needs of abused women. Ideas of educational attainment of women beyond eighteen years of age must spread to the rural areas through the transportation of teachers that would educate children and people, in general, as well as non-government units that would assist abused women and the project.

Among the considerations to be brought forward in this respect consist of the following:

- J In bidding documents and contracts for the road project, the Contractor will be required to implement the Labor Management Plan and Codes of Conduct and Action Plan to Prevent Gender Based Violence.
- J The Contractor must arrange for trainings for its workers on the Code of Conduct and on GBV/IEC campaign to be provided by a recognized agency or NGO (e.g., "Woman Association for Rational Development" or any recognized and credible women organization in Azerbaijan).

Among the sensitive cases that is brought to light would be those pertaining to Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH). By definition¹⁷, Sexual Exploitation pertains to "Any actual or attempted abuse of a position of vulnerability, differential power, or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another." Sexual Abuse is "The actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions." While Sexual Harassment "occurs between personnel and involves any unwelcome sexual advance or unwanted verbal or physical conduct of a sexual nature.

¹⁷ Regional Toolkit for PSEA/SH and Community-Based Complaint and Referral Mechanisms in the Americas.

In the context of a conservative society, social norms may form some barriers for complaints falling under these categories would go unreported. It is essential that emphasis is given on promoting an environment wherein the community, project workers and various stakeholders feel safe to report violations and trust that immediate and decisive action will be taken against perpetrators.

The complaint mechanisms should be safe, gender-sensitive, and appropriate to the context, maintaining neutrality and confidentiality before and during deliberation of matters. GRM functions will be strengthened to ensure timely, impartial, independent and fair investigations for SEA and SH. SAAAR will take all measures to build trust for its investigation function, including, where appropriate, engaging independent third-parties with experience in handling such cases through channels appropriate for the project. The protocols and procedures for serious grievances should be based on the following principles:

-) All complaints received will be filed and kept confidential. For statistical purposes, cases will be anonymized and bundled to avoid identification of persons involved.
-) After reaching a solution to a case, the Focal Point Person as the case may be, will follow-up to ensure that the solutions are effective.
-) Criminal cases will be referred to the public prosecutor.

The cost of the campaign for GBV and SEA/SH including Grievance Mechanisms shall be funded by the Contractor from the provisional sum provided in the bill-of-quantity. The contractor shall ensure that at least one refresher for workers is conducted each month to review materials provided.

5.5 Capacity Assessment and Needs

The State Agency of Azerbaijan Automobile Roads (SAAAR) has been dealing with a number of international finance institutions (IFIs) such as ADB, WB, EBRD, etc. requiring the implementation Environmental and Social Safeguards. Years of experience of working with IFIs and through appointed project consultants have familiarized SAAAR with the intricacies of the requirements. With the application of the previous WB's Safeguards Policies and Operational Procedures through a number of similar road construction or rehabilitation projects a compliance system within the SAAAR has evolved with the personnel getting familiar with the guidelines and requirements. Based on past performance, SAAAR has demonstrated a satisfactory commitment to complying with Environmental and Social Safeguard of the WB as well as of other IFIs.

However, the ESF (October 2018) is fairly new with the ESSs requirements for Borrowers forming the basis of compliance. A good knowledge of these requirements needs to be established with the SAAAR staff in order to maintain a good level of management and monitoring. Accordingly, SAAAR will need support throughout the implementation of Subcomponent 1.1 of the RCDP from DDIS E&S specialized staff or individual consultants to mainstream the ESF into the current Safeguards Systems.

At this stage, it is envisioned that training delivered by Safeguards Consultants will need to be holistic and cover all aspects of the project, including (but may be expanded):

- a) ESSs relevant to RCDP;
- b) Implementing the ESMP, LMP, and SEP;
- c) Monitoring E&S compliance, including reporting;
- d) Gender-Based Violence, including how to conduct awareness raising on this topic;
- e) Violence Against Children, including how to conduct awareness raising on this topic;
- f) HIV/AIDS awareness, including how to conduct awareness raising on this topic;
- g) Occupational Health & Safety, including how to monitor and enforce this aspect;
- h) Labor Management Procedures, including how to monitor and enforce this aspect;
- i) Grievance Redress, including how to oversee and implement the GRM;
- j) Road Safety, including how to conduct awareness raising on this topic;
- k) Climate Change, including measures to improve resiliency of infrastructure
- l) Biodiversity Conservation, including ensuring propagation of species and habitat preservation

At the Rayon level, personnel at the Road Maintenance Units or the Local Executive Powers may need to be familiar with new WB ESF ESSs for coordination of any local issues that may arise particularly on Community Safety, Affected Parties' Grievances, Labor Related Issues, Livelihood Restorations, Property Impacts, to name a few. At this juncture the Detail Design Implementation and Supervision (DDIS) Consultant or individual Consultant will also need to conduct training to some of the relevant personnel to ensure better compliance and prompt response and resolution to project related issues.

5.6 Institutional Arrangements

For this stage of project preparation for the RCDP Subcomponent 1.1, and consistent with the usual local requirements in Azerbaijan and within the WB ESF, a number of institutional arrangements and responsibilities are envisaged. With more details are provided in the Resettlement Framework, and Stakeholder Engagement Plan, this PESMP will feature more defined arrangements relevant to Sub-component 1.1 activities.

5.6.1 The State Agency of Azerbaijan Automobile Roads (SAAAR)

SAAAR will have overall responsibility for the RCDP Subcomponent 1.1 being funded by the World Bank. This consists of preparation, implementation, and financing of related activities related to social measures such as livelihood restoration, establishing project SEP, and overseeing the LMP. In addition, SAAAR will be responsible for any interagency coordination with relevant government offices. SAAAR will exercise its functions through the Project Implementation Unit (PIU), which in turn will be responsible for project execution and overseeing day-to-day project activities at rayon/subproject levels.

In SAAAR's Environment and Social Commitment Plan (ESCP), SAAAR has put forward certain commitment pertaining to Organizational Structure. In it SAAAR, is to establish an organizational structure (project implementation team) with qualified staff to support management of E&S risks including at least one Environmental and Social Specialist, one Social / Resettlement Specialist, one Labor, Health, and Safety Specialist, and one Community Liaison Officer responsible for ensuring full compliance with the ESSs, ESCP and relevant instruments. This organizational structure is to be maintained as necessary throughout Project implementation.

5.6.2 Detail Design Implementation and Supervision (DDIS) Consultant

The DDIS Consultant (and during construction phase only, the Civil Works Supervision Consultant) for the Yenikend-Bilasuvar road will be responsible for the tasks and scope of detailed design, construction supervision, implementation monitoring, as well as project performance monitoring and evaluation to be described in more detailed in a Consultancy Terms of Reference. An Environment and a Supporting the SAAAR ES Officer to fulfil the roles, including by conducting capacity building training, helping with work plans, monitoring reports, conducting site visits, etc.;

- 1) Spearhead in the drafting of required environment and social documents such as the site-specific ESMPs, RPs and updating of the LMPs and SEPs, as needed and ensure that the Contractors will formulate their own corresponding documents as to be stipulated in the civil works contract;
- 2) Working collaboratively with MENR and other related departments such as Communications and High Technologies, Ministry of Finance, etc., as needed;
- 3) Ensuring minimum disruption/damage to the environment and local communities by approval of contractors' work statement/methodology on implementation of the ESMP, including monitoring the impact of construction works on the environment and local communities and assisting the SAAAR to provide monthly progress reports;
- 4) Incorporate into the project design the environmental protection and mitigation measures identified in the ESMP for the design/pre- construction stage;
- 5) Assist the SAAAR to ensure that all environmental and social requirements and mitigation measures from the ESMP are incorporated in the civil works bidding documents and contracts as well as in the detailed design;

- 6) Assist SAAAR in establishing the Grievance Redress Mechanism as described in the SEP and summarised in this ESMF;
- 7) Implement all mitigation and monitoring measures for various project phases specified as DDIS' tasks in the ESMP based on guidance in this ESMF;
- 8) Undertake environmental and social management capacity building activities for the SAAAR/PIU as required;
- 9) Undertake regular monitoring of the contractor's environmental and social performance as scheduled in the ESMP;
- 10) Supervise Contractors' compliance with site-specific ESMPs and organize site visits to each Subcomponent;
- 11) Prepare Environmental and Social Monitoring Reports to be included into the Project Progress reports for each ongoing Subcomponent;
- 12) Participate in regular supervision missions and respond on WB requirements and SAAAR.

5.6.3 Civil Works Contractor

The Civil Works Contractor for Subcomponent 1.1 (Yenikend-Bilasuvar) will be selected based on procurement guidelines of the WB and Government of Azerbaijan. Depending on the parceling of lots, these Contractors may be international or local contractors depending on the construction lot budgets as has been normally applied in previous projects. Subcomponent 1.1 may be tendered as international competitive bidding. Subcomponent 1.1 will have a Site-Specific ESMP to be complied with by the winning contractor. The contractor for Subcomponent 1.1 will be expected to be responsible for implementing most, if not all, the measures recommended in the ESMP to mitigate environment and social impacts. The contractor may also have responsibilities linked to other documents such as the RPs, LMPs and SEP. Accordingly, the contractor will:

- a) Designate a full-time Environment, Social, Health and Safety Officer/s the contracted works (with assistants);
- b) Prepare and submit a site-specific ESMP for review by the DDIS Consultant for approval by the SAAAR and the WB and other project documents if required (RP, LMPs, SEP, etc.); other specific plans may be required which will all be annexes to the ESMPs;
- c) Provide sufficient funding and human resources for implementation of the ESMP, especially for parametric monitoring;
- d) Ensure proper and timely implementation of required pre-construction and construction mitigation measures in the ESMP;
- e) Implement additional environmental and/or social mitigation measures as necessary, consistent with the grievance redress system and complying with other measures in the SEP.

5.6.4 Ministry of Finance

As the line agency in charge of regulating the financial sector in Azerbaijan Republic, the Minister of Finance (MOF) shall be the Borrower's Representative. From the financing received both from the WB and Government of Azerbaijan, the MOF shall cause the SAAAR to disburse funds allocated to its account for the RCDP Subcomponent 1.1. In line with the RP, the MOF also will allocate the calculated compensation to the account of SAAAR and will transfer the compensation to affected peoples' accounts. For this activity, an additional report will be submitted to the WB for the execution of the compensation payment.

5.6.5 Ministry of Ecology and Natural Resources of Azerbaijan

The primary institution in Azerbaijan with respect to the environment is the Ministry of Ecology and Natural Resources (MENR). A Presidential Decree in 2001 transformed the former State Committee for Ecology and Natural Resources Utilization (SCENRU) into the MENR. Thereon, along with its inherent mandate from SCENRU, the MENR assumed over the functions of several other state bodies such as the departments of Hydrometeorology, Geology, Forestry, and Fishery. The functions and activities of the MENR are sub-divided into the following main sectoral areas:

-) Environmental policy development
-) Environmental protection

-) Water monitoring and management
-) Protection of marine (Caspian Sea) bio-resources
-) Forest management
-) Bio-resources and protected areas management

Under MENR is the Department of Environmental Policy and Environmental Protection (DEPEP), which oversees the State Ecological Expertise (SEE) Department. The SEE is responsible for the review and approval of Environmental Impact Assessment (EIA) reports submitted by project proponents.

During construction of any project, the applicant/developer (in this case SAAAR) should ensure adherence to conditions attached to the approval and be responsible for monitoring the developments of the projects along with the regular and timely reporting to MENR. The monitoring program of the proponent/developer should be designed to give clear indications prior to conditions being breached. Practical corrective measures should be undertaken by the proponent/developer in order to avoid breach of any conditions stipulated in the approval.

The MENR is authorized to issue warning to proponent/developer should it observe that conditions are being breached. In the event that conditions are breached, the proponent/developer is obliged to stop whatever activity which is causing the breach. In such cases, the MENR may reconsider the approval, possibly with the participation of the Environmental Review Expert Group, and the conditions of approval may be reviewed.

During the implementation stages of the RCDP Subcomponent 1.1 the following are the roles of MENR:

-) The Department of Environmental Protection under the MENR periodically monitors the environmental compliance on behalf of Government.
-) MENR is also providing licenses and permissions for the operation of plants and use of material sources. All facilities are operated under the strict control of relevant regional and local offices of Ministry of Ecology and Natural Resources.
-) If additional quarries are required after the beginning of the construction, an approval shall be obtained from authorities, and a reinstatement plan shall be prepared by the contractor.
-) Operation of a new borrow pit for extraction of aggregate requires a permit from Ministry of Ecology and Natural Recourse. The application requires an Ecological Passport. Details required in Ecological Passport include location of borrow pit and proposed volume and rate of extraction. MENR undertakes a geological assessment of the site of the proposed borrow pit. Once approved, the site is registered by MENR's regional branch. MENR undertakes regular checks to confirm the volumes extracted do not exceed those in the permit. Overall process usually takes 1 month to obtain the necessary permit for operation of new borrow sites. After the use of the area Contractor should implement reinstatement plan under the strict control of MENR local branches within the time frame agreed in ecological passport. Details of the reinstatement plan (such as time frame) is identified together with MENR. Usually, Contractors are required to finalize the reinstatement works within one month period after operation of the site.
-) Monitoring of surface water quality is carried out by National Hydrometeorological Department of MENR.

6 CONSULTATION AND STAKEHOLDER ENGAGEMENT

In conformity with the ESS10: Stakeholder Engagement and Information Disclosure and prevailing laws and regulations Azerbaijan pertaining to Stakeholder Engagements, public notification and consultations for the Subcomponent 1.1 of RCDP are to be done by the SAAAR. This will be undertaken through official notices to the residents in Salyan and Bilasuvar, and potential stakeholders. The outputs and outcomes of any public consultations shall be considered in the project preparation stage of RCDP.

In accordance with RCDP Stakeholder Engagement Plan, SAAAR will conduct consultation activities and stakeholder engagement. The SEP provides ways to identify potential different stakeholders, to

develop an approach for reaching each of the subgroups, to create a mechanism by which Project Affected Parties (PA-Ps) and Other Interested Parties (OIPs) can raise concerns, provide feedback, or make complaints, and to minimize and mitigate environmental and social risks related to the proposed project. The overall objective of this Stakeholder Engagement Plan is to establish an organized program for stakeholder engagement, including public information disclosure and consultation, throughout the entire project cycle following the objectives outlined in *ESS10 par. 3* as follows:

-) To establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties;
-) To assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be taken into account in project design and environmental and social performance;
-) To promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them;
-) To ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format stakeholder engagement and Information Disclosure; and
-) To provide project-affected parties with accessible and inclusive means to raise issues and grievances, and allow Borrowers to respond to and manage such grievance.

In general, there are two kinds of stakeholders, affected and interested stakeholders – Project-Affected Parties and Other Interested Parties. The **Project-Affected Parties (P-APs)** are those that are affected or likely to be affected by the project and because of their particular circumstances, may be disadvantaged or vulnerable. This group are likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project's benefits (*ESS10 pars. 5&11*). The **Other Interested Parties (OIPs)** are those who may have an interest in the project and would have different concerns and priorities about project impacts, mitigation mechanisms and benefits, and who may require different, or separate, forms of engagement (*ESS10 pars. 5&11*). Both of these stakeholders were detailed in the SEP.

For Subcomponent 1.1, the Yenikend-Bilasuvar road, these stakeholders can be identified as those who will experience impacts due to the reconstruction of the main corridor. It will be the responsibility of SAAAR and the DDIS to update the SEP. More detail and analysis of project stakeholders, and suggested methods and timing for engagement, is provided in the SEP.

6.1 Consultations During Project Preparation

As part of the Environmental and Social Safeguards requirements for the processing of the ESF documents, Public Consultations (PC) were conducted within the Rayons of Salyan and Bilasuvar on February 18 and 19, 2021 with representatives of stakeholders from these respective Rayons. Initially, digital copies of Environmental and Social Framework (ESF) Documents have been posted on the official websites of SAAAR and Salyan and Bilasuvar Executive Power Offices on February 7, 16 & 18, 2021 respectively (see Appendix 1 for relevant weblinks). Due to the restrictions on public meetings related to the COVID-19 pandemic situation, it was decided to hold a limited number of meetings with stakeholders. One meeting was held with stakeholders living in Bilasuvar region over the "Zoom" application, and three (3) group meetings were held with stakeholders living in Salyan Rayon. The Minutes of the Public Consultations are found in the Annex 2.

6.2 Consultations During Project Implementation

ESS10 par. 2 states: "Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for successful management of a project's environmental and social risks". Henceforth, it is expected that consultations and information disclosure will be an ongoing process for the RCDP as detailed in the SEP. There will be ongoing local consultations with affected people, project workers, local authorities and vulnerable people, among others. Consultations will focus on the environmental and social impacts of the project,

potential land acquisition impacts, livelihood restoration plans, and trainings on Gender-Based Violence, Worker’s Code of Conduct, labor rights and available job opportunities, among others. Specific details, including details of stakeholders, methods of consultations and timings, are provided in the SEP.

For Subcomponent 1.1, the SEP should be updated by the DDIS once detailed designs becomes available. Future updated SEP, along with the other ESF documents will be consulted on and publicly disclosed.

6.3 Reporting Back to Stakeholders

Reporting to stakeholder groups and evaluating the stakeholder process is considered vital to ensure that SAAAR-PIU can respond to identified issues and change the schedule and nature of engagement activities to make them more effective. It is desirable that all issues must be resolved at all levels and professionally. For a clear and understandable review, everything should be used as informational and in the form of presentation. All interested parties should be informed of all stages and the solution of all problems.

RCDP Communication and Community Coordinators (or the Environmental and Social Safeguards) will report back to P-APs and other stakeholder groups, primarily through public meetings in project affected areas and/or Villages. Minutes of meetings will be shared during subsequent public meetings. Feedback received through the GRM will be responded to in writing and verbally, to the extent possible. SMS’ and phone calls will be used to respond to stakeholders whose telephone numbers are available. Key Project updates will be posted on RCDP’s website. Social media (primarily through the Project website (or social media platform) for P-APs and other stakeholders) will

Through consultations, the stakeholders will be informed and feedbacks can be obtained. SAAAR, with the support of DDIS, will ensure that any project related meetings with the stakeholders will be recorded and any comments form part of the project documents when applicable. Any insights or ideas, or in particular, grievances from stakeholders will be logged accordingly and followed through.

RCDP Subcomponent 1.1 information will be disclosed to the public mainly through the following:

-) **Public/community meetings** - Prior to other RCDP Subcomponent 1.1 related activities, at the time of disclosure of relevant project documentations, SAAAR will arrange for a project briefing meeting on a national level, involving the stakeholder agencies. As the need arises, the briefing meeting can be done once at the start and another can be arranged if the need arises or if there will be major change in the project. Rayon, District/city authorities (Executive Powers) of Salyan and Bilasuvar will organize meetings with community leaders, P-APs, and OIP. These meetings will be unrestricted but may prioritize on those vulnerable groups and in which the general public can raise concerns and provide comments. Depending on the level of interest on the RCDP, separate meeting for women and important sectors for a more focused discussion. These meetings can be scheduled on a semiannual basis.
-) **Communication materials** – RCDP Subcomponent 1.1 information will be disclosed to the public via a variety of means of conveying project information and updates via printed materials consisting of brochures, flyers, posters, etc. The communication materials will be produced by the SAAAR-PIU and to be made available at the Executer Power office in Salyan and Bilasuvar. A “Public Relations Kit” will be designed specifically and be made available both in print and online form. SAAAR/PIU will also update its website (<http://www.aayda.gov.az/az>) regularly (at least on a quarterly basis) with key project updates and reports on the project’s performance both in Azerbaijani and English. The website can also be utilized to provide information regarding the grievance mechanism for the project.
-) **Mass/social media communication** - A social safeguard specialist (from SAAAR-PIU staff or an external consultant) will be engaged on during the project implementation of RCDP Subcomponent 1.1 in order to maintain close communication with stakeholders, including P-APs, community leaders. The social safeguard specialist, as the main Focal Point Person (FPP), will also be tasked for posting relevant information on the dedicated RCDP website, social media channels (Facebook, etc.) and on information boards throughout the project’s

lifecycle. In addition, if necessary, the project may arrange for production of video materials (for video-sharing platform, e.g., YouTube) or documentary broadcast on TV/cable TV and which will entail description of the project, advance announcement of the forthcoming public events or commencement of specific Project activities.

-) **Information Desks** - During the initiation of the RCDP Subcomponent 1.1, an “Information Desks” in each Rayon (Salyan & Bilasuvar) will be arranged with Executive Powers to provide local residents with information on stakeholder engagement activities, project interventions, contact details of the Focal Point Person, etc. The FPP will set up these information desks in Rayon offices where they can meet and share information about the project with PAPs and other stakeholders. RCDP Subcomponent 1.1 brochures and fliers on various project related social and environmental issues will be made available at these information desks.
-) **Stakeholders/ Beneficiaries /PAP Opinion/ Perception Surveys** - At the start of the project, the RCDP will finance the design and a pilot of a Stakeholders/ Beneficiaries /PAP Opinion/ Perception Surveys regarding the RCDP to cover a good sample of the stakeholders of the project. Qualitative and quantitative metrics of the project will be taken and will serve as baseline information on the Stakeholders. A social safeguard consultant may be employed by the SAAAR-PIU for this purpose. This can be cross-validated at some point in time during the implementation and prior to handing over of the project to SAAAR-PIU.

7 GRIEVANCE REDRESS

As per *ESS10 C – Grievance Mechanism*, the Borrower is expected to respond to concerns and grievances of project-affected parties related to the environmental and social performance of the project in a timely manner (*ESS10 par. 26*). The major considerations are as follows:

- (a) The grievance mechanism is expected to address concerns promptly and effectively, in a transparent manner that is culturally appropriate and readily accessible to all project-affected parties, at no cost and without retribution. The mechanism, process or procedure will not prevent access to judicial or administrative remedies. The Borrower will inform the project-affected parties about the grievance process in the course of its community engagement activities, and will make publicly available a record documenting the responses to all grievances received; and
- (b) Handling of grievances will be done in a culturally appropriate manner and be discreet, objective, sensitive and responsive to the needs and concerns of the project-affected parties. The mechanism will also allow for anonymous complaints to be raised and addressed.

The Grievance Redress Mechanism (GRM) for RCDP, which can be adapted to Subcomponent 1.1, is described in detail in the SEP.

7.1 Grievance Redress Mechanisms

The RCDP Grievance Redress Mechanism (GRM) in the SEP will be similar to what will be applied in the RCDP RPF, and in some instances both GRM's can work in parallel to resolve issues. Personnel and experts can be assigned to any or both GRM's for practicality and even consistency. For consistency this format shall be applied to Subcomponent 1.1. The Steps to be followed to address grievance within the SEP framework as per ESS10 requirements:

Step 1 Grievance Redress Commission (GRC): The GRC will act as the mediator between aggrieved parties and will make efforts to resolve conflicts through mutual consent.

Step 2 SAAAR-PIU: Recommendations of GRC are sent to the SAAAR-PIU. The SAAAR-PIU is responsible for addressing the grievances of the P-APs and, if necessary, will forward these grievances to appropriate agencies/ offices for taking action. P-APs will be able to contact the SAAAR-PIU through phone, email, direct meetings and letters. The contact details of SAAAR-PIU (Point of Contact) will be distributed to the P-APs and posted on the main locations in the communities before the commencement of RCDP implementation. In

addition, in case of unresolved issues with the P-AP, the SAAAR-PIU may resort to “mediation” as an option (*ESS10 Annex 1 par 3*)

Step 3 (Court of law): The court of law will be the last resort before the P-AP. The Project-Affected Parties can **appeal** to court should they disagree with the decision of SAAAR-PIU.

In conformance to *ESS10 Annex 1 par 2 (a)*, the GRM will be accessible to the full range of project stakeholders, including project-affected parties, community members, civil society, media, and other interested parties. Stakeholders can use the GRM to submit complaints, feedback, queries, suggestions, or even compliments related to the overall management and implementation of the project. The GRM is intended to address issues and complaints from external stakeholders in an efficient, timely, and cost-effective manner. A separate mechanism will be used for worker grievances. The SAAAR-PIU will be responsible for managing the stakeholder GRM following the roles and responsibilities outlined in the previous section.

7.2 Recording Grievances

As part of *ESS10 Annex 1 par 2* requirement for maintenance of “Grievance Logs and Data Base”, the SAAAR-PIU will maintain a grievance log as part of the SEP implementation, which will contain, at the minimum, the following information:

-) Individual reference number;
-) Name of the person submitting the complaint, question, or other feedback, address and/or contact information (unless the complaint has been submitted anonymously);
-) Details of the complaint, feedback, or question/her location and details of his / her complaint;
-) Date of the complaint;
-) Name of person assigned to deal with the complaint (acknowledge to the complainant, investigate, propose resolutions, etc.);
-) Details of proposed resolution, including person(s) who will be responsible for authorizing and implementing any corrective actions that are part of the proposed resolution;
-) Date when proposed resolution was communicated to the complainant (unless anonymous);
-) Date when the complainant acknowledged, in writing if possible, being informed of the proposed resolution;
-) Details of whether the complainant was satisfied with the resolution, and whether the complaint can be closed out; and
-) Date when the resolution is implemented (if any)

8 MONITORING AND REPORTING

The environmental and social monitoring will be done to ensure proper response and mitigation with the identified project risks and impacts, which may arise during the construction phase of the RCDP Subcomponents. Prior to the construction, the SAAAR Safeguard officer with the assistance of the DDIS will do the following:

-) Develop an environmental auditing protocol for the construction period as well as a detailed monitoring and reporting plan;
-) Provide guidance and formulate a report outline that will be used by the contractor as a guide in the preparation of periodic environmental and social progress reports; and
-) Undertake regular and periodic monitoring of contractor’s implementation of the mitigation measures during the construction stage, consistent with the monitoring program, and submit to SAAAR-PIU quarterly monitoring reports. Special separate reports should be prepared in the event a significant environment related incident will arise.

The SAAAR-PIU will provide the WB a summary of the monitoring results on a quarterly basis. In addition, environmental management activities should form part of the Internal Monitoring System. The purpose of such system is to track progress of as well as changes in civil work activities as well as monitor effects and impact of the RCDP Subcomponent 1.1 on the Project-Affected Parties and

Other Interested Parties. The SAAAR will be responsible for the establishment of the monitoring system with the assistance of the DDIS and the Civil Works Contractor, whose scope will be specified in the terms of reference for the work contract.

8.1 Internal Monitoring

During RCDP Subcomponent 1.1 implementation, the SAAAR will conduct monthly internal monitoring activities on the ESMPs to determine the effectiveness of the mitigation measures against the identified environmental and social risks and impacts. Monitoring reports will be reviewed by the project SAAAR-PIU Director and be submitted to the World Bank for their review. SAAAR-PIU will be assisted by the DDIS in the report preparation.

During the road construction, the SAAAR-PIU with the assistance of the DDIS shall monitor the compliance of the Contractor in accordance with the ESMPs. Quarterly reports shall be drafted to SAAAR, WB, and to relevant agencies describing the status of implementation of environmental and social mitigation measures by the Contractors. Included in the reports are additional mitigation measures that may need to be implemented, incidents of non-compliance with applicable environmental permits, complaints received from local residents, NGOs, etc. and ways and means by which, they were addressed or settled.

It is also important that during the construction stage, any occupational health and safety (OHS), community or other incidents that may occur at the Project sites must be immediately reported to the WB without postponing that till a regular progress report is due. Towards this end, SAAAR must include the requirement to promptly report on incidents into the contracts signed with the contractors of works and work supervision consultants. Once a notice on an incident arrives to the SAAAR, it must be instantly communicated to the World Bank in writing with the inclusion of sufficient detail known at the moment of reporting. Following the occurrence of an incident SAAAR will undertake a root cause analysis to assess the causes for the incident and prepare a corrective action plan including remedial actions to be put in place to prevent further occurrence of such accidents as well as to mitigate and compensate for any consequences arising from the accident that has occurred.

It is advisable that the DDIS shall employ an expatriate environment and social specialist (with civil engineering/environmental management background) to assist the SAAAR in the monitoring the progress of the construction on its environmental aspect in accordance with the ESSs. The DDIS, through its environment and social specialist, shall provide hands-on training to the SAAAR throughout various stages of the construction. The DDIS shall also assist SAAAR in preparing monitoring reports regarding the performance of the contractors in terms of compliance with the relevant national environmental regulations, quality standards and the implementation of environmental specifications in accordance with the contract provisions. The Terms of Reference (ToR) for the environmental specialist shall be drawn-up by the DDIS for the RCDP. During project implementation, the SAAAR will report to the World Bank-IBRD every three (3) months on the progress of the project based on the monitoring reports submitted by the ESS/CSC and the Contractor.

9 BUDGET

The cost for implementing the PESMP for Subcomponent 1.1 stems from undertaking mitigation measures, monitoring of impacts and capacity building for SAAAR personnel. The line items for mitigation measures primarily planting trees as and providing green covers to embankment fills for the road pavement and bridges for erosion control such as sodding of embankment. For the monitoring aspects, environmental and social specialist (local and international) shall be engaged periodically to conduct periodic audits on compliance of the contractor as well as ES performance of the project. Parametric measurements of air quality, water quality and noise at specific points shall be conducted by the Contractor. Capacity building will mainly involve training on various topics tentatively enumerated in the ESMF.

ESF Documents Preparation – Preliminary Environmental and Social Management Plan (PESMP)

For this purpose, as estimated in the previous section the following budget is derived:

-) Mitigation measures = US\$34,800;
-) Consultants cost is during construction for monitoring = US\$285,600
-) Periodic Parametric measurements = US\$72,000
-) Capacity Building for SAAAR personnel (based on ESMF) = US\$50,000

The total budgetary estimate for the PESMP for Subcomponent 1.1 is US\$442,400

Annex 1: Sample Chance Find Procedure

A. Objectives of the Procedure

The chance find procedure is a project-specific procedure that outlines actions required if previously unknown heritage resources, particularly archaeological resources, are encountered during project construction or operation. A Chance Find Procedure, as described in IFC Performance Standard 8, is a process that prevents chance finds from being disturbed until an assessment by a competent specialist is made and actions consistent with the requirements are implemented.

B. Scope of the chance find procedure

This procedure is applicable to all activities conducted by the personnel, including contractors, that have the potential to uncover a heritage item/site. The procedure details the actions to be taken when a previously unidentified and potential heritage item/site is found during construction activities. Procedure outlines the roles and responsibilities and the response times required from both project staff, and any relevant heritage authority.

C. Procedure

If any person discovers a physical cultural resource, such as (but not limited to) archaeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the following steps shall be taken:

1. Stop all works in the vicinity of the find, until a solution is found for the preservation of these artefacts, or advice from the relevant authorities is obtained;
2. Immediately notify a foreman. The foreman will then notify the Construction Manager who will in turn must contact the SAAAR Safeguards Specialist;
3. Record details in Incident Report and take photos of the find;
4. Delineate the discovered site or area; secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities take over;
5. Preliminary evaluation of the findings by SAAAR Safeguards Specialist; and if necessary, government archaeologists. The SAAAR Safeguards Specialist; must make a rapid assessment of the site or find to determine its importance. Based on this assessment the appropriate strategy can be implemented. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage such as aesthetic, historic, scientific or research, social and economic values of the find;
6. Sites of minor significance (such as isolated or unclear features, and isolated finds) will be recorded immediately by the archaeologist, thus causing a minimum disruption to the work schedule of the Contractor. The results of all archaeological work must be reported to the Ministry/Agency, once completed.
7. In case of significant find the Agency/Ministry (Ministry of Culture, hereinafter referred to as Heritage team) will be informed immediately and in writing within 7 days from the find (ref. law on heritage protection).
8. The onsite archaeologist provides the Heritage team with photos, other information as relevant for identification and assessment of the significance of heritage items.
9. The Ministry must investigate the fact within 2 weeks from the date of notification and provide response in writing.
10. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration and salvage;
11. Construction works could resume only after permission is granted from the responsible authorities.
12. In case no response received within the 2 weeks period mentioned above, this is considered as authorisation to proceed with suspended construction works.

One of the main requirements of the procedure is record keeping. All finds must be registered. Photolog, copies of communication with decision making authorities, conclusions and recommendations/guidance, implementation reports – kept.

D. Induction/Training

All personnel, especially those working on earth movements and excavations, are to be inducted on the identification of potential heritage items/sites and the relevant actions for them with regards to this procedure during the Project induction and regular toolbox talks.

E. Additional information

Management options for archaeological site

-) **Site avoidance.** If the boundaries of the site have been delineated attempt must be made to redesign the proposed development to avoid the site. (The fastest and most cost-effective management option)
-) **Mitigation.** If it is not feasible to avoid the site through redesign, it will be necessary to sample it using data collection program prior to its loss. This could include surface collection and/or excavation. (The most expensive and time-consuming management option.)
-) **Site Protection.** It may be possible to protect the site through the installation of barriers during the time of the development and/or possibly for a longer term. This could include the erection of high visibility fencing around the site or covering the site area with a geotextile and then capping it with fill. The exact prescription would be site- specific.

Management of replicable and non-replicable heritage

Different approaches for the finds apply to replicable and non-replicable heritage.

Replicable heritage

Where tangible cultural heritage that is replicable¹⁸ and not critical is encountered, mitigation measures will be applied.

The mitigation hierarchy is as follows:

-) Avoidance;
-) Minimization of adverse impacts and implementation of restoration measures, in situ;
-) Restoration of the functionality of the cultural heritage, in a different location;
-) Permanent removal of historical and archaeological artefacts and structures;
-) Compensation of loss - where minimization of adverse impacts and restoration not feasible.

Non-replicable heritage

Most cultural heritage is best protected by in situ preservation, since removal is likely to result in irreparable damage or even destruction of the cultural heritage.

Nonreplicable cultural heritage¹⁹ must not be removed unless all of the following conditions are met:

-) There are no technically or financially feasible alternatives to removal;
-) The overall benefits of the project conclusively outweigh the anticipated cultural heritage loss from removal; and

Any removal of cultural heritage must be conducted using the best available technique advised by relevant authority and supervised by archaeologist.

¹⁸ Replicable cultural heritage is defined as tangible forms of cultural heritage that can themselves be moved to another location or that can be replaced by a similar structure or natural features to which the cultural values can be transferred by appropriate measures. Archaeological or historical sites may be considered replicable where the particular areas and cultural values they represent are well represented by other sites and/or structures.

¹⁹ Nonreplicable cultural heritage may relate to the social, economic, cultural, environmental, and climatic conditions of past peoples, their evolving ecologies, adaptive strategies, and early forms of environmental management, where the (i) cultural heritage is unique or relatively unique for the period it represents, or (ii) cultural heritage is unique or relatively unique in linking several periods in the same site. Examples of non-replicable cultural heritage may include an ancient city or temple, or a site unique in the period that it represents.

Human Remains Management Options

The handling of human remains believed to be archaeological in nature requires communication according to the same procedure described above.

There are two possible courses of action:

-) **Avoid.** The development project is redesigned to completely avoid the found remains. An assessment should be made as to whether the remains may be affected by residual or accumulative impacts associated with the development, and properly addressed by a comprehensive management plan.
-) **Exhumated.** Exhumation of the remains in a manner considered appropriate by decision makers. This will involve the predetermination of a site suitable for the reburial of the remains. Certain ceremonies or procedures may need to be followed before development activities can recommence in the area of the discovery.

Annex 2. Public Consultation Minutes

Regional Connectivity and Development Project Rehabilitation Project of Selected Sections of Salyan-Bilasuvar Road Public Consultations on Environmental and Social Framework (ESF) Documents

(Conducted on February 18 and 19, 2021 with representatives of stakeholders from Salyan and Bilasuvar Rayons)

Background:

As part of the Environmental and Social Safeguards requirements for the processing of the ESF documents, Public Consultations (PC) were conducted within the Rayons of Salyan and Bilasuvar.

The Objectives and Purposes of the Public Consultations:

- Providing information on the Project scope (general details, objectives, components, etc.);
- Presenting RCDP Environmental and Social Framework (ESF) Documents (***ESMF, RPF, SEP, LMP and PreESMP specific for the Yenikend-Bilasuvar Road Section***) that describe potential socio-environmental impacts of the Project activities and corresponding mitigations;
- For responding questions related to the above-mentioned documentations; and
- Receiving comments and feedback to be incorporated into the final versions of environmental and social framework (ESF) documents.

Methodology:

Digital copies of Environmental and Social Framework (ESF) Documents have been posted on the official websites of SAAAR and Salyan and Bilasuvar Executive Power Offices on February 7, 16 & 18, 2021 respectively (see Appendix 1 for relevant weblinks). In addition, SAAAR official website also contains supplementary note indicating that any interested party may use the organization's official contact details (phoneline, email and postal addresses) for sending further feedback and suggestions.

Due to the restrictions on public meetings related to the COVID-19 pandemic situation, it was decided to hold a limited number of meetings with stakeholders. One meeting was held with stakeholders living in Bilasuvar region over the "Zoom" application, and three (3) group meetings were held with stakeholders living in Salyan Rayon.

The RCDP Public Consultations were organized with the assistance of the Local Executive Powers of the Rayons, who informed to their local citizens regarding the event, as part of the outreach activities. In addition to the Project information presented during the PC's, contact details of the PIU were provided for any future grievances, suggestions and communications. The Grievance Mechanism shall also be shared in the aforementioned websites for guidance of the stakeholders and the general public prior to the commencement of the actual work.

Location: Salyan Rayon, Yenikend village²⁰

Date and time: February 19, 2021, 10:00 AM

Participants: 14 people (representatives of interested parties from Yenikend, Hasanli and Chukhanli villages)

- Executive Power local representative;
- Members of Municipalities;
- Village residents; and
- A representative of the service organization.

Minutes of the meeting

Elnur Abbaszade (representative of PIU2) informed that with financial support provided by the World Bank, the Government of Azerbaijan is in the process of preparation of the Regional Connectivity and Development Project aimed at rehabilitation of selected sections of Salyan-Bilasuvar road.

The drafts of Environmental and Social Framework (ESF) Documents describing potential socio-environmental impacts and the corresponding relevant mitigation activities have been produced as a part of the Project and in accordance with the World Bank Environmental and Social Standards, as well as relevant legislative acts of the Republic of Azerbaijan. These documents are being disclosed to the public for questions and comments. E. Abbaszade gave a PowerPoint presentation describing general information on the Project, potential socio-economic impacts and mitigation activities. It was also been mentioned that the full electronic versions of documents are available on the official websites SAAAR and Salyan Executive Power Office.

The meeting continued with a question-and-answer session.

Questions	Responses (PIU)
P.Jafarov (Yenikend village excom) – We were looking forward to this project. After the construction of the new road, the existing road was put aside, and left out of attention. My question is related to the dust that will be generated during the construction of the road. What specific actions are planned to prevent this?	E.Abbaszade – As it was mentioned during the presentation water regularly will be sprayed along the routes, as well as all unpaved access roads to stop dust emission.
Z.Vahidov (Head of Chukhanli municipality) – In order to prevent the entry of strangers and domestic animals into the construction site mounting lights and barriers are necessary.	E.Abbaszade - Security barriers will be widely applied during construction. In addition, public awareness campaigns will be organized to draw their attention to security issues.
T.Rahmanov (Hasanli village excom) – Sometimes we observe that during the construction process the top layer of existing	E.Abbaszade - Firstly, I would like to inform you that according to the prepared ESF

²⁰ Given the current pandemic situation, representatives of various communities were invited to a meeting located nearby.

Questions	Responses (PIU)
<p>asphalt roads is removed and thrown to the side of the road. This is a serious threat to the soil.</p>	<p>documents, areas for large-scale waste disposal will be identified at the pre-construction stage. A waste management plan with all details for waste disposal will be prepared by the contractors and approved by the construction technical supervision consultant. The Contractor will not dump any constructional materials on individual land plots without the permission of the landowner and the consent of the Engineer.</p>
<p>P.Gozalov (teacher) – Will the Grievance Redress Mechanism be approached as a tool to share our feedback and suggestion with you?</p>	<p>E.Abbaszade – During the preparation phase of the project, as well as during the active construction period the regular interactions can be established and maintained to express your feedback and suggestions to us.</p>
<p>A.Huseynov (school principal) – As I understood from the presentation the project envisages the development of roadside markets and, indirectly, the creation of new jobs. This is a very important direction. These markets are a very good opportunity for the people of our village to earn money by selling their products.</p>	<p>E.Abbaszade - You are absolutely right. The third component of the project envisages the development of such markets. However, before starting on these activities, there is a need for serious research. A decision will be made upon the results of relevant investigations, including consultations with the local population.</p>
<p>M.Abasov (Member of Hasanli municipality) – Is the land acquisition expected as part of the construction?</p>	<p>E.Abbaszade – No new areas are expected to be acquired as the rehabilitation of this road is planned to be carried out along the existing road axis. Nevertheless, in accordance with international standards, a Resettlement Policy Framework (RPF) has been developed, which regulates the mentioned issue.</p>

Azərbaycan Avtomobil Yolları Dövlət Agentliyi
Regional Yollar və İnkişaf Layihəsi
Salyan-Biləsuvar yolunun seçilmiş hissələrinin bərpası
Sosial və ətraf mühitə təsirlər barədə sənədlərin ictimai müzakirəsi

Salyan R-NU, Yenişad k. 19.02.21 10 ⁰⁰
yaşayış məntəqəsi (rayon, kənd) tarix və vaxt

İştirakçıların siyahısı

S.s.	Adı və soyadı	İş yeri və tutduğu vəzifə	İmza	Əlaqə nömrəsi
1.	İzzətova Əstər	Yenişad i.ş. d. i. nümayəndəsi	[İmza]	050-221-14-78
2.	Əbasov Əsəd	Yenişad kənd bələdiyyəsi sədri	[İmza]	050-350-45-30
3.	Rəhimov Fəvq	Həsənlı.ş. d. N. d. s. müvəkkil	[İmza]	050-632-23-22
4.	Çobanov Faiq	Qeydiyyatçı, direktor	[İmza]	050-640-60-71
5.	Əbasov Əliqasım	Həsənlı.ş. d. bələdiyyəsi	[İmza]	050-419-44-13
6.	Səlimov Rəşad	Müəllim	[İmza]	055-749-49-20
7.	Gözlöv Fəvq	Müəllim	[İmza]	050-361-14-84
8.	Əfəndiyev Həsən	Əlaqə Direktoru	[İmza]	050-632-21-96
9.	Hüseynov Əliqasım	Direktor müvəkkil	[İmza]	050-324-27-38
10.	Dünnəliyev Sədrəddin	Su agenti	[İmza]	050-574-87-38
11.	Kərimov Fəvq	Qeydiyyatçı bələdiyyəsi sədri	[İmza]	050-325-53-75
12.	Səfərov Əliqasım	Yenişad i.ş. d. i. müvəkkil	[İmza]	050-380-60-89
13.	Məmmədov Səlim	Mühasib	[İmza]	050-362-03-07
14.	Səfərov Səlim	Kitabxanaçı	[İmza]	070-340-57-56
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Yenikend village, Salyan Rayon, February 19, 2021



Yenikend village, Salyan Rayon, February 19, 2021

Location: Arbatan village, Salyan Rayon

Date and time: February 19, 2021, 11:30 AM

Participants: 11 people (representatives of interested parties from Arbatan, Marishli, Seyidsadigli and Sarvan villages)

- Executive Power local Representatives;
- Municipality members;
- Local people.

Minutes of the meeting

Elnur Abbaszade (representative of PIU2) informed that with financial support provided by the World Bank, the Government of Azerbaijan is in the process of preparation of the Regional Connectivity and Development Project aimed at rehabilitation of selected sections of Salyan-Bilasuvur road.

The drafts of Environmental and Social Framework (ESF) Documents describing potential socio-environmental impacts and the corresponding relevant mitigation activities have been produced as a part of the Project and in accordance with the World Bank Environmental and Social Standards, as well as relevant legislative acts of the Republic of Azerbaijan. These documents are being disclosed to the public for questions and comments. E. Abbaszade gave a PowerPoint presentation describing general information on the Project, potential socio-economic impacts and mitigation activities. It was also been mentioned that the full electronic versions of documents are available on the official websites SAAAR and Salyan Executive Power Office.

The meeting continued with a question-and-answer session.

Questions	Responses (PIU)
<p>F.Gafarov (Arbatan village excom) – Using internal roads during the construction may create a threat for our village residents. What measures are planned in this regard?</p>	<p>E.Abbaszade – A Transport Management Plan will be produced to prevent the mentioned negative situations. In addition, some measures will be taken such as informing the local population about the planned work in advance, placing flagmen and mounting temporary traffic lights in perilous areas, establishing pedestrian crossings and reducing the movement of large trucks, especially during rush hours.</p>
<p>A.Huseynov (Head of Marishli municipality) – Construction materials or waste spilled from trucks during construction are a source of danger on the roads. Please impose strict control on this issue.</p>	<p>E.Abbaszade - Trucks carrying soil, gravel, and stones will be covered with a tent or any material that can effectively prevent spillage. Drivers and contractors bear responsibility for loading materials and transporting them safely, especially when passing through residential areas.</p>

Questions	Responses (PIU)
<p>I.Mammadov (Resident of Sarvan vil-lage) – Will local people be employed or people from other areas be invited here to get a job in construction?</p>	<p>E.Abbaszade - Job competitions will be organized to attract employees. Of course, local labor will be preferred, if they have the necessary qualifications and skills.</p>
<p>A.Farajov (Head of Arbatan municipality) – Are there any other works planned to be done for our village within the project?</p>	<p>E.Abbaszade - The third component of the project involves the implementation of certain social and economic activities. This includes providing support for the planning and development of the roadside market and logistics facilities. On the other hand, it is also planned to develop a curriculum and then provide special training and consulting services for small agricultural producers and agro-logistics operating in the project area. Trainings will be open to everyone in the communities living in the project area.</p>

Azərbaycan Avtomobil Yolları Dövlət Agentliyi
Regional Yollar və İnkişaf Layihəsi
Salyan-Biləsuvar yolunun seçilmiş hissələrinin bərpası
Sosial və ətraf mühitə təsirlər barədə sənədlərin ictimai müzakirəsi

Salyan r-nu, Arbatan k. 19.02.21 11 ³⁰
yaşayış məntəqəsi (rayon, kənd) tarix və vaxt

İştirakçıların siyahısı

S.s.	Adı və soyadı	İş yeri və tutduğu vəzifə	İmza	Əlaqə nömrəsi
1.	Dəfərova Sığozat	Arbatan kənd		051413001
2.	Fəxrəddin Ələm	Arbatan kənd		0517531500
3.	Məhəmməd Məhəmməd	Məhəmməd Məhəmməd		0504570567
4.	Usubov Vüqar	Məhəmməd Məhəmməd		050-391-22-89
5.	Səfərov Ərif	Məhəmməd Məhəmməd		059-390-840
6.	Məmmədov İntiqam	Salyan 1982		0503635799
7.	Səfərov Əmir	Salyan 1982		0504803536
8.	Nəzirova Fəridə	Salyan 1982		0513265064
9.	Əsədov Cəmal	Salyan 1982		0513497301
10.	Səmədov Arar	Salyan 1982		0515534208
11.	Məhəmməd Əmir	Salyan 1982		0514262987
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Arbatan village, Salyan Rayon, February 19, 2021



Arbatan village, Salyan Rayon, February 19, 2021



Arbatan village, Salyan Rayon, February 19, 2021



Marishli village, Salyan Rayon, February 19, 2021

Location: Salyan Rayon, Sarvan village

Date and time: Feb 19, 2021, at 01:30 pm

Participants: 10 people (representatives of interested parties from Shorsulu, Sarvan and Gizilaghadj villages)

- Executive Power local Representatives;
- Members of Municipalities;
- Local people.

Minutes of the meeting

Elnur Abbaszade (representative of PIU2) informed that with financial support provided by the World Bank, the Government of Azerbaijan is in the process of preparation of the Regional Connectivity and Development Project aimed at rehabilitation of selected sections of Salyan-Bilasuvar road.

The drafts of Environmental and Social Framework (ESF) Documents describing potential socio-environmental impacts and the corresponding relevant mitigation activities have been produced as a part of the Project and in accordance with the World Bank Environmental and Social Standards, as well as relevant legislative acts of the Republic of Azerbaijan. These documents are being disclosed to the public for questions and comments. E. Abbaszade gave a PowerPoint presentation describing general information on the Project, potential socio-economic impacts and mitigation activities. It was also been mentioned that the full electronic versions of documents are available on the official websites SAAAR and Salyan Executive Power Office.

The meeting continued with a question-and-answer session.

Questions	Responses (PIU)
<p>G.Hasanov (Gizilaghaj village excom) – There are several secondary school buildings along the road. How will the safety of the population, especially schoolchildren, be ensured during construction?</p>	<p>E.Abbaszade – A Traffic Management Plan will be developed to regulate increasing traffic in the area. In addition, some measures will be implemented too. For example, additional advocacy work may be carried out in schools so that children can be introduced to safety rules during construction. On the other hand, additional measures may be undertaken in areas some areas, such as placing flag persons and mounting temporary traffic lights, establishing pedestrian crossings, and reducing the movement time of large trucks, especially during rush hours. In addition, safety signs will be installed in prominent places.</p>
<p>S.Javadov (Shorsulu village excom) – I think there will not be such a serious problem. I urge you to minimize the impact on the soil and the environment as much as</p>	<p>E.Abbaszade - Efforts will be made to ensure that all activities carried out under the project do not have a negative socio-environmental impact. As you can see from the</p>

Questions	Responses (PIU)
possible, simply because our area is an agricultural zone.	presentation, preventive measures will be proposed to be taken for all types of impacts.
F.Mammadov (Head of Shorsulu municipality) – We have some suggestions on the technical aspects of the project. How can we present them?	E.Abbaszade - the World Bank's 10 th Environmental and Social Standard (ESS) includes stakeholder engagement and disclosure. Public hearings should also be held in accordance with the requirements of the Law on Environmental Impact Assessment and the Law on Public Participation. At the same time, the existence of an open and transparent relationship between the stakeholders in the project is considered an essential element of international practice. Effective stakeholder participation can improve the environmental and social sustainability of projects and make a significant contribution to the more successful design and implementation of the project. For this purpose, additional consultations will be held with you during the preparation of the project. In addition, a continuous information exchange mechanism will be established and operated throughout the project between the stakeholders involved in the project.
B.Sadigov (Member of Gizilaghadj municipality) – Land plots of some villagers are situated in close vicinity of the road. We would like to minimize the impact on those lands during construction.	E.Abbaszade - As you saw in the presentation, a number of preventive measures have been taken to minimize the environmental impact of the construction work. During the construction period, contractors will not be allowed to dump excess materials on individual plots of land without the permission of the landowner. All temporarily affected areas should be rehabilitated at the end of the project.
I.Hasanov (teacher) – If there is a plan to rehabilitate the affected areas as you mentioned earlier, is it possible that the vegetation, for example, cut trees, will be replaced with new ones?	E.Abbaszade - If there will be an inevitable impact on trees, then mature trees will be removed for replanting or three new trees will be planted instead of every single cut tree.

Questions	Responses (PIU)

Azərbaycan Avtomobil Yolları Dövlət Agentliyi
Regional Yollar və İnkişaf Layihəsi
Salyan-Biləsuvar yolunun seçilmiş hissələrinin bərpası
Sosial və ətraf mühitə təsirlər barədə sənədlərin ictimai müzakirəsi

Salyan r-nu, Sarvan k. 19.02.2021 13³⁰
yaşayış məntəqəsi (rayon, kənd) tarix və vaxt

İştirakçıların siyahısı

S.s.	Adı və soyadı	İş yeri və tutduğu vəzifə	İmza	Əlaqə nömrəsi
1.	Məmmədov Fərid	Sosial kəndi Bələdiyyə sədri		050-055 393-33-23
2.	Həqiqiyev Bənyad	Əzizləyəv kəndi Bələdiyyə sədri		051-421-11-00
3.	Canadov Bəhman	Sarısuqan kəndi Nəmənzadə küçəsi		0505336757
4.	Həsənov Əhməd Əhməd oğlu	Əzizləyəv kəndi 7.2 Ə.21. N-5		0503743941
5.	Təməylov Fərid Rəis	Sarvan kəndi 10007 Nəmənzadə küçəsi		0506407004
6.	Bəyralı Rəis Hidayət	Sarvan kəndi 10007 Nəmənzadə küçəsi		0505030960
7.	Sadıyev Bəhram Həsən oğlu	Əzizləyəv kəndi Nəmənzadə küçəsi		050-552-17-37
8.	Həsənov İsmayil M.	Müəllim		05058249-12
9.	Dədəyev Səməd Ə.	Müəllim		0503404571
10.	Həsənov Cəmil Rəis	VARGUZAR		0505030960
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In addition to the group meetings listed above two more individual meetings were held with Mr. Etibar Huseynov, Deputy head of Salyan Executive Power Office and Mr. Sarvaddin Jafarov, head of Salyan Municipality.



Sarvan village, Salyan Rayon, February 19, 2021



Sarvan village, Salyan Rayon, February 19, 2021



Sarvan village, Salyan Rayon, February 19, 2021



Sarvan village, Salyan Rayon, February 19, 2021

Location: Administrative office of SAAAR (a distance meeting over the Zoom application)

Date and time: February 18, 2021, 3:00 PM

Participants: 23 people (representatives of interested parties from Khirmandali, Beydili and Ashaghi Jurali villages of Bilasuvar Rayon)

- Executive Power local Representatives;
- Municipality members
- Local people.

Minutes of the meeting









Elnur Abbaszade (representative of PIU2,) informed that with financial support provided by the World Bank, the Government of Azerbaijan is in the process of preparation of the Regional Connectivity and Development Project aimed at rehabilitation of selected sections of Salyan-Bilasuvar road.

The drafts of Environmental and Social Framework (ESF) Documents describing potential socio-environmental impacts and the corresponding relevant mitigation activities have been produced as a part of the Project and in accordance with the World Bank Environmental and Social Standards, as well as relevant legislative acts of the Republic of Azerbaijan. These documents are being disclosed to the public for questions and comments. E. Abbaszade gave a PowerPoint presentation describing general information on the Project, potential socio-economic impacts and mitigation activities. It was also been mentioned that the full electronic versions of documents are available on the official websites SAAAR and Salyan Executive Power Office.

The meeting continued with a question-and-answer session.

Questions	Responses (PIU)
A.Imanov (resident of Khirmandali vil-lage) – We are facing certain challenges while our domestic animals cross the newly built road. I hope there will be no such ban on this road. It is important to have special temporary crossings for this purpose during the construction of the road.	E.Abbaszade – In accordance with the initial technical documentation, I can say that this road will have the 2 nd category and there will be no restrictions on the crossing of domestic animals through designated locations. Temporary safety barriers and road signs to be installed during construction will help to organize movements.
A.Jafarov (Baydili village excom) – As a result of the project, the mobility of people living in the area will increase. For this reason, we are ready to support the project within our authorities. My concern is about the use of local labor. Please, increase the involvement of the rural population in construction as much as possible.	E.Abbaszade – Preference will be given to local labor if they have the necessary qualifications and skills.
I.Azizov (Head of Khirmandali municipal-ity) – The existing road is situated at a very close distance to our village. Noise during	E.Abbaszade - Some measures will be taken to reduce noise and not cause inconvenience to residents. For example, restricting working hours during certain hours of

Questions	Responses (PIU)
<p>construction will disturb the villagers. Therefore, I ask you to monitor this case.</p>	<p>the day or not allowing noise to exceed a certain norm. In addition, if necessary, the local population will be notified in advance about activities that could cause a loud noise.</p>
<p>G.Baghirov (Ashaghi Jurali excom) – Where will construction waste be transported?</p>	<p>E.Abbaszade - An area for large-scale waste collection will be identified prior to construction. Garbage bins will be provided for each work area and waste and non-hazardous waste will be collected at designated disposal sites. Waste disposal sites will be agreed with local municipalities and relevant authorities.</p>

 <p>Elnur Abbaszade, PIU2</p>	 <p>Galib Baghirov, Ashaghi Jurali Executive Power local Representative, Bilasuvar Rayon</p>
 <p>Azad Imanov, resident of Khirmandali vil-lage, Bilasuvar Rayon</p>	 <p>Rahib Hajiyev, Khirmandali village Executive Power local Representative, Bilasuvar Rayon</p>
 <p>Ilqar Karimov, Head of Beydili municipality, Bilasuvar Rayon</p>	 <p>Adil Jafarov, Beydlil village Executive Power local Representative, Bilasuvar Rayon</p>
 <p>Salamat Rahimov, resident of Ashaghi Ju-rali village, Bilasuvar Rayon</p>	 <p>Gabil Baghirov, resident of Ashaghi Jurali vil-lage, Bilasuvar Rayon</p>

Azərbaycan Avtomobil Yolları Dövlət Agentliyi
Regional Yollar və İnkişaf Layihəsi
Salyan-Biləsuvar yolunun seçilmiş hissələrinin bərpası
Sosial və ətraf mühitə təsirlər barədə sənədlərin ictimai müzakirəsi

Biləsuvar rayonu, Aşağı Cürəli kəndi
yaşayış məntəqəsi (rayon, kənd)

18 fevral 2021-ci il saat 15:00
tarix və vaxt

İştirakçıların siyahısı

S.s.	Adı və soyadı	İş yeri və tutduğu vəzifə	İmza	Əlaqə nömrəsi
1.	Baqırov Qabil Qadir	offisəri (Cürəli kəndi)		050 344 9884
2.	Sirucov Əmir Əlişeyx	İctimai münasibət departamenti		051 308 7801
3.	Baqırov Qabil Qadir	kənd sakinisi		050 576 7616
4.	Rəhimov Səlahət Əliyev	kənd sakinisi		050 743 8585
5.	Rəyev Əlyar Hüseyn	kənd sakinisi		050 614 9137
6.	Hüseynov Əsədulla Əliyev	kənd sakinisi		051 854 8847
7.	Həziyev Ələz Əli	kənd sakinisi		050 370 0481
8.	Rəzadə Büsəl Mürsəl	kənd sakinisi		051 768 4346
9.	Məmmədov Məhəbbət Əliyev	kənd sakinisi		070 215 1284
10.	Hüseynov Təpdiq Qadir	kənd sakinisi		050 530 5395
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Azərbaycan Avtomobil Yolları Dövlət Agentliyi
Regional Yollar və İnkişaf Layihəsi
Salyan-Biləsuvar yolunun seçilmiş hissələrinin bərpası
Sosial və ətraf mühitə təsirlər barədə sənədlərin ictimai müzakirəsi

Biləsuvar rayonu, Xırmandalı kəndi 18 fevral 2021-ci il saat 15:00
yaşayış məntəqəsi (rayon, kənd) tarix və vaxt

İştirakçıların siyahısı


S.s.	Adı və soyadı	İş yeri və tutduğu vəzifə	İmza	Əlaqə nömrəsi
1.	İmranov Azad	Mülkiyyətçi		070-900-94-30
2.	Muradov Səlim	Mülkiyyətçi		051-845-39-85
3.	Zəizov İlqar	Bələdiyyə Sədri		070-677-18-84
4.	Bəyqasov Fəxrizadə	KİM-də Müvəhin		010-258-45-38
5.	Məmmədov Eldar	Mülkiyyətçi		051-772-11-46
6.	Abdulayev Balağlar	Mülkiyyətçi		051-592-43-49
7.	Abdulayev Bəyqasov	Mülkiyyətçi		050-583-25-99
8.	Məmmədov Təhran	Mülkiyyətçi		050-578-44-64
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Azərbaycan Avtomobil Yolları Dövlət Agentliyi
Regional Yollar və İnkişaf Layihəsi
Salyan-Bilasuvar yolunun seçilmiş hissələrinin bərpası
Sosial və ətraf mühitə təsirlər barədə sənədlərin ictimai müzakirəsi

Bilasuvar rayonu, Bəydili kəndi 18 fevral 2021-ci il saat 15:00
yaşayış məntəqəsi (rayon, kənd) tarix və vaxt

İştirakçıların siyahısı

S.s	Adı və soyadı	İş yeri və tutduğu vəzifə	İmza	Əlaqə nömrəsi
1.	Cəfərov Adil Vəkil	İcra nümayəndəsi	<i>[Signature]</i>	0708917132
2.	Kərimov İsmayil Səlim	Bələdiyyə sədri	<i>[Signature]</i>	0509735057
3.	Pirvəli Kərim Kərimov	Bələdiyyə müvəkkili	<i>[Signature]</i>	0513560955
4.	Mühsənov Adil Kərim	Bələdiyyə operatoru	<i>[Signature]</i>	0514171235
5.	Bəyqulov Rəşad Qurbanlı	M-ya müvəkkili	<i>[Signature]</i>	0558165050
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Bilasuvar r/n Bəydili kənd İnzibati
 Təşkilatı üzvü nümayəndəsi

 A.V. Cəfərov *[Signature]*

In addition to the group meetings listed above an individual consultation was held with Mr. Rovshan Badalov, a representative of the architectural department of the Executive Power Office of Bilasuvar Rayon.

Appendix #1.

ESF Documents issued on the official website of SAAAR on February 7, 2021

<http://www.aayda.gov.az/az/pages/287/>



The screenshot shows the official website of AAY (Azərbaycan Yol Agentliyi). The header includes the AAY logo and a quote by Heydər Əliyev: "Yol - iqtisadiyyat, mədəniyyət, bir sözlə həyat deməkdir!". Below the header is a navigation menu with options: Baş səhifə, Azərbaycan, Haqqımızda, Sənədlər, Yollar, Xəbərlər, Galereya, Fəaliyyət, Əlaçə, Zəfər yolu.

Regional Yollar və İnkişaf Layihəsi

Təsnifat

- Layihələr
- Respublika əhəmiyyətli
- Yerli əhəmiyyətli
- Avtomobil yollarının xəritəsi
- Layihələr barədə təqdimat

1. Ətraf Mühit və Sosial İdarəetmə üzrə Çərçivə Sənədi (ƏMSİÇS)
2. Köçürülmə Siyasəti üzrə Çərçivə Sənədi (KŞÇS)
3. Maraqlı Tərəflərin Cəlb Olunması Planı (MTCOP)
4. Əməyin İdarəedilməsi Prosedurları (ƏİP)
5. İkinci Ətraf Mühit və Sosial İdarəetmə Planı (ƏMSİP)

1. Preliminary Environmental and Social Management Plan (PreESMP)

2. Stakeholder Engagement Plan (SEP)

3. Resettlement Policy Framework (RPF)

4. Labor Management Procedures (LMP)

5. Environmental and Social Management Framework (ESMF)

Sənədlərlə bağlı sual və təkliflərinizi AAYDA-nın rəsmi elektron ünvanlarına göndərə bilərsiniz.

ESF Documents issued on the official website of the Executive Power Office of Salyan Rayon on February 16, 2021

<http://salyan-ih.gov.az/news/997.html>

AZƏRBAYCAN RESPUBLİKASI
SALYAN RAYON
İCRA HAKİMİYYƏTİ

Əsas sənəd | İcra Hakimiyyəti | Ünvanvericilik | Xəbərlər | Elektron xidmətlər | Əlaqə | Foto galeriya

Rayon haqqında | Xəbərlər
İcra Hakimiyyəti | Regional Yollar və İnkişaf Layihəsi
2021-02-16

AZƏRBAYCAN RESPUBLİKASI

AZƏRBAYCAN AVTOMOBİL YOLLARI DÖVLƏT AGENTLİYİ

Regional Yollar və İnkişaf Layihəsi

Ətraf Mühit və Sosial Məsələlər Cəmiyyətə Səmərəlilik (ƏMSİCS)
Köçürülmə Siyasəti Üzrə Çərçivə Sənədi (KİSÇS)

Fevral 2021

Ətraf Mühit və Sosial Məsələlər Cəmiyyətə Səmərəlilik (ƏMSİCS)
Köçürülmə Siyasəti Üzrə Çərçivə Sənədi (KİSÇS)
Ətraf Mühit və Sosial İdarəetmə Planı (ƏMSİP)
Mədəni Mənbələrin Cəmiyyətə Səmərəlilik Planı (MMSİP)
Əməyin İdarəetməsi Prosedurları (ƏİP)

← Əvvəlki

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ESF Documents issued on the official website of the Executive Power Office of Bilasuvar Rayon on February 16, 2021

<http://www.bilesuvar-ih.gov.az/news/940.html>