



REPUBLIC OF MOLDOVA
Ministry of Infrastructure and Regional Development
National Road Administration

Moldova Rural Connectivity Project (P180153)
ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN
FOR C24 CORRIDOR

ROAD SECTIONS:

Section G131: R35 – Bobocica – G132, km 0+000 – km 21+873

Section G132: R35 – Baimaclia – Taraclia de Salcie – R32, km 14+220 - km 20+350

Section G133: G132 – Tartaul – Gotestî – R34, km 0+000 – km 14+920

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ACRONYMS AND ABBREVIATIONS

CERC	-	Contingent Emergency Response Component.
ESF	-	Environmental and Social Framework
ESHS	-	Environmental, Social, Health and Safety
ESMP	-	Environmental and Social Management Plan
ESIA	-	Environmental and Social Impact Assessment
ESS	-	Environmental and Social Standard
EU	-	European Union
FS	-	Feasibility Study
GBV	-	Gender Based Violence
GN	-	Guidance Note to ESS2
GM	-	Grievance Mechanism
IBRD	-	International Bank for Reconstruction and Development
LMP	-	Labor Management Procedure
LPA	-	Local Public Administration
M&E	-	Monitoring & Evaluation
NGO	-	Non Governmental organization
NRA	-	National Road Administration
NMT	-	Non-Motorized Transport
OHS	-	Occupational Health and Safety
PAP	-	Project affected Person
PDO	-	Project Development Objective
PIU	-	Project Implementation Unit
PPE	-	Personal protective equipment
RAP	-	Resettlement Action Plan
RPF	-	Resettlement Policy Framework
SEP	-	Stakeholder Engagement Plan
WB	-	World Bank

1. INTRODUCTION

1.1. Project Context

Moldova's road network is strategically vital and is a critical component of the Solidarity Lanes intended to support Ukraine during and after war. The national road network in Moldova is 2,598 km in length. The secondary and local road network is over 7,000 km. About 80% of the transport of goods from the Republic of Moldova are transported by road. Relative to its territorial size, Moldova has a comparatively dense network of transport infrastructure. However, the Soviet-era stock of assets has suffered from underinvestment in renewal, modernization, and maintenance since transition. In 2020, 46.8% of Moldova's road network was assessed to be in poor condition. Investment gaps are clear when comparing Moldova to international peers. According to the 2019 Global Competitiveness Report, the quality of Moldova's road infrastructure is the worst in the entire Europe Central Asia (ECA) region and one of the worst in the world and was ranked 126 out of 140 countries considered. The war in Ukraine has significantly impacted Moldova's transport sector, due to the high number of refugees fleeing the war, the re-routing of freight transport as a result of the closure/destruction of specific routes on the territory of Ukraine and disruptions to Black Sea ports. Additionally, the Danube Solidarity Lane is currently used as an option for facilitating the export of Ukrainian grain aside from fully restoring Black Sea access, thus Moldova's transport network is likely to remain strategic while the war continues. Romanian and Republic of Moldova borders continue to experience significant pressure. For example, land routes to transport grain out of Ukraine operate through border crossing points in the two countries, resulting in lorry queues of up to 20 kilometers. Despite severe capacity constraints, Moldova's road Border Crossing Points have managed to increase throughput capacity throughout 2022 but will require additional investment to continue expanding support to Solidarity Lanes¹.

Project Development Objective

The Project Development Objective (PDO) is to provide climate-resilient road connectivity to selected local communities; facilitate road transit through selected border crossings with Romania and provide effective response in case of an eligible emergency.

The key performance indicators are:

- Number of people living within 30 minutes' drive of the nearest market and high school (number)
- Roads upgraded with climate resilient design (km)
- Reduced average waiting times at Moldova/Romania border crossing points (hours)

1.2. Project Components

The proposed Project's design consists of four components: (i) Component A will finance physical works needed to link local communities with public services and economic opportunities, building on the previous support to the Government's upgrade of a prioritized network of local and regional roads ; (ii) Component B will facilitate trade and expand Solidarity Lanes, by increasing capacities and modernizing the Ungheni, Leuseni and Giurgiulesti border crossing points (BCPs) and the access roads connecting them; (iii) Component C will finance interventions aimed at enhancing delivery capacity and supporting essential project management

¹ For more detailed information about solidarity lanes, please follow the link: https://eu-solidarity-ukraine.ec.europa.eu/eu-assistance-ukraine/eu-ukraine-solidarity-lanes_en

functions; and (iv) Component D will provide a standby Contingent Emergency Response capability should the need arise. Specific details for each component are provided below.

Component A: Linking local communities with economic opportunities

A.1: Upgrading local road links (IBRD US\$ 69.49 million; US\$ IDA 5.98 million): This subcomponent will finance the rehabilitation and upgrading of approximately 100 km of three priority local roads, to improve connectivity to markets, schools, health and other social and economic centers, and enhance climate resilience. An important part of the subcomponent is road safety works in the proximity of schools and on road sections within communities. All roads financed by the project will be maintained under maintenance contracts to ensure that investments made are sustained over time.

A.2: Community inclusion & accessibility: This subcomponent will finance: (i) interventions complementary to the road works in (A.1) including those requested by communities along the roads; and (ii) Non-Motorized Transport (NMT) infrastructure along and adjacent to Project Roads².

A.3: Safer roads for Moldova: This subcomponent will provide funding for two main purposes: (i) Remediation of road safety "black spots" at up to 6 priority locations. The aim is to pilot remediation of known risks of road safety "blackspots" as per best international practices tailored to the specific conditions. (ii) Road safety educational and informational campaigns. These campaigns will aim to raise awareness and educate the public about road safety measures and practices. The campaigns will be designed to target specific audiences and address key road safety issues relevant to the Moldovan context.

Component B: Facilitating trade and expanding Solidarity Lanes

The aim of this subcomponent is to enhance capacity and improve the functionality of the Border Crossing Points (BCPs) between Republic of Moldova and Romania. The works include a range of interventions at both the infrastructure level of the BCPs, coupled with equipment acquisition needed to enhance their functionality. These interventions are designed to increase the capacity, interoperability, and efficiency of the border crossing services in accordance with the existing regulations. Investments made under this Component will be matched by an EU grant facility - Connecting Europe Facility (CEF).

Investments on the Moldova side of the border will be complemented by simultaneous modernization investments on the Romania side. These investments on the Romania side will be implemented by the Romanian Government and co-financed by the CEF. Preparation/implementation on the Romanian side has advanced. A High-level working group and technical group between Moldova and Romanian Government have been set-up to coordinate the respective investments. The High-level working group consists of senior officials from both countries who are responsible for overseeing and guiding the overall progress of the modernization project. The technical group, on the other hand, comprises experts and specialists who work together to address technical aspects and ensure the smooth implementation of the investments.

B.1: Road access and modernization of Leuseni/Albita BCP: This subcomponent will finance the upgrade of the BCP at Leuseni and expansion of the access road to the BCP.

² The approach to consider community requested works will be linked to the Project's citizen engagement activities and Stakeholder Engagement Plan. Examples of community requested works could include: Additional sidewalks and others as will be indicated in the Project Operation Manual

B.1.1 Modernization and upgrade of BCP at Leuseni: The BCP upgrade will be carried out in two stages to ensure adequate capacity, optimized traffic flow and custom processing are maintained: Stage 1 - full refurbishment of the existing freight entry facility and the passenger car exit facility that require urgent improvement; Stage 2 – construction of a new freight exit facility. The procurement of fixed and mobile customs equipment is included in this sub-component. The subcomponent also finances related consultancy services for feasibility studies, supervision and monitoring services.

B.1.2 Access Road to Leuseni BCP: The works involve upgrading the 1 km access road to the Leuseni BCP. The current 2-lane road will be expanded to 4 lanes, aligning it with the standards of a similar access road on the Romanian side. This upgrade is also in line with Romania's plan to replace the existing bridge over the Prut River at the Moldova/Romania border with a 4-lane standard bridge. The access road connects the BCP to the national road M1 (Leuşeni – Chisinau – Dubasari - MD/UA boarder). The subcomponent also finances related consultancy services for feasibility studies, supervision and monitoring services.

B.2. Solidarity Lane customs facilitation & BCP upgrades (Giurgiulesti): This subcomponent will encompass the following activities: (i) traffic organization and implementation of an electronic queuing system at the Moldovan side of Giurgiulesti BCP. This will help streamline and improve the efficiency of border crossing procedures, reducing waiting times and congestion. Traffic congestion often leads to idling vehicles, which consume fuel inefficiently and produce more emissions. By reducing congestion and allowing smoother traffic flow, vehicles can operate more efficiently, consuming less fuel and emitting fewer greenhouse gases. (ii) Expansion of the capacity of the existing parking/waiting facility in Giurgiulesti area, along with the provision of basic services such as toilets and water supply points for truckers. This will enhance the facilities available to truck drivers, ensuring their comfort and convenience during waiting periods. (iii) Procurement and installation of scanning equipment and software at the BCP facility. This will enable efficient and effective scanning of goods and vehicles passing through the border, enhancing security measures and facilitating smoother border control processes. (iv) Supervision services are also included under this subcomponent, to ensure proper oversight and monitoring of the implementation of the activities.

B.3. Construction and Road access to BCPs (Ungheni): A new road BCP will be developed at Ungheni with modern customs processing, weighing facilities and truck terminal. The BCP will be connected through a 0.5 km access to the national road network, for which feasibility study is already available³. The subcomponent also finances related consultancy services for feasibility studies, supervision and monitoring services.

Component C: Building sustainability, delivery capacity and project management support (IBRD US\$ 4.5 million)

C.1. Project audit and supervision (US\$2.00 million): This subcomponent will finance: (i) annual project audits; and (ii) Monitoring consultants for the OPBRC contracts as well as Supervision Engineers for overseeing all civil works under Component A.1.

C.2: Output and Performance Based Roads Contracting (OPBRC) system; and Road Asset Management System (RAMS) (US\$1.00 million): This subcomponent will finance consultancy services to support the development and implementation of OPBRC on a selected road under Component A.1. Specific activities to be financed include: (i) An assessment of political, legal, regulatory, and institutional constraints to adopting

³ Simultaneously, Romania will construct a bridge across the Prut River with a new BCP and 0.5 km access road of the same standard as the Moldovan side access road to the BCP.

OPBRC in the road sector. This assessment will help identify any barriers or challenges that need to be addressed. Based on the assessment, a strategy and implementation plan will be developed to guide the adoption of OPBRC. (ii) Providing technical assistance to develop appropriate legal instruments, such as a draft bill and regulations, that are necessary for the implementation of OPBRC. It will also involve preparing or adopting standard OPBRC bidding documents, training, and institutional capacity building activities to ensure that relevant stakeholders are equipped with the necessary knowledge and skills to implement OPBRC effectively. Hands-on support will also be provided to the Government of Moldova (GoM) during the launch of OPBRC pilot contracts, which may be financed under the Project or other sources. The subcomponent also supports the full operationalization of the Road Asset Management System (RAMS), which includes technical assistance: (i) to complete the missing functionalities/modules in both the federal and regional versions of the current RAMS, (ii) to rolling out the RAMS to all rayons, (iii) training and capacity building of NRA and rayons in the full operationalization of the RAMS. The RAMS will include climate resilience and road safety parameters and shall be interlinked with other state digital systems such as the one for meteorological data. This will enhance climate resilience through evidence-based understanding of vulnerabilities of the road network which leads to risk-based climate-informed road maintenance planning and prioritization.

C.3. Design and implement a female internship program (US\$0.20 million). This Sub-component will help promote women’s employment in the transport sector, where they are underrepresented. The project will design and implement a female internship program will finance activities related to (i) setting up a collaboration (Memorandum of Understanding) between the line ministry and the Technical University of Moldova, (ii) designing the internship program (orientation, interns’ tasks, expected outcomes, and end of the program evaluation), and (iii) providing onboarding training to 25 female interns with opportunity of full-time employment upon graduation.

C.4. Incremental operating costs, project management, staff development (US\$1.30 million): This subcomponent will include: (i) consultancy support to each PIU and (ii) incremental operating costs for each PIU; and (iii) consultancy support for enabling NRA’s transition to a corporatized entity that operates under commercial principles (iv) the cost of female student’s internship program in the transport sector.

Component D: Contingent emergency response (US\$ 0 million):

Given the inherent uncertainty created by the ongoing war in Ukraine, this zero-dollar component is designed to provide swift response in the event of an emerging crisis or emergency. The Government of Moldova would be able to request the World Bank to reallocate Project funds to address an eligible crisis or emergency needs that may materialize. The activities financed by the CERC will be demand- and event-driven and will be detailed in a GoM Action Plan of Activities, which together with an official declaration of a specific emergency by the GOM represent the two obligatory conditions for triggering the component. The definition of an eligible emergency and a positive list of activities will be included in the project’s legal documents, and the mechanics of the decision-making process and implementation of the will be reflected in the CERC Operational Manual, part of the overall POM

1.3 Scope of ESMP

The purpose of the Environmental and Social Management Plan (ESMP) is to ensure integrated management of environmental and social impacts in accordance with national legislation and the World Bank’s Environmental and Social Framework (ESF) and applicable Environmental and Social Standards (ESSs) during the preparation, construction and operation stages. In addition, this document includes the Environmental and

Social Monitoring Plan for the construction phase and for the road operation phase. The ESMP monitoring section describes the monitoring activities, including the parameters to be measured, the methods to be applied, the location, the frequency of measurements, and the detailed monitoring and reporting procedures.

The Environmental and Social Management Plan (ESMP) contains measures and plans to reduce, mitigate and/or offset adverse risks and impacts, the costs of such measures, and information on the agency or agencies responsible for addressing project risks and impacts, in line with the Environment and Social Standard (ESS) 1 “Assessment and Management of Environmental and Social Risks and Impacts” as well as other applicable ESSes of the World Bank’s Environment and Social Framework (ESF).

The ESMP will be integrated into the preparation and implementation stages of C24 road project. It must be complied through the entire project cycle from design, implementation, and operation/maintenance, to attain the above outlined purpose and objectives.

The required mitigation measures and issues to be addressed through ESMP instruments for the project activities are standard and widely used in construction practices. These include proper waste management and disposal of construction debris (including asbestos), proper wastewater treatment; heating and fuel system assembly, dust and noise control, sensitivity of designs to cultural settings, and cultural heritage/chance finds procedures, traffic safety, community health and safety issues.

In practice, these issues will be addressed through a series of local permits, through contractor site supervisor oversight, through the local authorities’ requirements, and through the project implementation unit responsible for the construction.

The site-specific ESMP is prepared, publicly consulted and disclosed locally for already selected site before starting the procurement of the construction works for road rehabilitation. ESMP requirements will be included in the bidding and contract documents as integral part of both construction execution and technical supervision phases.

The construction organization, which will carry out construction work on Corridor 24, will use this ESMP to calculate the cost of services, implement measures to mitigate environmental and social impacts, and implement environmental and social management procedures during construction, as provided by the World Bank's environmental and social standards. To properly fulfil all obligations regarding environmental and social management under its contract, the Contractor will need to establish its own environmental and social management system.

This system will be described in the Contractor's Environmental and Social Management Plan (CESMP), which must be developed by the Contractor based on this ESMP. The CESMP describes the proposed implementation mechanisms and measures to mitigate impacts on the environment and social surroundings. The CESMP must be developed by the Contractor and approved by the NRA/Supervising Engineer before the commencement of construction work. The person responsible for environmental and social management on the part of the Contractor will coordinate and manage the implementation of the CESMP.

The ESMP is a ‘living document’ enabling revision, when and where necessary. Any unexpected situations and/or relevant changes in the design of C24 road project would be assessed and appropriate management measures would be incorporated by updating the ESMP. Revisions will be approved by the World Bank.

1.3. Project Environmental and Social Assessment

The project will not finance construction of new roads or their major upgrading - the proposed activities are essentially road rehabilitation and maintenance within the “Right of Way” (ROW) areas. Minor adjustments to road-related infrastructure may, however, will be required in specific locations—for example, improved access to road curves, construction or enhancement of drainage channels, or installation of road safety measures. In such cases, small additional land parcels will need to be acquired to ensure proper technical solutions and long-term functionality. The land requirements along the project corridor indicates that permanent acquisition of additional land plots—both public and private—will be necessary to ensure safe and compliant road operation. As shown in Table 1, several sections between chainages Pc 17+20 and Pc 120+00 require extra land to allow for geometric improvements such as increasing the radius of unsafe curves, widening the platform, and adjusting the longitudinal and transverse profiles. Additional land is also needed for the construction of new bus stops, the installation and extension of culverts, and the creation of adequate side ditches and stormwater drainage channels, all of which are essential for improving road safety and climate resilience. The total areas required amount to 2.3459 ha of public land and 0.0803 ha of private land, with an additional 0.7952 ha of public land and 2.9989 ha of private land anticipated under future development solutions. These acquisitions are limited in extent but are critical to achieving the project’s objectives of improving traffic safety, ensuring proper water management, and enhancing the overall functionality of the road.

Thus, expected environmental impacts related to air and water pollution, solid and hazardous wastes, labor security etc., are expected to be low to moderate, site specific and mostly temporarily. The impact on natural vegetation associated with operating the quarry and borrow areas, and constructing detour and access road to the borrow material pits and quarry sites, will not be applicable here – as there will be used the existing borrow/quarry sites. The stakeholder involvements will be ensured to avoid conflicts with local population and also to promote H&S on the roads and construction sites. Also, to avoid other social issues.

This is in conformity with national procedural requirements, according to which, as part of the detailed design documentation, an environmental compartment must also be prepared.

Under current legislation, environmental assessment for this type of roads project does not require full detailed impact assessment studies, a preliminary assessment by Environmental Agency may be requested. In general, the proposed interventions for implementing sub-projects under component A of MRCP Project will be limited to the rehabilitation and maintenance of existing rural roads. There will be no deviations from existing alignments, with all proposed interventions being planned to the limit of the existing road area. Through villages, however, it may be necessary to relocate the fences that are located on the road infrastructure. The impact on the environment due to the interventions will in fact be limited and can easily be kept under control due to the implementation of appropriate actions to solve environmental and social problems (addressing air and water pollution problems, managing construction waste and hazardous materials, protecting the existing vegetation at the edge of the road, solving safety issues on construction site, organizing transport circulation for construction materials, etc.).

Overall, environmental hazards related to proposed rehabilitation measures are expected to be of a small to moderate degree, mostly having a local and temporary aspect, depending on the site.

The C24 Project risk on environmental & social aspects are considerate moderate.

Although the EIA Law does not mention an ESMP by name, there are no big discrepancies between the national EA requirements and WB ESF and Environmental and Social Standards (ESSs) with regard to preparation of such document as main parts of the ESMP should be prepared and included in the project documents (mitigation and monitoring activities, along with the necessary financing).

It is important to mention that Article 37 of the Constitution of the Republic of Moldova guarantees the right to a healthy environment. The current legislation contains a series of regulations governing water supply and sewerage services.

The most relevant national legal requirements for this project relate to the following aspects:

- Environmental impact assessment and environmental protection
- Access to information and public participation;
- Social, health and safety legislation and regulation;
- Land acquisition; and
- Permission (permits) for construction.

The basic legal framework for the development of specific legislation and instructions in the field of environmental protection is provided in the Law No. 1515 of 16.06.1993 on environmental protection.

Law No. 86 (2014) on Environmental Impact Assessments EIA transposes Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment. The objective of this law is to define the procedures and methods to be applied in the environmental impact assessment process on certain types of public and private planned activities, that may have a significant impact on the environment in the Republic of Moldova or in other states.

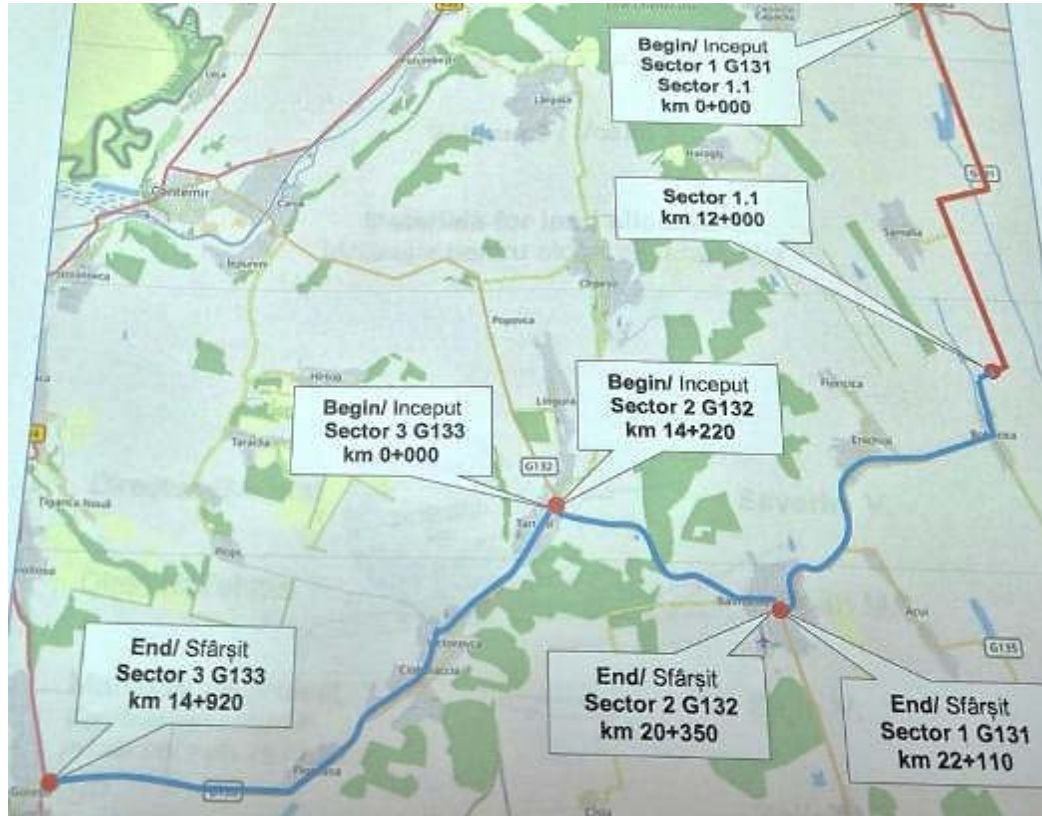
Revisions to this Law in 2022 came into force in November 2023. These mainly address changes and restrictions to cover all the parts of the economy, ensuring that biodiversity is protected. In addition, this Law comes in effect, and the Law of ecological expertise is abrogated.

This ESMP was prepared based on conducted Detailed Design of the project to rehabilitate the C24 and aims to:

- Comply with all the environmental requirements of the Government of Moldova as well as to the Law on Environmental Impact Assessment of 2014;
- Achieve sustainable and environmentally and socially acceptable development interventions for road development and rehabilitation;
- Inform the NRA and the contractors on environmental management strategies and activities while implementing the project;
- Guide Contractor in preparing its own Contractor ESMP.

In order to achieve the above objectives, the following action has been taken in formulating the ESMP.

- Outlining measures to be adopted in project planning and design to avoid or minimize adverse impacts on the environment and affected communities;
- Conducting a baseline analysis and identifying potential environmental and social impacts;
- Formulating specific mitigation measures to avoid or minimize the adverse impacts of preconstruction, construction, and operation and maintenance phases of the road development;
- Preparing a plan to monitor the implementation of the mitigation measures and their effectiveness in combating the adverse impacts;
- Providing guidance to Contractor on management and monitoring environmental and social risks and impacts;
- Establishing an institutional mechanism for ESMP implementation, monitoring, and reporting.



Corridor 24 has a total length of 43.14 km, on certain sectors the length of the carriageway is made of asphalt concrete. According to the investigations, the road sectors part of Corridor no. 24 has the average width of the carriageway of 6.65 m and vary from 5.0 m to 8.20 m. Each sector as follows:

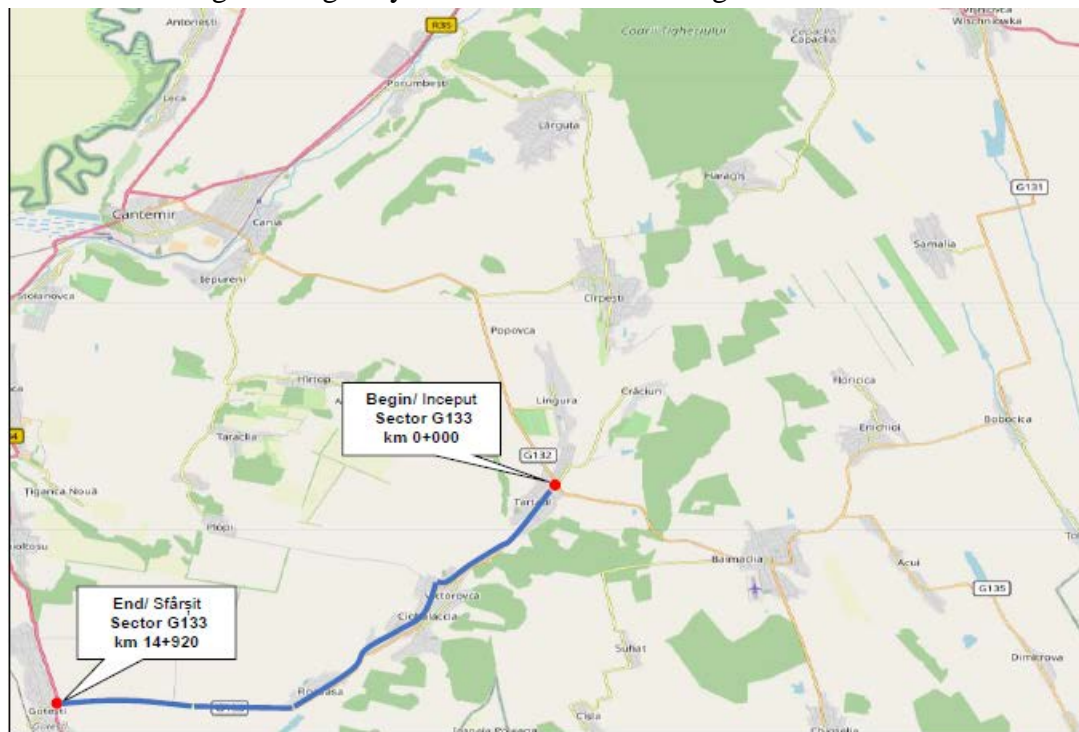
- The G131 has an average carriageway width of 6.50m and ranges from 5.00m to 7.00m.



- The G132 has an average carriageway width of 6.70m and ranges from 5.70m to 7.80m.



- The G133 has an average carriageway width of 6.65m and ranges from 5.90m to 8.20m.



The existing road system consists of a smooth road system, consisting of base layers of crushed stone or a mixture of crushed stone ballast with an average thickness of 18 cm and varying from 8 cm to 43 cm, and covered with bituminous layers with average thickness of 9.4 cm, which varies from 3 cm to 18 cm. It should be noted that during the entire period of operation of the road sectors, maintenance works were carried out, which were only intended to maintain the technical condition of the road, and the degraded sectors (with tiling, subsidence) underwent only local repairs. Out of the total of 43.14 km that the given corridor has, 16.300 km have the running surface of asphalt concrete, the rest of the sectors have the running surface of broken stone. Of those with an asphalt concrete surface in the year 2018 - 2021 within the "Good Roads" program, i.e. after the execution of the project, asphaltting works were carried out over the

broken stone running surface or works to replace the old upper layers or their bedding even on the existing one, namely the sectors:

- G131 Km 20+850 – 21+400, Baimaclia village, (asphalting works over the broken stone surface);
- G132 Km 19+350 – 20+320, Baimaclia village, (replacement of bituminous layers);
- G133 Km 0+250 – 1+600, Tartaul village, (replacement of bituminous layers);
- G133 Km 4+900 – 6+150, s. Ciobalaccia, (replacement of bituminous layers).

Of those with a broken stone tread, stone material was added to the sectors:

- G131 Km 1+350 – 2+400;
- G131 Km 17+600 – 18+500;
- G131 Km 3+200 – 3+950;
- G133 Km 9+350 – 9+900;
- G131 Km 8+100 – 8+650;
- G133 Km 9+900 – 14+924;
- G131 Km 15+000 – 16+600;

The existing road is in an unsatisfactory technical condition, a fact ascertained by the existing parameters of the geometric elements and the running surface, both on the road sectors outside the towns and on the road sectors within their limits, which do not correspond to the design norms in force, and, which is confirmed by the linear diagrams of accidents and road safety.

2. LEGAL, REGULATORY AND INSTITUTIONAL FRAMEWORK

2.1. Environmental Legislation

Republic of Moldova Legislation and regulations pertaining to the environment and its protection have been analyzed herein to ascertain the country requirement for environmental assessment and approval of development projects, in general, and road development projects, in particular. Although the national requirement for environmental assessment of projects is provided mainly by the Law on Environment Impact Assessment of 2014, other laws and codes that could have a bearing on and facilitate environmental protection and road development are also discussed below and summarized in Table 1 below.

Republic of Moldova Legislation represents a large framework of legislative, normative, and organic acts. Often, these acts are incomplete or incorrectly harmonized and sometimes this leads to legislative deficiency. A series of international acts and conventions to which Moldova is a signatory are not applied in practice neither at a ministerial nor at local level.

General environmental legislation related to roads

Name of Act	Last Amended	Description
Law No. 1515/1993 on environmental protection	11 Jan. 2023	The basic legal framework for the development of special regulatory acts and instructions of special issues, covering the field of environmental protection.
Law no. 86/2014 on environmental impact assessment	05 Sept. 2022 ⁴	Partially transposes Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment.
Law No. 98/2022 on atmospheric air quality	08 June 2023	This strengthens the institutional capacities for monitoring and assessing atmospheric air quality; to identify and implement effective measures to reduce air pollutant emissions to levels that minimise the harmful effects on human health and the environment. This partially transposes Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe.
Law No. 227/2022 on industrial emissions	In force with effect from 21 Oct. 2024	The establishment of the regulatory framework regarding the prevention of pollution caused by industrial and economic activities, in order to reduce emissions to air, water and soil, including the generation of waste, as well as environmental control, the promotion and application of the best available techniques to achieve a high level of environmental protection. Partially transposes Directive 2010/75/EU of the European Parliament and of the Council of 24/11/2010 on industrial emissions.

⁴ On 21st October 2023 the changes approved in Law 226/2022 will enter into force in order to harmonize with Directive 2011/92/EU of the European Parliament and of the Council of 13th December 2011 on the assessment of the effects of certain public and private projects on the environment and the provisions of art. 6 para. (3) and (4) of Council Directive 92/43/EEC of 21st May 1992 on the conservation of natural habitats and of wild fauna and flora.

Name of Act	Last Amended	Description
Law No. 78/2017 for the ratification of the Paris Agreement	-	This agreement, contributing to the implementation of the convention, including its objective, aims to strengthen the global response to the threat posed by climate change, in the context of sustainable development and efforts to eradicate poverty.
Government Decision no. 1470/ 2016 regarding the approval of the Low Emission Development Strategy of the Republic of Moldova until 2030 and the Action Plan for its implementation	18 Dec. 2021	To ensure the implementation of the provisions of the United Nations Framework Convention on Climate Change, of the mechanisms and provisions of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, to which the Republic of Moldova acceded through Law no. 29/2003, with subsequent amendments, as well as the Association Agreement between the Republic of Moldova, on the one hand, and the European Union and the European Atomic Energy Community and their member states.
Law No. 272/2011 on Water	22 Oct. 2022	Creation of a regulatory framework for the monitoring, assessment, management, protection and efficient use of surface water and underground water. The law is partially harmonised with directives no. 91/271/EEC, no. 91/676 EEC, no. 2000/60/EC, no. 2006/7/EC, no. 2007/60/EC and no. 2008/105/EC.
Law No. 1536/1998 on hydrometeorological activity	31 Jan. 2022	Regulates the hydrometeorological activity in the territory of the Republic of Moldova. It aims to provide hydrometeorological information concerning the needs of the population, economy and national defence, as well as of the public authorities.
Law No. 1102/1997 on natural resources	05 Sept. 2022	Regulates the relations in the field of use, protection and reproduction of the natural resources, in order to ensure the ecological security and sustainable development of the country.
Forest Code no. 69/2024	-	Regulates the sustainable management of the forest fund through rational use, regeneration, guarding and protection of forests, maintaining, preserving and improving forest biological diversity, ensuring with forest resources the current and future needs of society based on their multi-functionality.
Law No. 239/2007 on vegetal kingdom	11 Jan. 2023	Establishes the legal framework in the field of conservation, protection, restoration and use of objects of the plant kingdom, as well as the competences of public authorities at all levels and of scientific institutions in the field.
Law No. 1538/1998 on the fund of natural areas protected by the state	01 July 2022	Establishes the legal bases for the creation and operation of the funding for natural areas protected by the state; principles, mechanism and method of conservation thereof; as well as the attributions of central and local public authorities, non-governmental organisations and citizens in this field.
Law no. 591/1999 on green spaces in urban and rural communities	04 June 2023	Regulates relations in the field of development and protection of green spaces of urban and rural localities in order to ensure the right of every person to a healthy and aesthetically pleasing environment.

Name of Act	Last Amended	Description
Law no. 439/1995 on the animal kingdom	24 Mar. 2023	Regulates relations in the field of protection and use of wild animals, which live naturally on land, in water, in the atmosphere or in the soil, permanently or temporarily populating the territory of the republic.
Law no. 325/2005 on the Red Book of the Republic of Moldova	25 Apr. 2022	Restoration of extinct, critically endangered, endangered, vulnerable, rare and undetermined species of plants and animals, included in the Red Book of the Republic of Moldova, in order to prevent their disappearance and ensure the conservation of their genetic background, establishes the legal bases for keeping the Red Book, the attributions of public authorities at all levels and of scientific institutions in the field.
Law No. 209/2016 on waste	07 June 2023	It establishes the legal basis, the state policy and the necessary measures for the protection of the environment and the health of the population by preventing or reducing the adverse effects determined by the generation and management of waste and by reducing the general effects of the use of resources and increasing the efficiency of their use.
Law No. 10/2009 on state surveillance of public health	02 July 2023	Regulates the organisation of the state surveillance of public health, establishing general public health requirements, rights and obligations of natural and legal persons and way of organisation of the state surveillance system of public health.
Law no. 91/ 2007 on delimitation of public property	26 Dec. 2022	Consolidates the legal framework in order to delimit public property, ensure the right of ownership and the efficient use of the public property of the state, of the public property of the administrative-territorial units of the first and second level

2.2 Biodiversity Legislation

- Forest Code no. 28-03-2024 (into force since 26.04.2025)
- Law no. 1515/1993 on environment protection
- Law on the animal kingdom no. 439/1995
- Law no. 1102/1997 on natural resources
- Law no. 1538/1998 on the funding of state protected natural areas
- Law no. 591/1999 on green spaces in urban and rural communities
- Law no. 325/2005 on the Red Book of the Republic of Moldova
- Law on vegetal kingdom no. 239/2007
- Law no. 94/2007 on the ecological network
- Law no.29/ 2018 on land public property delimitation .

The main strategic documents on biological diversity are:

1. Environmental Strategy for 2014-2023 and the Action Plan to enforce it, approved by the Decree of the Government no. 301/2014;
2. National Forest Extension and Rehabilitation Programme for the period 2023-2032 and the Action Plan for its implementation for the period 2023-2027, approved by GD no. 55/2023;

3. National Strategy for Agricultural and Rural Development for the years 2023-2030, approved by GD no. 56/2023; and
4. Strategy for the sustainable development of the forestry in the Republic of Moldova, approved by the Decision of the Parliament no.350/2001.

In addition to the general environmental legislation, the Republic of Moldova has established a comprehensive legal and policy framework addressing **climate change mitigation and adaptation**, aligned with the Paris Agreement and national development priorities.

1. **National Climate Change Adaptation Strategy of the Republic of Moldova until 2030** – Establishes the national framework for adaptation to climate change impacts across key sectors, including transport and infrastructure.
2. **National Climate Change Adaptation Action Plan** – Defines concrete adaptation measures, responsibilities, timelines, and financing mechanisms.
3. **Nationally Determined Contribution (NDC) of the Republic of Moldova under the Paris Agreement** – Sets national targets for greenhouse gas emission reduction and adaptation priorities.
4. **National Greenhouse Gas Emissions Inventory System Regulation** – Establishes institutional arrangements for monitoring, reporting, and verification (MRV) of GHG emissions.
5. **Law No. 43/2023 on Fluorinated Greenhouse Gases** – Regulates the use, control, and reduction of fluorinated gases with high global warming potential.
6. **Law No. 178/2023 on the Ratification of the Kigali Amendment to the Montreal Protocol** – Supports the phasedown of hydrofluorocarbons (HFCs) contributing to climate change.
7. **National Strategy on Environment and Climate Change Integration in Sectoral Policies** – Promotes mainstreaming climate change considerations into transport, energy, water, and land-use planning.
8. **National Energy and Climate Plan (NECP) (where applicable / in draft or implementation phase)** – Provides an integrated approach to climate mitigation, energy efficiency, and resilience.

The key national legislation in the Republic of Moldova that governs occupational health and safety (OHS), labor rights, and social protections applicable to infrastructure and construction projects. Compliance with these laws is essential for ensuring legal conformity, safeguarding the wellbeing of workers, and promoting inclusive and sustainable development.

2.3 Occupational Health and Safety (OHS) Legislation

Legislation Title	Reference	Area of Coverage
Labour Code of the Republic of Moldova	Law No. 154/2003	General legal framework for labor, including health and safety rights, obligations, and inspections.
Law on Occupational Safety and Health	Law No. 186/2008	Defines responsibilities for preventing occupational risks and ensuring safe working conditions.
GD on temporary or mobile construction sites	GD No. 95/2009	Sets minimum OHS standards for construction sites, transposing Directive 92/57/EEC.
General construction safety rules	GD No. 1330/2008	Rules for occupational safety and health specific to construction activities.
Labour Inspectorate regulation	GD No. 98/2012	Regulates the organization and OHS enforcement by the State Labour Inspectorate.
PPE technical requirements	GD No. 508/2017	Technical standards and obligations for use of personal protective equipment.

Medical checks for occupational risks	GD No. 1088/2010	Requires medical exams for workers exposed to specific workplace hazards.
Minimum workplace safety conditions	GD No. 1091/2013	General workplace safety obligations, aligned with EU Directive 89/391/EEC.
Anti-discrimination in employment	Law No. 121/2012	Ensures equality and prohibits unsafe or discriminatory conditions at work.
OHS standards in construction	CP A.09.04:2014	Technical code for occupational safety during construction works.

2.4 Social Legislation

Legislation Title	Reference	Area of Coverage
Temporary work incapacity and benefits	Law No. 289/2004	Regulates social support during work incapacity, maternity, and sick leave.
Public social insurance system	Law No. 489/1999	Covers state contributions for social benefits, pensions, and insurance.
Public pension system	Law No. 156/1998	Regulates access to retirement pensions.
Child protection	Law No. 140/2016	Provides special protection for children at risk or separated from families.
Labour migration	Law No. 241/2022	Regulates employment of migrant and foreign workers in Moldova.
Social inclusion of persons with disabilities	Law No. 60/2012	Ensures equal access and protection for people with disabilities.
Ensuring equality	Law No. 121/2012	Prohibits discrimination in employment and public life.
Equal opportunities for women and men	Law No. 5/2006	Promotes gender equality in employment and social life.
Education and retraining of unemployed	Law No. 273/1994	Facilitates vocational training for reintegration into the labor market.

1.4 WB standards and international legislation

The World Bank's Environmental and Social Framework (ESF) includes the Sustainable Development Concept, which reflects the Bank's commitment to achieving environmental and social sustainability, and implies the compliance of investment projects financed by the Bank with the ten World Bank Environmental and Social Standards (ESSs): ESS1 - ESS10.

The ESSs are designed to help the Borrower/Project Implementing Agencies and their PIU to manage the risks and impacts of a project, and improve their environmental and social performance, through a risk and outcomes-based approach. The desired outcomes for the project are described in the objectives of each ESS, followed by specific requirements to help Borrowers achieve these objectives through means that are appropriate to the nature and scale of the project and proportionate to the level of environmental and social risks and impacts.

The relevance of each of the standards was verified in relation to the MRCP project and its subprojects during scoping and further analysis of environmental and social impacts.

The standards relevance at this stage of the Project are discussed below.

It is important to note that WB ESF requirements apply regardless of national EIA exemption.

Out of ten ESS, seven⁵ apply to the **Moldova Rural Connectivity Project** and establish the conditions that the Borrower and the project will meet throughout the project life cycle.

ESS 1 - Assessment and Management of Environmental and Social Risks and Impacts

ESS1 sets out the Client's 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).

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, with a particular attention to those that may fall disproportionately on disadvantaged and/or vulnerable social groups; 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.

Within ESS1, the Borrower is obliged to:

- Conduct an E&S assessment of the propose subproject, including stakeholder engagement,
- Based on the E&S assessment, prepare site-specific ESMPs for each subproject financed under the MRCP.
- Undertake stakeholder engagement and disclose appropriate information in accordance with ESS10,
- Develop an Environmental and Social Commitment Plan (ESCP) and implement all measures and actions set out in the legal agreement including the ESCP,
- Conduct monitoring and reporting on the environmental and social performance of the project against the ESSs.

According to ESS1 the Client will manage environmental and social risks and impacts of the project throughout the project life cycle in a systematic manner, proportionate to the nature and scale of the project and the potential risks and impacts.

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. The ESS2 promotes basic principles and rights in the field of work, as well as issues related to child and forced labour, freedom of association and collective bargaining. The ESS2 also promotes safety and health at work and requires that all works should be carried out with observation of construction safety measures.

⁵ ESS1-ESS6, ESS10

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. All parties involved in this subproject implementation (PIUs, subproject implementing entities, contractors) are expected to follow ESS2 requirements.

ESS2 applies to **project workers** including fulltime, part-time, temporary, seasonal and migrant workers. The term “project worker” is related to:

- a) people employed or engaged directly by the Borrower (including the project proponent and the project implementing agencies) to work specifically in relation to the project (direct workers);
- b) people employed or engaged through third parties to perform work related to core functions of the project, regardless of location (contracted workers);
- c) people employed or engaged by the Borrower’s primary suppliers (primary supply workers); and
- d) people employed or engaged in providing community labor (community workers).

ESS2 objectives are:

- To promote safety and health at work.
- To promote 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.
- 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.

The Borrower developed and will implement written labor management procedures (LMP) 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 (contracted workers) to manage in accordance with ESS2. In addition, a Grievance Redress Mechanism for workers will be developed.

ESS 3 – Recourse and 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.

ESS3 objectives are:

- To promote the sustainable use of resources, including energy, water and raw material.
- To avoid or minimize adverse impact on human health and the environment by avoiding or minimizing pollution from project activities.
- To avoid or minimize project-related emissions of short and long-lived climate pollutants.
- To avoid or minimize generation of hazardous and non-hazardous waste.

- To minimize and manage the risks and impacts associated with pesticide use.

Besides, 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 World Bank Group Environmental, Health and Safety Guidelines⁶, 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. Pollution prevention and management includes management of:

- Air pollution
- Hazardous and non-hazardous waste
- Chemicals and hazardous material
- Pesticides

The Assessment of risks and impacts and proposed mitigation measures related to relevant requirements of ESS3, including raw materials, water use, air pollution, hazardous materials, and hazardous waste are included within scope of the Preliminary E&S assessment, and ESMPs as relevant.

ESS 4 – Community Health and Safety

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 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable.

Objectives of ESS4 are the following:

- To anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and non-routine circumstances.
- To promote quality and safety, and considerations relating to climate change, in the design and construction of infrastructure, including dams.
- To avoid or minimize community exposure to project-related traffic and road safety risks, dis-eases and hazardous materials.
- To have in place effective measures to address emergency events.
- To ensure that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities.

ESS 5 – Land Acquisition, Restriction on Land Use and Involuntary Resettlement

ESS5 requirements cover the preparation and implementation of a resettlement framework or plan which will set ground for:

- ⇒ general requirements such as eligibility classification, project design, compensation and benefits for affected persons, community engagement, grievance mechanism, planning and implementation;

⁶ World Bank Group Environmental, Health and Safety Guidelines (EHSG), available at: https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/EHS-Guidelines/

- ⇒ physical and economic displacement;
- ⇒ collaboration with other responsible agencies or subnational jurisdictions; and
- ⇒ technical and financial assistance.

The RPF is developed for dealing with possible resettlement issues. The document takes into account the needs of project-affected persons and is drafted in accordance with the Environmental and Social Framework (ESF) and its social and environmental standards of IBRD (ESS5)⁷ and the Moldova legislation.

The RPF objective is to identify strategies, principles, institutional mechanisms, legislative framework and procedures for resettlement or acquisition of assets under the Project implementation, as well as to set forth the framework for the preparation of Resettlement Action Plans, should any be required in the course of the Project implementation.

The RPF applies to the private landowners, whose lands, rights, or resources will be permanently or temporarily affected by compulsory actions by the Government of Republic of Moldova due to land acquisition required for Project / sub-projects. It also applies to people who lease private or state-owned lands or those who have no registered or legal rights over the land they use, and who will be adversely affected as a result of the Project/ sub-projects. However, the RPF does not apply to state land that is transferred from one Moldova authority to another, or used temporarily during construction works, unless third parties are adversely affected by the transfer or use.

The RPF was prepared jointly by National Road Administration of Moldova (NRA) and by Custom Service of Moldova (MCS). This document is applicable for all sub-projects included in the Project.

The final RPF version, upon IBRD approval, will be published on the official websites of the NRA and MCS and in official information resources (if any) of the respective state rayon administrations on whose territories the Project will be implemented.

This RPF expresses the commitment of Project implementation entities to avoid adverse involuntary Land Acquisition impacts, where possible, and to mitigate and manage them to ensure that Project Affected Persons (PAPs) are able to maintain, restore or improve their livelihoods at the end of the Project.

ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

This standard is applicable to all projects that potentially affect biodiversity or habitats, either positively or negatively, directly or indirectly, or that depend upon biodiversity for their success.

The objectives of ESS6 is to:

- ⇒ protect and conserve biodiversity and habitats;
- ⇒ apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity;
- ⇒ promote the sustainable management of living natural resources; and
- ⇒ support livelihoods of local communities through the adoption of practices that integrate conservation needs and development priorities.
- ⇒ avoid or minimize generation of hazardous and non-hazardous waste

The applicability of ESS6 depends on the environmental and social assessment described in ESS1. The Borrower is obliged to avoid adverse impacts on bio-diversity and habitats. When avoidance of adverse impacts is not possible, the Borrower will implement measures to minimize adverse impacts and restore

⁷ <http://pubdocs.worldbank.org/en/796881511809516397/ESS5-FactSheet-WB-ESF.pdf>

biodiversity in accordance with the mitigation hierarchy provided in ESS1 and with the requirements of this ESS. Where significant risks and adverse impacts on biodiversity have been identified, the Borrower will develop and implement a Biodiversity Management Plan⁸. A Biodiversity Management Plan (BMP) includes key biodiversity objectives, activities to achieve the objectives, an implementation schedule, institutional and gender-inclusive responsibilities, cost and resourcing estimates.

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.

The client will engage with stakeholders throughout the project life cycle, commencing such engagement as early as possible in the project development process and in a timeframe that enables meaningful consultations with stakeholders on project design. The nature, scope and frequency of stakeholder engagement will be proportionate to the nature and scale of the project and its potential risks and impacts.

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.

Stakeholder engagement is most effective when initiated at an early stage of the project development process and is an integral part of early project decisions and the assessment, management and monitoring of the project’s environmental and social risks and impacts. In consultation with the Bank, the Borrower has developed a Stakeholder Engagement Plan (SEP) proportionate to the nature and scale of the project and its potential risks and impacts of the ESS triggered for this Project.

2.6 GAP analyses Moldova Legislation and WB ESS1-10.

Environmental & Social risk	WB requirements	National legislation	Description	GAP in national legislation
a. Traffic flow disruption during construction	To develop measures in the Traffic Management Plan (TMP), ESMP.	Law No. 131 from 07-06-2007 On road safety	The TMP has to be coordinated with road police (National Public Security Inspectorate)	The focus is on scheme of diversion roads and installing the road temporary signs. There are no provisions related with pedestrian protection, public consultations, compensation procedures, etc.

⁸ Depending on the nature and the scale of the risks and impacts, to address biodiversity conservation as an integral aspect of sustainable development within the project, the Biodiversity Management Plan may be a stand-alone document or it may be included as part of the Environmental and Social Commitment Plan prepared under ESS1.

Environmental & Social risk	WB requirements	National legislation	Description	GAP in national legislation
b. Traffic accidents	To develop measures in the TMP, ESMP, The World Bank required to report in case of accident during first 24 hours to the Bank. (Environmental and Social Incident Response Toolkit) ESIRT should be prepared. (annex 7)	Law No. 131 from 07-06-2007 On road safety. Prosecutor Code Administrative Code	The TMP has to be coordinated with road police (National Public Security Inspectorate).	The prevention measures related with pedestrians are weakly described. There are no requirements to urgent reporting of any accidents.
c. Disturbance to existing properties frontage, or public utilities	ESMP	Law no. 163 of 09.07.2010 on authorization of construction works, Law 303, On Water supply services	As part of the construction of a water supply or sewerage project, there are likely to be impacts on existing property frontages or on public utilities such as electricity supplies. These types of impacts involve costs, whether to individuals or to the community.	Usually, the people have to informed about disturbance in advance and for the period of absence of services. Many time this is done just formally and there a delay in reconnections.
d. Involuntary Resettlement	RPF, RAP according to ESS5 requirements should be prepared	The Law on Expropriation for Reasons of Public Use No. 488 of 7 August 1999 or Eminent Domain, Land Code No. 828-XII, 1991 with amendments	The basic principles of the Moldovan civil legislation are: recognition of equality among the parties to relationships regulated by it, inviolability of ownership, freedom of contract, prohibition to interfere with private affairs, free exercise of civil rights, guaranteed remedy of violated rights and judicial	No reference on involuntary resettlement, physical/economic displacement in the legal framework. (the national law refers only to expropriation); lack of provisions on vulnerable groups; lack of the socio-economic baseline assessment in the affected communities; informal users, PAPs with lack of documents should be compensated.; additional engagement procedures should be established.

Environmental & Social risk	WB requirements	National legislation	Description	GAP in national legislation
			protection of the same	
e. ESMP development	ESS 1	EIA Law no.86 from 2014.	The ESMP is the main instrument for environmental & social risk governance in WB project in order to identify, prevent, monitor, report the impacts	The legislation mentions about need for a list of projects to have EIA developed. For local roads is not the case. A formal environmental chapter has to be developed in the Detailed Design documents but the identification and monitoring of parameters is not indicated. There is lack of social aspects in EIA.

International environmental treaties to which the Republic of Moldova is a Party:

1. Convention on long-range transboundary air pollution (Geneva, November 13, 1979)
2. Convention for the Protection of the Ozone Layer (Vienna, March 22, 1985):
3. Convention regarding environmental impact assessment in a transboundary context (Espoo, February 25, 1991);
4. Protocol on strategic environmental assessment (Kiev, May 21, 2003)
5. Convention on the Transboundary Effects of Industrial Accidents (Helsinki, March 17, 1992):
6. Convention on access to information, justice and public participation in environmental decision-making (Aarhus, June 25, 1998):
7. Basel Convention on the Control of Transboundary Transport of Hazardous Wastes and their Disposal (Basel, March 22, 1989)
8. Convention on Biological Diversity (Rio de Janeiro, June 5, 1992):
9. Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, March 3, 1973)
10. Convention on the Conservation of Migratory Species of Wild Animals (Bonn, June 23, 1979)
11. Agreement on the Conservation of African-Eurasian Migratory Water birds (The Hague, 16 June 1995)
12. Convention to Combat Desertification in Countries Severely Affected by Drought and/or Desertification (Paris, June 17, 1994)
13. Convention on the Prior Informed Consent Procedure Applicable to Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam, September 10, 1998)
14. Convention on Persistent Organic Pollutants (Stockholm, May 22, 2001)
15. Framework Convention on Climate Change (New York, May 9, 1992)
16. Kyoto Protocol (December 11, 1997)
17. The Paris Agreement (April 22, 2016)
18. Convention on the Conservation of Wild Life and Natural Habitats in Europe (Bern, September 19, 1979)
19. Convention on the European landscape (Florence, October 20, 2000)
20. Convention on Wetlands of International Importance, Especially as Waterfowl Habitat (Ramsar, February 2, 1971)
- 21.

International and regional human rights treaties ratified by the Republic of Moldova:

- Universal Declaration of Human Rights (adopted in 1948)
- International Covenant on Civil and Political Rights (adopted in 1966, ratified by the Republic of Moldova in 1990)
- International Covenant on Economic, Social and Cultural Rights (adopted in 1976, ratified by the Republic of Moldova in 1990)
- International Convention on the Elimination of All Forms of Racial Discrimination (adopted in 1965, ratified by the Republic of Moldova in 1993)
- Convention on the elimination of all forms of discrimination against women (adopted in 1979, ratified by the Republic of Moldova in 1994)
- Convention on the Rights of the Child (adopted in 1989, ratified by the Republic of Moldova in 1993)
- UN Convention Against Torture (adopted in 1984, ratified by the Republic of Moldova in 1995)
- European Convention for the Protection of Human Rights and Fundamental Freedoms (adopted in 1950, ratified by the Republic of Moldova in 1997)
- Revised European Social Charter (adopted in 1966)
- Convention on the Rights of Persons with Disabilities (adopted in 2006, ratified by the Republic of Moldova in 2010)

2.7. Legal, Regulatory, and Institutional Framework for Environmental and Social Management***Environmental and Social Impact Assessment (ESIA) Requirements for Corridor 24***

According to Law No. 86/2014 of the Republic of Moldova on Environmental Impact Assessment (EIA), a full environmental and social impact assessment (ESIA) is not required for Corridor 24. The project, which focuses on the rehabilitation and maintenance of existing roads within the right-of-way (ROW), falls into the third category of projects according to national environmental assessment practice. This category requires the development of an "Environmental Protection Chapter" in the detailed design documentation, which must identify potential environmental impacts and propose mitigation measures.

The proposed project for road Corridor C24 rehabilitation and modernization obtained the **Environmental Permit No. 10/2874/2025 dated 09.06.2025.**

Findings from environmental Permit:

- The activity falls under Annex 2, point 13 of Law No. 86/2014 on Environmental Impact Assessment
- Environmental Impact Assessment (EIA) is NOT required
- Project must comply with the following conditions:
 1. Construction must follow environmental and construction regulations
 2. Construction/demolition waste must be managed as per CP A.09.04.2014
 3. Use mineral soil only from authorized quarries
 4. Comply with Water Law No. 272/2011
 5. Any vegetation removal must follow environmental and forestry laws
 6. Environmental Inspector must participate in the final acceptance committee

However, the ESMP has been prepared to ensure compliance with all environmental and social requirements of the Government of the Republic of Moldova and the Environmental Impact Assessment Law of 2014, and in strict accordance with World Bank's Environmental and Social Standards. In addition, the ESMP serves as a guide for the Contractor in preparing its own Contractor's Environmental and Social Management Plan (C-ESMP). The project's classification under Moldovan legislation, while not requiring a full ESIA, highlights a limitation of the national legislative framework regarding comprehensive social impact assessment for such

projects. Therefore, the robust ESMP, developed in accordance with World Bank Environmental and Social Standards, is essential to cover these social aspects and ensure compliance with international financing requirements, thus compensating for a potential gap in national legislation.

Key Environmental, Social, and Labor Regulatory Permits, Authorizations, and Licenses Required:

For the implementation of the Corridor 24 project, a series of permits, authorizations, and licenses are required, both environmental and social/labor in nature:

- **Environmental Permit:** Necessary for design and construction.
- **Deforestation Permit:** Specific, obtained from the Environmental Agency for any planned deforestation operations.
- **Water Use Permit:** If water is extracted from rivers, ponds, or reservoirs for construction purposes, the consent of the owner/administrator, the local public authority, the District Ecological Inspectorate, and, in certain cases, the "Apele Moldovei" Agency is required.
- **Approval for Temporary Waste Storage:** Requested from the District Environmental Inspectorate for temporary waste storage.
- **Written Permission/Lease Agreement for Temporary Land Occupation:** If the Contractor requires temporary land occupation outside the road right-of-way for facilities or material storage, written permission from the landowner and official approval from the Supervising Engineer are required. In the case of land managed by local public administration (LPA), the consent of the village local council is necessary.
- **Licenses for Material Sources:** All construction materials (sand, river gravel, earth for embankments, crushed stone) must be obtained exclusively from existing, licensed sources. The Construction Supervision Engineer must approve the following plans prepared by the Contractor before the commencement of works.
- **Contractor's Health and Safety Plan:** Must be prepared and approved before the start of any work on site.
- **Road Traffic and Safety Management Plan:** Developed by the Contractor, requires approval from the Traffic Police (National Public Security Inspectorate) and timely review and approval by the Supervising Engineer.
- **Contractor's Environmental and Social Management Plan (C-ESMP):** Developed by the Contractor based on the main ESMP, it details the implementation mechanisms and mitigation measures for environmental and social impacts, and must be approved by the Supervising Engineer before construction begins.

This level of rigor in compliance implicitly favors the selection of contractors with robust ESHS management capabilities.

Agencies Responsible for Monitoring and Enforcement

ESMP implementation involves a complex institutional structure, with well-defined roles and responsibilities for several key agencies:

National Road Administration (NRA): Is the implementing agency, assisted by a Project Implementation Unit (PIU). Its responsibilities include procurement, financial management, contract management, project monitoring and evaluation, and ensuring the compliance of projects with ESA and civil works with approved ESMPs. NRA has Environmental and Social (E&S) Specialists responsible for coordinating all E&S safeguards aspects of the project.

NRA Land Acquisition and Resettlement Specialist: Examines land acquisition cases by state authorities, ensuring adequate compensation and preventing discrimination against landowners.

Project Implementation Unit (PIU):

- PIU Environmental Specialist (ES): Responsible for daily EA activities, including environmental screening, identifying necessary EA types, preparing EIA reports and/or ESMPs, organizing State Ecological Expertise, integrating environmental requirements into contracts, and supervising/monitoring the implementation of environmental mitigation and protection measures. They also prepare semi-annual reports on ESMP implementation progress.
- PIU Social Specialist: Will provide essential support to the existing social, environmental, occupation health and safety and resettlement specialists within the NRA and enhance their capacity within the scope of the Project. The Social Specialist will be engaged at the NRA level to assist in the project’s implementation, specifically to oversee and ensure the effective social management, as well as the monitoring of all social aspects associated with the project. Specifically, the Social Specialist will ensure that the sub-projects are carried out by NRA with due regard to appropriate social standards and practices, and in accordance with the Environmental and Social Framework (ESF) instruments (Environmental and Social Management Framework (ESMF), Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP), prepared for the project and as per the Environmental and Social Commitment Plan (ESCP). The Social Specialist will be responsible for the impacts and risk mitigation plans and monitoring of all social aspects of Bank financed loans and grants in line with the provisions of Environmental and Social (E&S) documents required under the Environmental and Social Framework (ESF) and referred to in Environmental and Social Commitment Plan (ESCP), such as Environmental and Social Management Framework (ESMF), Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plans (ESMPs, Labor Management Procedures (LMPs), and Stakeholder Engagement Plans (SEPs), and the timelines specified in those E&S documents. Additionally, the Social Specialist will support supervising and monitoring activities related to social risks. Social Specialist in the NRA will work in close collaboration with the other relevant specialists in the NRA such as social specialist, environmental specialist, occupation health and safety specialist, resettlement specialist, procurement specialists, financial management specialists, Monitoring and Evaluation (M&E) specialists, etc. The Social specialist also will coordinate with specialists from Custom Services on social aspects, if needed. The specialist is expected to keep the Project Coordinator fully informed of all social-related matters, providing monthly performance reports on these topics.
 - Contractor: Responsible for implementing the ESMP through its C-ESMP in accordance with contractual documents. Appoints an Environmental, Social, Health, and Safety Officer, ensures employee training in E&S, and reports incidents. Conducts laboratory analyses and on-site monitoring for various environmental parameters.
 - Supervising Engineer (SE): Ensures the compliance of all works with contractual requirements, including the ESMP. Provides periodic reports to NRA on the overall implementation of ESMPs and approves sampling points and reports for environmental monitoring conducted by the Contractor.
 - Local Environmental Inspectorates: Inspect compliance with environmental legislation.
 - Local Public Health Centers: Inspect compliance with national public health legislation.
 - Social Impact Monitoring Committees (SIMC): Non-governmental structures at the community level, formed by representatives of institutions and affected communities. Their role is to inform the local population and institutions about project activities and to record and transmit complaints regarding the Contractor's non-compliance with social and ecological legislation.

This multi-layered institutional structure, involving national, local, and project-specific entities, indicates a complex governance architecture. Such complexity requires exceptional coordination and communication

for effective ESMP implementation and continuous compliance. The success of the project's environmental and social performance therefore depends on a fluid information flow and strong collaboration among all these diverse actors.

Table 1: Summary of Key Permits/Authorizations and Responsible Agencies

Permit/Authorization Name	Issuing/Approving Agency	Monitoring/Enforcement Agency
Environmental Permit	Environmental Agency	District Environmental Inspectorate
Deforestation Permit	Environmental Agency	District Environmental Inspectorate
Water Use Permit	Environmental Agency , co-participant: Owner/Administrator, APL, District Ecological Inspectorate, "Apele Moldovei" Agency (where applicable)	District Ecological Inspectorate, "Apele Moldovei" Agency
Approval for Temporary Waste Storage	District Environmental Inspectorate	District Environmental Inspectorate
Written Permission/Lease Agreement for Temporary Land Occupation	Landowner, Supervising Engineer, Local Council (for LPA land)	Supervising Engineer, LPA
Licenses for Material Sources	Relevant licensing authorities	District Environmental Inspectorate
Health and Safety Plan	NRA, Supervising Engineer	Supervising Engineer, Local Public Health Centers
Road Traffic and Safety Management Plan	Traffic Police (National Public Security Inspectorate), Supervising Engineer	Traffic Police, Supervising Engineer
Contractor's Environmental and Social Management Plan (C-ESMP)	NRA, Supervising Engineer	Supervising Engineer, PIU E&S Specialist, NRA E&S Specialists, District Environmental Inspectorate

3. PROJECTED WORKS. SCOPE OF C24 ROAD REHABILITATION AND PROPOSED ACTIVITIES

During the implementation period of the Project, it is not excluded that in some places it may be necessary to relocate technical-building networks, decentralized water sources (wells). The respective decisions will be taken jointly with the owners of the objectives, LPA (local public administration) , the local population. The transport speed designed for the Category IV road is in accordance with NCM D 02.01:2015, namely 80 km/hour for straight sectors, 60 km/hour – on hilly terrain and 40 km/hour – on sharply inclined sectors. On the sectors that pass through towns, the designed speed is 50 km/h, but a lower speed may be adopted in some places, for the purpose of road safety, up to 30 km/h - for example, in front of schools. All permanent works will be accommodated within the existing RoW of the road and no additional land allocations are foreseen. The width of the carriageway will not be widened.

Depending on the sector and the available space, the width will vary between 6.0 and 7.0m.

During the construction, it may be necessary to temporarily occupy some lands beyond the road embankment, to accommodate the Contractor's facilities. The location and design of these facilities are

unknown at this stage, they need to be determined by the selected Contractor. In addition, the temporary use of land may be necessary (e.g. for the temporary storage of materials), these being established by the Contractor at a later stage. For this purpose, before starting operations, the Contractor will have to obtain written permission (lease contract, temporary use, etc.) from the owner of the land and an official approval from the Supervising Engineer. If the land is under the management of APL, the consent of the local village council will be requested. For the temporary storage of waste, the approval of the District Ecological Inspection is required.

Construction materials, such as sand, river gravel, earth for the construction of embankments or crushed stone will be obtained exclusively from existing licensed sources, and only existing roads are provided for their transportation. The beneficial part of asphalt recycling is:

- Saving natural resources;
- Unoccupied seats due to storage of recyclable resources;
- Reduced quantity of materials delivered to/from the site, saving fuel.

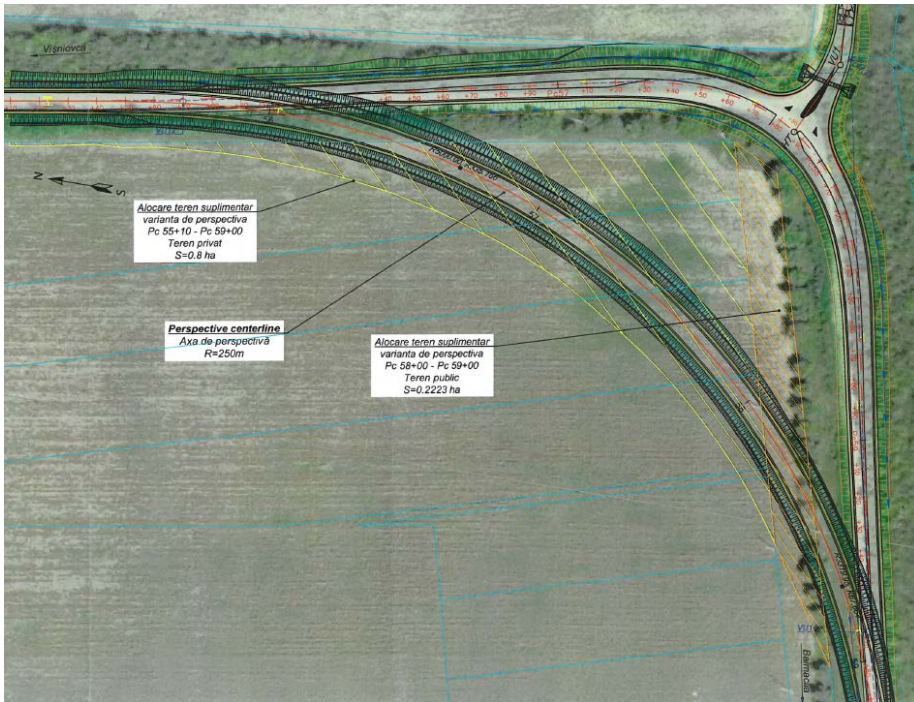
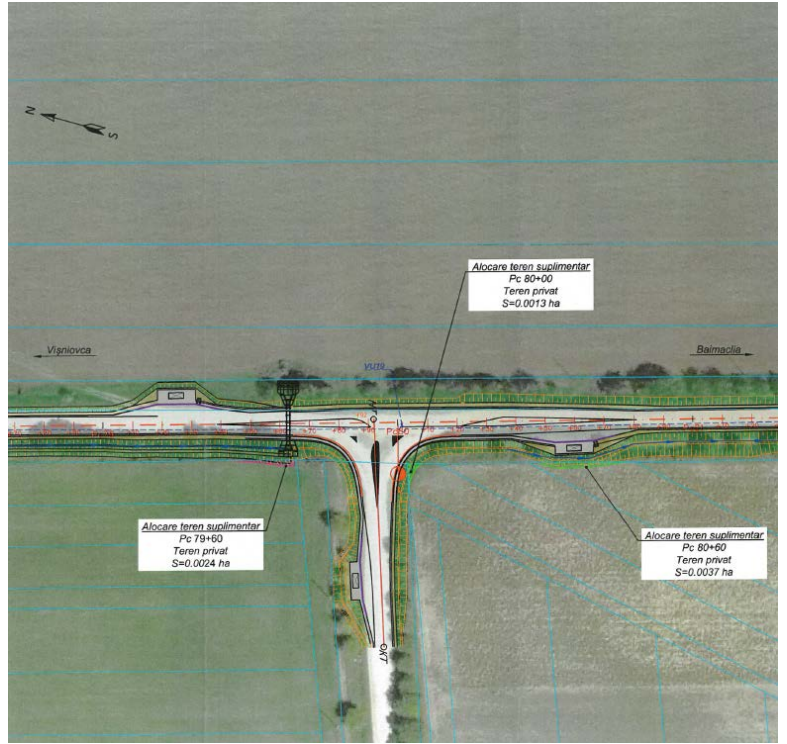
The reinforced concrete elements, demolished at the existing footbridges, will be transported and temporarily stored in the NRA (rom: AND) warehouses, the other materials (e.g. sand, river gravel) - will be used for the construction of the abutments. All new structures, such as tubular decks and frame decks, will be made of prefabricated elements delivered from existing factories.

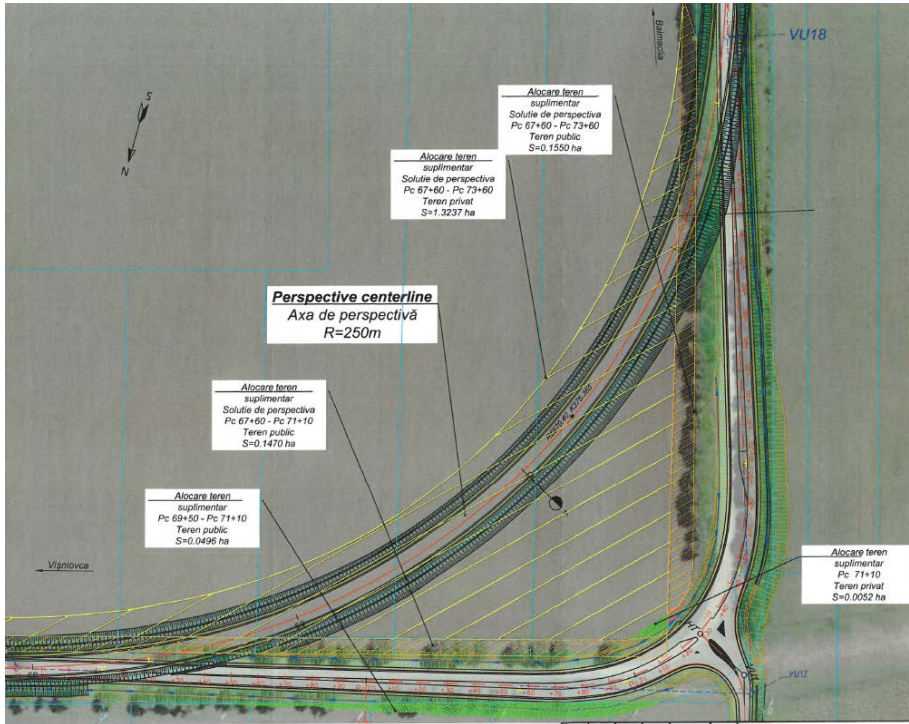
For Project implementation it is envisaged to implement the following:

- Ensure paved areas along the entire road of the project;
- Repair or replace existing structures, as appropriate;
- Ensure appropriate drainage, both longitudinal and transversal, in accordance with national standards in force;
- Provide pedestrian sidewalks and street lighting on the most frequented sections of the Project Road;
- Provide protection means (e.g. protection guardrails) in the areas most exposed to risks;
- Rehabilitation of property entrances and land rehabilitation, as necessary;
- Provide road inventory and signing in accordance with applicable standards and norms;
- Provide rumble strips and road signing, as appropriate, to increase pedestrian safety in sensitive areas.

Permanent acquisition of land plots that will be required to improve the road conditions

The land requirements along the project corridor indicates that permanent acquisition of additional land plots—both public and private—will be necessary to ensure safe and compliant road operation. As shown in Table 1, several sections between chainages Pc 17+20 and Pc 120+00 require extra land to allow for geometric improvements such as increasing the radius of unsafe curves, widening the platform, and adjusting the longitudinal and transverse profiles. Additional land is also needed for the construction of new bus stops, the installation and extension of culverts, and the creation of adequate side ditches and stormwater drainage channels, all of which are essential for improving road safety and climate resilience. The total areas required amount to 2.3459 ha of public land and 0.0803 ha of private land, with an additional 0.7952 ha of public land and 2.9989 ha of private land anticipated under future development solutions. These acquisitions are limited in extent but are critical to achieving the project’s objectives of improving traffic safety, ensuring proper water management, and enhancing the overall functionality of the road.





3.1 Allocation of Additional Land Plots

Table 1. Allocation of Additional Land Plots

Chainage From (Pc+)	Chainage To (Pc+)	Position relative to axis	Required additional land area, Public land (ha)	Required additional land area, Private land (ha)	Required additional land area, Future solution – Public land (ha)	Required additional land area, Future solution – Private land (ha)
17+20	25+10	left	0.28			
34+70	36+90	left	0.0735			
42+30		intersection	0.1352			
55+10	59+00	right				0.8
58+00	59+00	right			0.2223	
69+50	71+10	left	0.0496			
67+60	71+10	right			0.147	
67+60	73+60	right			0.155	
67+60	73+60	right				1.3237
71+10		left		0.0052		
80+00		intersection		0.0013		
80+60		right		0.0037		
79+60		right		0.0024		
86+10	88+50	right		0.0483		
89+00		intersection		0.0955		

114+80		left		0.0210		
116+20		right		0.0205		
114+40	116+20	right			0.061	
114+40	118+20	right				0.8752
116+30	118+20	right			0.061	
114+40	120+00	left	1.690		0.1489	
Total			2.3459	0.0803	0.7952	2.9989

During the implementation of the Project, it cannot be excluded that in some places it may be necessary to relocate the municipal technical networks, the decentralized water sources (wells). These decisions will be taken in agreement with the owners of the objectives, the APL, the local population.

The designed speed of transportation for the Category IV Road is in accordance with NCM D 02.01:2015, i.e. 80 km/h for flat sections, 60 km/h - for hilly sections and 40 km/h - on steep sections. For sections crossing settlements the designed speed is 50km/h, however, lower 30 km/h design speed may be adopted locally to ensure safety – e.g. in front of schools.

Width of semi-carriageway: 3.50m

Sidewalks within villages: 1.50m

Pavement: paved

Structures

3 Bridges (B01, L=12m, km:13+880.19 / B02, L=14m km:1+166.85 / B03, L= 16m km:3+904.40))

46 existing culverts

Pavement

21.800 m3 Embankment material from borrow material

145.500 m3 Excavation of unsuitable material and disposal

112.000 m3 of gravel material (drainage layer, base course, levelling material)

76.600 m2 Cold recycling of the asphalt concrete pavement

10.700 m3 Wearing course of asphalt concrete

11.400 m3 Base course of asphalt concrete

Trees

237+74= 311 trees to be removed

593+185= 778 new trees

No schools and kindergartens are located immediately near the road.

All permanent works will be accommodated within the existing Right of Way, and no additional land allocation is foreseen. The width of the roadway will not be extra-widened. Depending on the section and available space, the width will vary between 6.0 and 7.0m.

During construction, certain land areas outside the existing Right-of-Way (RoW) may need to be temporarily occupied to accommodate the Contractor’s activities and ensure safe traffic management. This may include land required for temporary detour roads around bridges and culverts during their rehabilitation or reconstruction, temporary bypasses, and areas needed for the storage of construction materials, placement of construction equipment and machinery, workshops, parking areas, and other auxiliary facilities. The exact location, size, and layout of these temporary land areas are not known at this stage and will be determined by the selected Contractor during the preparation of the Contractor’s Environmental and Social Management Plan (C-ESMP). Prior to commencing any works, the Contractor shall obtain written permission (e.g., lease

agreements, provisional land-use contracts) from the respective landowners and secure formal approval from the Engineer-Supervisor. If the land is administered by the Local Public Authority (LPA), approval from the village council will be required. For any temporary waste storage areas, the Contractor must additionally obtain authorization from the District Environmental Inspectorate. All temporarily used land must be reinstated to its original condition upon completion of the works.

Construction materials, such as sand, gravel, earth for earthworks or crushed stone, will only be obtained from existing licensed sources and will be transported only on the existing roads. No new borrow pits opening is accepted under this project.

The beneficial side of asphalt recycling is:

- Natural resources are preserved;
- Land space is not taken by storing recyclable resource;
- Reduced import / export materials from project site, saving on fuel.

The r/c elements obtained from the demolition of existing culverts (see next pictures) will be transported and temporarily stored at the NRA's base, other materials (e.g. sand, gravel) will be used for the construction of shoulders. All new structures such as pipe or box culverts will be pre-cast elements supplied from the existing plants.

Corridor 24 has a length of 43.14km, on certain sectors the length of the carriageway is made of asphalt concrete. According to the investigations, the road sectors part of Corridor no. 24 has the average width of the carriageway of 6.65 m and vary from 5.0 m to 8.20 m. Each sector as follows:

- The G131 has an average carriageway width of 6.50m and ranges from 5.00m to 7.00m.
- The G132 has an average carriageway width of 6.70m and ranges from 5.70m to 7.80m.
- The G133 has an average carriageway width of 6.65m and ranges from 5.90m to 8.20m.

The existing road system consists of a smooth road system, consisting of base layers of crushed stone or a mixture of crushed stone ballast with an average thickness of 18 cm and varying from 8 cm to 43 cm, and covered with bituminous layers with average thickness of 9.4 cm, which varies from 3 cm to 18 cm. It should be noted that during the entire period of operation of the road sectors, maintenance works were carried out, which were only intended to maintain the technical condition of the road, and the degraded sectors (with tiling, subsidence) underwent only local repairs. Out of the total of 43,200 ml that the given corridor has, 16,300 ml have the running surface of asphalt concrete, the rest of the sectors have the running surface of broken stone. Of those with an asphalt concrete surface in the year 2018 - 2021 within the "Good Roads" program, i.e. after the execution of the project, asphaltting works were carried out over the broken stone running surface or works to replace the old upper layers or their bedding even on the existing one, namely the sectors:

- G131 Km 20+850 – 21+400, Baimaclia village, (asphaltting works over the broken stone surface);
- G132 Km 19+350 – 20+320, Baimaclia village, (replacement of bituminous layers);
- G133 Km 0+250 – 1+600, Tartaul village, (replacement of bituminous layers);
- G133 Km 4+900 – 6+150, s. Ciobalaccia, (replacement of bituminous layers).

Of those with a broken stone tread, stone material was added to the sectors:

- G131 Km 1+350 – 2+400;
- G131 Km 17+600 – 18+500;
- G131 Km 3+200 – 3+950;
- G133 Km 9+350 – 9+900;
- G131 Km 8+100 – 8+650;
- G133 Km 9+900 – 14+924;
- G131 Km 15+000 – 16+600;

The existing road is in an unsatisfactory technical condition, a fact ascertained by the existing parameters of the geometric elements and the running surface, both on the road sectors outside the towns and on the road sectors within their limits, which do not correspond to the design norms in force, and, which is confirmed by the linear diagrams of accidents and road safety.

3.2 Types of Road Pavement designed

Road surface/pavement design is a process of selecting a suitable road surface and appropriate materials to provide optimum load-bearing capacity of the road structure, to perform its function adequately and to require minimal maintenance following action the load generated by the heavy traffic that accesses this road sector in the transport of goods and construction materials, for the entire period of operation.

The process of selecting an optimal road construction involves the adoption of the types of materials, thicknesses and configuration of the layers of the road surface, which ensure compliance with the design and performance objectives, such as:

- ensuring safety and comfort conditions for all road users, whether they are drivers, passengers, cyclists or pedestrians, optimizing the predestined function of the road and its level of use;
- ensuring low maintenance costs by the State Road Authorities (by the Government) (i.e. the minimum cost over the entire period of operation);
- compliance with Road Pavement Standards and other relevant Guidelines and/or Standards of the National Road Administration.

The design procedures for the following types of road pavement are set out in internationally recognized road pavement design standards:

- Flexible road surface, which consists of granular road surface materials and a thin bituminous layer (granular surface);
- Flexible road surface, which includes one or more layers easily linked together, whether they are executed in-situ (on site) or at the factory (stabilized road surface);
- Soft road surface, which consists predominantly of layers of asphaltic concrete;
- Rigid road pavement.

Soft road surfacing consisting of dust-free granular materials not covered with asphalt (crushed road surfacing) should only be considered for rural roads with very low traffic intensity, minor access roads or temporary roads.

The transverse profiles were designed according to the existing situations and the solutions adopted for the development of the road and its accessories, related to the design norms in force. All type transverse profiles were made in accordance with the solutions adopted in the execution project. Thus, in the outskirts, transverse profiles were designed where the width of the carriageway is 7.0 m (3.5+3.5) and the width of the approaches is 3.0 m (1.5+1.5), where each 0.5 m of the width of the approach is the framing lane.

Transversal profiles type 1, 2, 3 and 4 were designed for road sections located outside the city:

- | | |
|--|---|
| - Road platform – 9,0-10,0 m; | - The width of the framing band - 0,5 m; |
| - The width of the carriageway - 6,0 m; | - The slope of the surface of the carriageway – 2,5%; |
| - The width of the traffic lane - 3,0 m; | - The slope of the approach surface - 4%; |
| - The width of the berth – 1,5-2,0 m; | - The slope of the slopes - 1:1,5. |

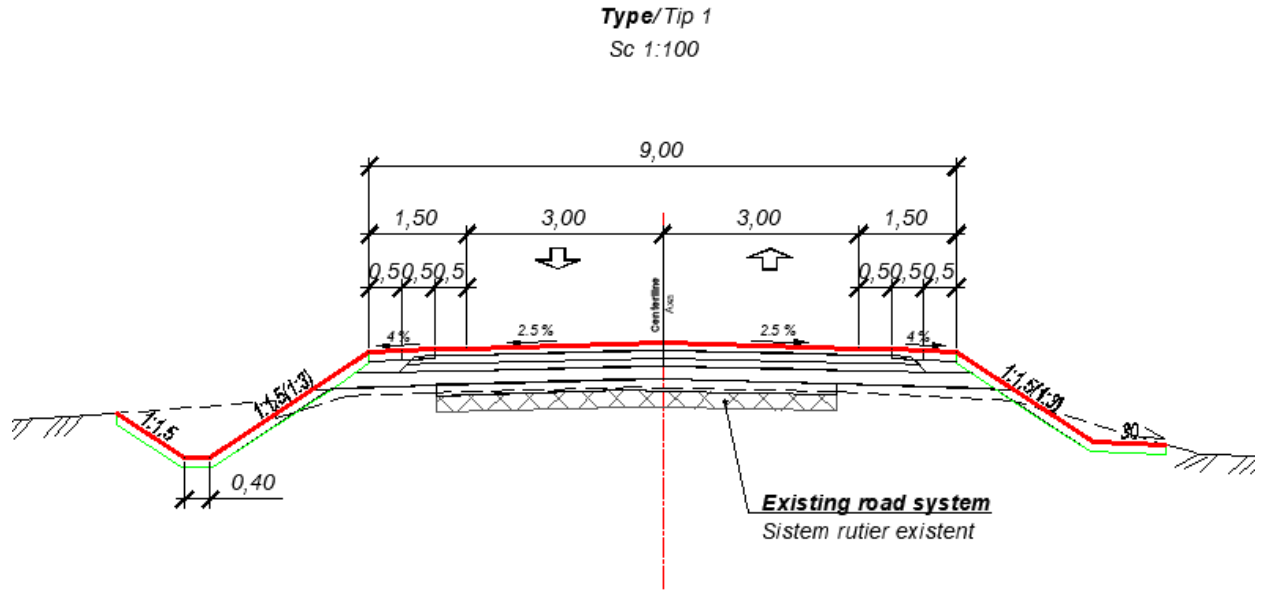


Figure 4.3.1. Transverse profile type 1

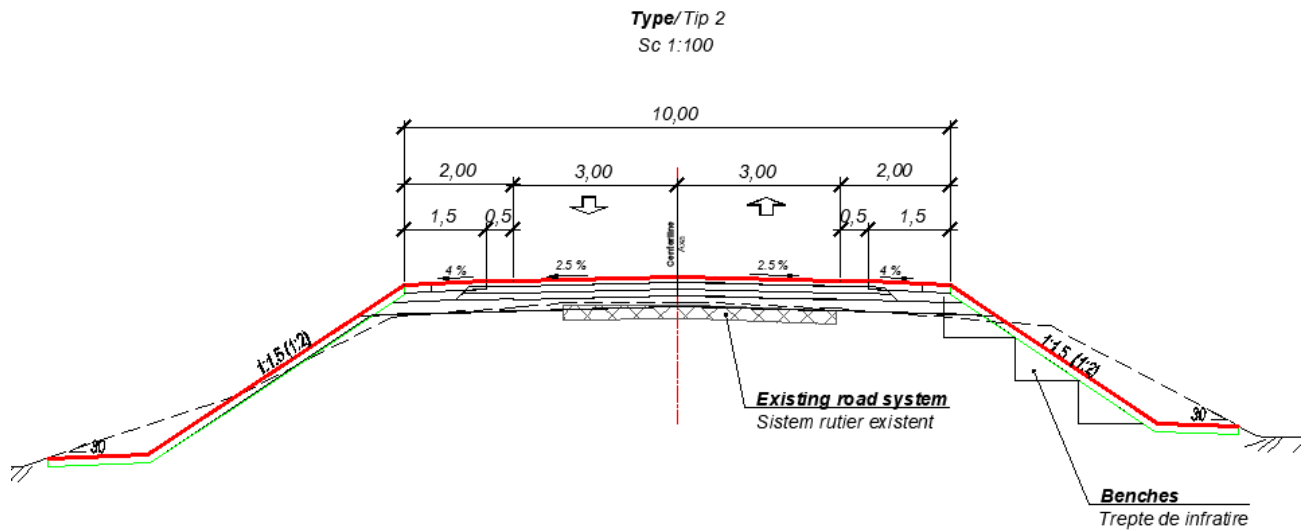


Figure 4.3.2. Transverse profile type 2

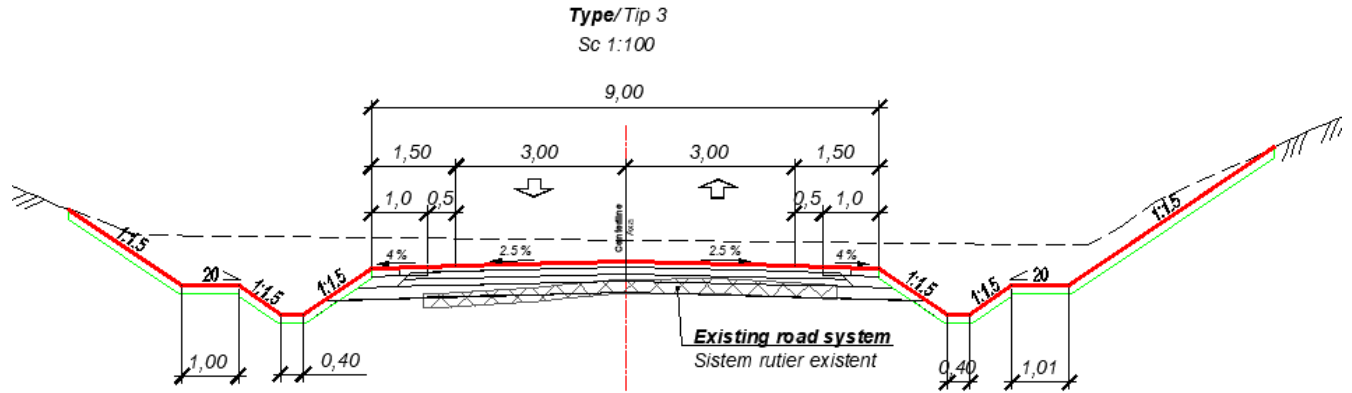


Figure 4.3.3. Transverse profile type 3

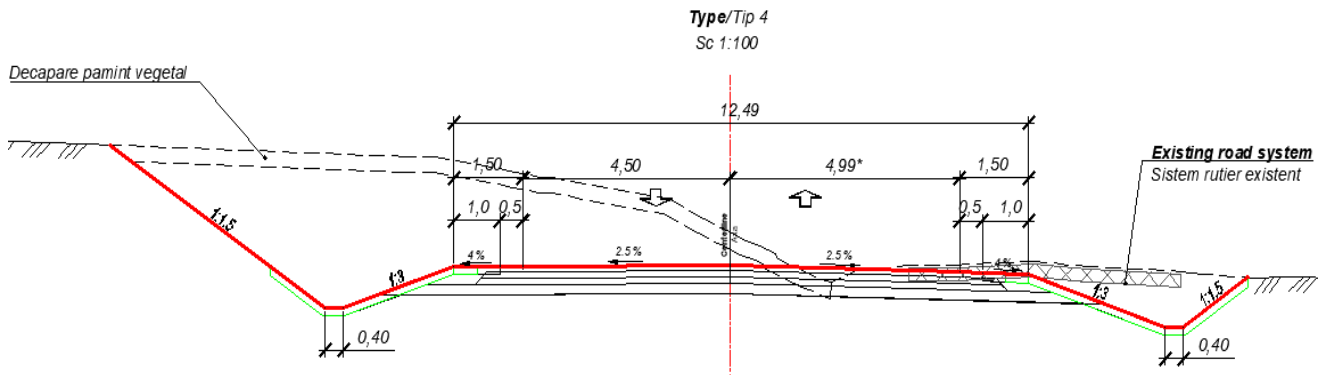


Figure 4.3.4. Transverse profile type 4

4. ENVIRONMENTAL AND SOCIAL BASELINE

4.1. Regional climate and geography

The C24 is located in the southern part of the Republic of Moldova in the climatic zone III. The average January temperature is minus 3 degrees, for July – plus 22. The average annual temperature is + 9.5-10.0° C, the absolute winter minimum – -27-30°C, days with temperatures above 0 degrees – 279-289, the sum of positive temperatures – 3650-3850. The average depth of soil freezing – 30-45 cm, absolute depth – 55-85 cm. Passing over the average zero-degree spring temperature occurs on March 1, at the earliest – on January 18, at latest – on April 4. Passing to temperatures below zero degrees generally takes place on November 11th, at the earliest on November 2nd, at the latest on February 11th. Annual average precipitation – 475 mm, hydrothermal coefficient – 0.7-0.8. The humidity of the air (hydrothermal coefficient) is equal to: in winter time – 1.0, spring-autumn – 5.5-9.0, winter – 10.0-13.0. The predominant wind direction - northwest and north, average speed – 3.0-4.5 m/sec, in spring days up to 15 m/sec and more.

Among the most common natural hazards are droughts (no precipitation for 14 consecutive days in the cold season of the year and 10 days in the hot season of the year). In this climatic zone the droughts have 1-2 repetitions in 5 years. There is an increase in the frequency and intensity of the drought phenomenon. In the last decade, there have been five years of drought (2001, 2003, 2007, 2012).

In the summer, the rainfalls (rainstorms with the intensity of 0.5-2 mm/min) is specific to the area, accompanied by lightning, storms and hail. Hydrometeorologists in the Republic of Moldova have observed the increase of the frequency of these rains in the last decades, from 8.4 cases in the period of 1966-1990 to 10.4 cases in the years 1991-2004.

The villages in this Project area of C24 are about 80-100 km away from Vrancea, the epicenter of earthquakes in this region of Europe, located in the seismic area of magnitude 7-8 degrees at the Richter scale. The average periodicity of earthquakes of such intensity is reported once in 35-40 years. The last earthquakes of such strength happened more often and occurred in 1977, 1986, slightly weaker - in 1990. Earthquakes can have an impact on pumping systems and equipment, transportation and distribution of water, water quality in the source, others.

4.2. Geomorphology, geology and hydrography

Project area of C24 is situated on the Tigheci plateau with gradual passage on the South Moldavian Plain, the territory is crossed by the Tigheci, Larga and partially Salcia Mare rivers; the northern part is higher and heavily fragmented by valleys and ravines, and the lower part of the south with lower slopes. As a result of erosion processes and landslides, hill-shaped hills have been formed in the meridional, higher and more compacted in the north. The highest altitude is 295 m. The western part is a lower region, consisting of old terraces, crossed by valleys and ravines. The terraces descend to the Prut's meadow.

Most of the district is situated in the basin of the Larga River, which starts from two springs near the village of Cârpești and runs off in the Prut river. The length of the river is 33 km, slope – 4.4%. There are 16 tributaries with a length of less than 10 km and a total length of 40 km. The reception basin is located on the Tigheci Hills, elongated from northeast to southwest. The average height of the basin – 140 m, the surface – 151 km, the length – 30 km, the average width - 5,0 km, the density of the hydrographic network – 0,48, the coefficient of meandering – 1,23. The relief is hilly, very dismembered, the slopes on the left of the valleys are steep, on the right – not so steep. The valley is slightly winding, V-shaped, with a width of 2.3 to 5.3 km. The slopes are 100-150 m high.

Native rocks in the basin are presented by different types of clay and sand. From the deep layers, mineral water (Enichioi), natural gas (Ciobalaccia) is extracted.

4.3. The quality of surface water and groundwater

The Tigheci, Larga, Salcia Mare rivers flow into the territory of Cantemir district. Large spring waters usually begin in the last days of February – the first half of March (the earliest manifestations of the phenomenon were recorded on February 23, the latest on March 30. During the intense melting of snow, the rise of the level lasts 2-9 days, the lowering – 7-15 days. In the years with low snow quantity, the phenomenon practically does not occur, the level increase does not exceed 20-30 cm. During the summer there are 2-3 river floods.

The monitoring of water quality in the Larga River is missing. But according to some investigations of the Cahul Ecological Agency carried out in the Prut River Basin, where the Larga River flows, the water quality corresponds to the third and fourth classes (moderate and heavily polluted) respectively.

There are built 67 ponds in the rivers' riverbeds, the surface of the water mirror is about 400 ha. The water is used for small irrigation, fish farming, and recreation. Some of the older aquatic basins have a high degree of silting, 14 are dry.

In Cantemir district, there are recorded 1627 shallow wells and springs, out of which 110 are set up. About 85% of the wells do not have good drinking water, a safe source of drinking water being the village aqueducts.

In the district there are recorded 76 artesian wells, in functioning condition – 45, only in 15 wells the water is drinkable. The volume of pumped water is 650 350 cubic meters per year. The depth of water extraction is from 110 to 400 m. Most of the water quality in the artesian wells does not meet the sanitary requirements because of the high degree of mineralization (up to 6000 mg / dm³), the hardness reaches 90 mol/m³, it contains supernormal concentrations of ammonia, hydrogen sulfide, bromine, boron, others.

4.4. The landscape

Most of the territory of the C24 is exploited for agricultural purposes, so the plantations of vines, orchards, field crops predominate. Only a few secular forests, acacia forests and windbreak forests, mostly of the acacia species, are encountered. In the meadows of the rivers and on some versants, there were preserved degraded sectors with steppe vegetation, willow trees. Due to the lack of precipitation and excessive grazing, in summer the vegetation of the meadows dries up, revealing the soil and the native rocks that appeared on the surface due to the processes of water erosion of the soil. Alignments of trees around the roads (predominant species - walnut, poplar, acacia) are in good and satisfactory condition. Several sectors near the roads, banks of ravines, ponds, including in the outskirts of localities, contain piles of domestic, vegetable, zootechnic, construction waste which considerably reduce the landscape value of the land.

4.5. Organic and biotic resources

The forests in Cantemir district constitute about 6 thousand ha or 9% of the territory. Some of them are secular, but most of the areas have been planted in the last 40-50 years, being subject to regeneration cuttings. Greater massive forests are located near the villages of Tigheci, Cârpești, Lărguța, Baimaclia and others. In the dendrological structure of the old forests there is predominantly the common oak (*Quercus robur*) and the downy oak (*Quercus pubescens*), in new ones – the Bodalla silver wattle (*Acacia silvestris*). Other species found more often in the forests of the district are: the field elm (*Ulmus carpinifolia*), the Tata maple (*Acer tataricum*), the littleleaf linden (*Tilia cordata*), others. Around the creeks grows Mediterranean and nemoral

species of shrubs: the European smoketree (*Cotinus coggigria*), the common dogwood (*Swida sanguinea*), the wayfarer (*Viburnum lantana*), the blackthorn (*Prunus spinosa*), others. In the litter and meadows, we meet the sparrow grass (*Asparagus tenuifolius*), Solomon's seal (*Poligonatum latifolium*), *Aegonychom purpureo-caeruleum*), the suter (*Sedum maximum*), others. On the hillsides and on the slopes, there are predominantly the *Stipa capillata*, *Festuca valesiata*, *Poa angustifolia*, the *Bromopsis inermis*, the *Elytrigia repens*, the *Stipa lessingiana*, the wormwood (Austrian *Artemisia*), others.

On the banks of ponds, brooks, aquatic plants grow such plants as *Phragmites australis*, the lesser bulrush (*Thipha latifolia*, *Thipha angustifolia*), the frog grass (*Hydrocharis morsus-ranae*), the great horsetail (*Equisetum telmatea*), the European water plantain (*Alisma plantago-aquatica*), others

The animal world is represented by the species: the brown hare (*Lepus europaeus*), the fox (*Vulpes vulpes*), the hedgehog (*Erinaceus eoropaeus*), the Eurasian badger (*Talpa europaea*), the least weasel (*Mustela nivalis*), the mole (*Talpa europea*), the lizard (*Lacerta viridis*), the water snake (*Natrix natrix*), the common quail (*Coturnix coturnix*), the white stork (*Ciconia ciconia*), the pheasant (*Phasianus colchicus*), others.

The species of wild animals that are endangered and strictly endangered, protected by law, living in the natural areas of the district, are: the European ground squirrel (*Spermophilus citellus*), the pine marten (*Martes martes*), the steppe polecat (*Mustela eversmanni*), the multi-coloured lizard (*Eremis arguta*), the tawny eagle (*Aquila rapax*), the great bustard (*Otis tarda*), the meadow viper (*Vipera ursini*), the European pond turtle (*Emis orbicularis*).

The following protected areas are protected under the protection of the state: the geological monument of Cociulia quarry located about 10 km from Corridor 24, Alunis Forest Reserve near the Ciobalaccia village at 8 km from the repair road, the forest landscape reserves near the village of Antonești (in the Prut's meadow), near the village of Chioselia, as well as the Codrii Tigheciului reserve, near the villages Lărguța and Capaclia. No protected area above is crossed by corridor 24.

Forest Area Traversed by Corridor 24 (C24). The only section of the C24 road project that intersects a forested area is located in Sector 2, between the villages of Baimaclia and Tartaul in Cantemir District, The road passes through this forest over a length of approximately 1 kilometer, at coordinates Lat: 46.196 / Long: 28.352.

This area is part of the State Forest Fund (Fondul Silvic de Stat) and is managed by the Moldsilva. The forest includes a mix of trees. According to the classification and field records, the dominant tree species in this forest area are:

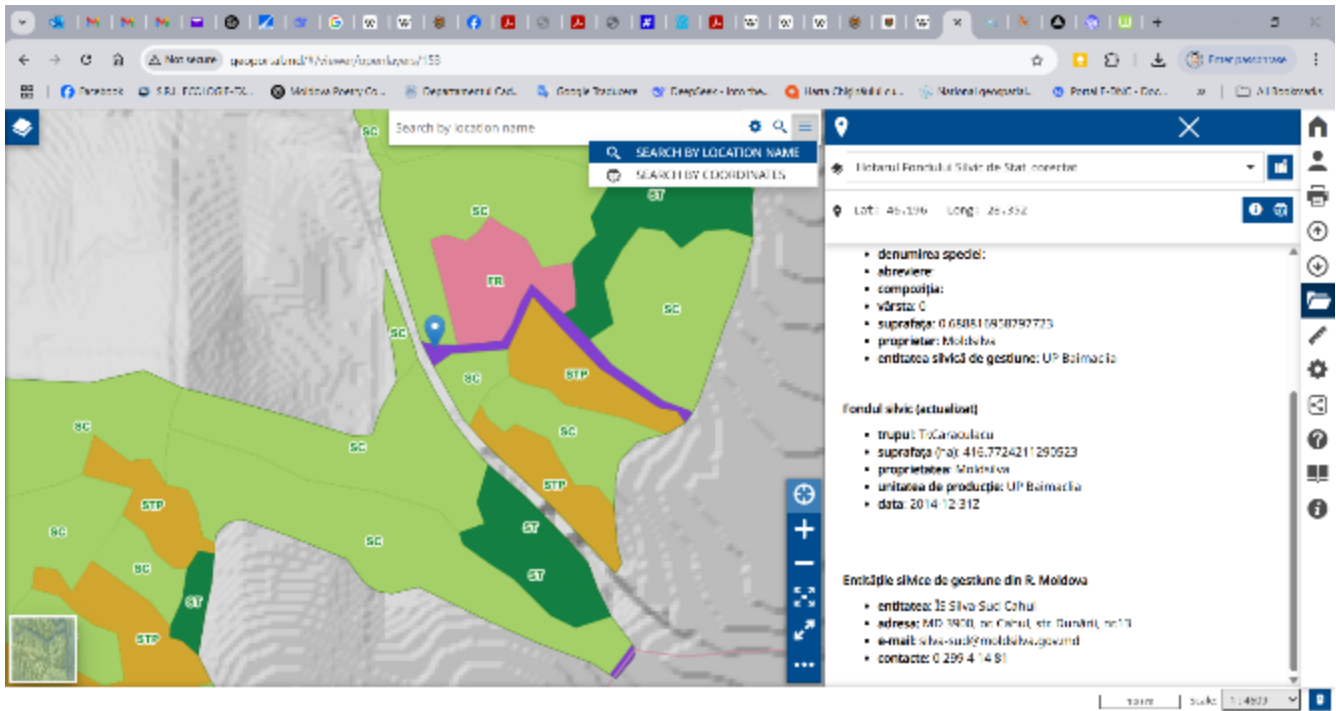
- *Robinia pseudoacacia* (Black Locust / *Salcâm*)
- *Quercus* spp. (Oak / *Stejar*)

One specific parcel crossed by the road has a surface of 0.6881 hectares, and the larger forest block known as “Trupul Caracalacu” covers a total of 416.77 hectares.

The forest is state-owned and managed by Întreprinderea de Stat „Silva-Sud Cahul”. This is the only forested area affected by the C24 project. Any interventions such as deforestation, tree removal, or access for construction machinery within this segment must comply with:

- Law No. 1515/1993 on Environmental Protection
- Law No. 239/2007 on Vegetation (especially Articles 26 and 26¹)

Moreover, such works must be coordinated with the State Environmental Inspectorate and Î.S. Moldsilva to ensure legal compliance, environmental protection, and mitigation of ecological impact.



4.6. Air quality

In Project area, the main sources of atmospheric air pollution with gas and dust are car transport (in the Prut Valley passes the Chisinau - Cahul road which is quite crowded), some industrial enterprises, the forges (49), the gas stations. Another source, characteristic for the spring and autumn months, is the burning of domestic and vegetal waste.

In the rest of the territory, the impact of air transport on the air is somewhat lower because the middle territory of the country is not crossed by any important motorway. Data on concentrations of gas in the atmosphere were not found, such research was not carried out. No data on instrumental environmental control carried out in recent years at technical testing stations in the district during technical review have been found but the statistics show that about 20% of cars have exceeded the concentration of toxic compounds in the emission gases. At the same time, it should be noted that, according to World Health Organization data, the entire territory of the Republic of Moldova, is located in the moderate atmospheric air pollution with dust and ozone as a result of the cross-border transport effects of air masses as well as local emissions of pollutants. Specialist sources state that excessive air pollution leads to increased indications of the morbidity of the population with respiratory, cardiac, blood and other diseases.

4.7. Noise impact

Just like the atmospheric air pollution the main sources of noise are transport units, trains and industrial enterprises. Some noise research conducted by the Ministry of Health shows that the noise level in the localities crossed by the motorways reaches 76-78 dBA, the permissible daily level is 70 dBA. Industrial enterprises produce noise within the range of 40-60 dBA, which is within the sanitary rules. The noise level in the localities located near the railways (Chisinau - Cahul - Giurgiulesti railway line passes through the district) is 11-76 dBA, the maximum permissible night time is 60 dBA. The localities in Cantemir district are not crossed by any major motorway, except for Chisinau - Cahul road in the west and the industrial enterprises work at low efficiency, thus the noise pollution does not pose a risk to the health of the population. More frequent maladies related to excessive noise are cardiac, neuro-psychic, otitis, and others.

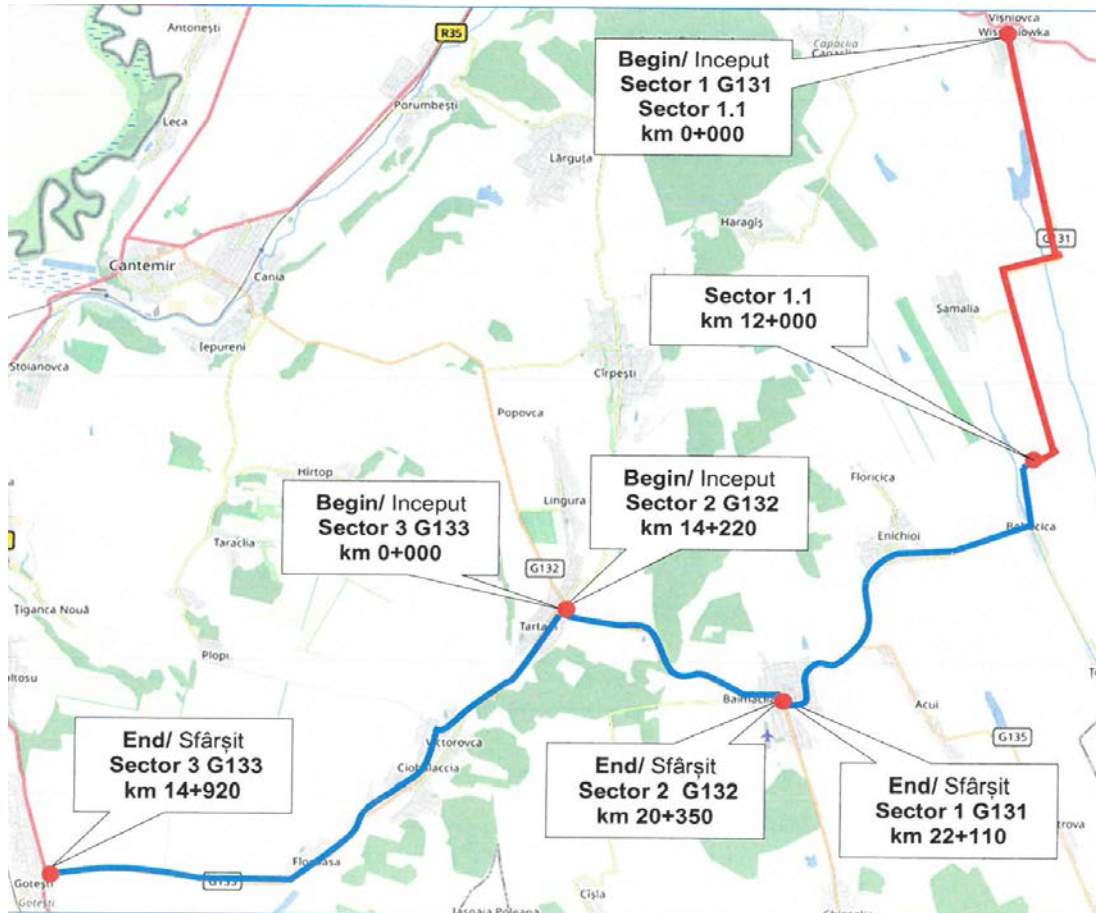
4.8. Soil properties

The area of agricultural land in the district is 64690 ha, the common and carbonate chernozems are the most widespread. 42% of the land area is affected by erosion, the average degree of soil solvency in the district is 57 points (as a reference base for the assessment of soil quality serves the typical humerus typical chernozem, appreciated at the 100-point scale). The natural fertility of soils is constantly diminishing. Degradation occurs due to the loss of large amounts of humus and nutrients in the water erosion process as well as the large gap between the amount of nutrients (nitrogen, phosphorus, potassium) eliminated from the soil with the crop harvested and the volume of fertilizer incorporated in the ground. The versants occupy a large part of the land, which, in the absence of efficient anti-erosion measures, contributes to the gradual washing of the upper layer of soil. On the other hand, the amount of organic and mineral fertilizers incorporated into the soil has decreased several times, compared to 20-30 years ago.

As regards the chemical pollution of soils, the situation is gradually normalizing. Only occasionally, where there were once vineyards and orchards, there are copper concentrations higher than the norms. Since the amount of chemical substances used to protect plants against diseases and pests has decreased hundreds of times and new chemicals have a much shorter decomposition period, the soils have practically been cleared of pesticides. It was cleared from chemicals and part of the chemical stores that were permanently a strong source of pesticide pollution were demolished.

4.9. Socio-economic aspect

Project Area context.



The following villages are located along the road:

- Gotești is a locality located at 46.1477 latitude, 28.1672 longitude and 32 meters above sea level. This locality is managed by the Mayorality of Gotesti. The direct distance to the town of Cantemir is 13 km. The direct distance to the town of Chișinău is 114 km. Gotesti locality has 5 economic agents that focus their activities in the area of agriculture, 1 pharmacy, 1 dental center, 2 shops that sell construction materials and 12 shops that sell food products.

In the locality there is functioning a secondary school where 281 children study and 3 kindergartens where 170 children attend.

The Gotesti commune is rather big in number of households comparing to the other ones, where 4122 people live (according to the mayorality data) from which 1955 men and 2167 women.
- Baimaclia has 2 shops that sell construction materials and 5 shops that sell food products. Unlike other villages it has a veterinary pharmacy, a pharmacy, a workshop for repairs cars enterprise and a transportation company, and a gas station.

In Baimaclia village 256 children attend secondary school as well as 170 children attend 3 kindergartens. The medical aid is offered at the Health Center Baimaclia where 3 villages come to get medical consultations and also two medical points.

3. Ciobalaccia is located at latitude 46.11744, longitude 28.2872 and 53 meters altitude above sea level. This locality is in the administration of Ciobalaccia village. The locality of Ciobalaccia is composed of 3 villages: Flocoasa, Ciobalaccia and Victorovca. The direct distance to the town of Chisinau is 104 km. In Flocoasa village they have a small lake near which is being built a swimming pool. We have 2 small shops and 3 peasant's households.
In Ciobalaccia village activate 3 private enterprises and a Municipal enterprise that supplies water, evacuates garbage. There is also a post office, an entertainment hall, bakery, dining hall – where are organized various holidays.
In the village of Victorovca there are 3 individual enterprises, 4 peasant's households and also an Agricultural Production Cooperative (in process of bankruptcy). There is also a warehouse of keeping cereals and also a weigher to facilitate the activity of economic agents.
In the main locality, Ciobalaccia, there is a high school where study 352 children from Flocoasa, Ciobalaccia and Victorovca but also children from the neighboring villages like Tartaul and Baimaclia, because the high school has a dormitory for students from the other villages.
Kindergartens are functioning in Flocoasa village where 32 children attend and also in Ciobalaccia where 56 children come from 2 villages – Ciobalaccia and Victorovca. The local population is multi- ethnic, populated also with Bulgarians and for about 2004 inhabitants, where 1012 men and 992 women live. In Ciobalaccia there is the Center of Hope and Faith that organizes different activities for youth and children of different ages. They plan to open a retirement center for old people. In the center of the locality functions a Health Center for inhabitants and also a functionable swimming pool in Victorovca village.
4. Tartaul is at 46,2069 latitude, 28,3213 longitude and 83 meters altitude above sea level. This locality is managed by the Mayoralty of Tartaul village. Tartaul locality has 1200 ha of agricultural land, most of it is covered with wine yards, where 2 factories that process the grapes are functioning. Likewise, there are orchards with plums with a workshop of drying plums and fruits, and fields corn, sun flower seeds, and grains. In the locality function 2 shops with construction material goods, 4 shops that sell food products and a car washing place.
On the territory of village Tartaul 179 children attend the secondary school “Delta” out of them 40 students come from neighboring localities Lingura and Craciun. There is also a kindergarten that is attended by 70 children. In the village is functioning a Museum of History and Ethnography. Currently 1171 people with residential visa live in Tartaul, out of them 604 men and 567 women. The direct distance to the town of Cantemir is 15 km. The direct distance to the town of Chişinău is 99 km.
5. The Enichioi locality is composed of the following 4 villages Enichioi, Floricica, Bobocica, and Tolica with maximum distance of 7 km between them. Enichioi is located at 46.2216 latitude, 28.4200 longitude and 98 meters above sea level. This locality is managed by the Mayoralty of the Enichioi. The local economy is composed of a mini factory of processing oil, 3 food shops, a big fridge that is processing the agricultural products, 8 economic agents that are working in the agriculture domain. In Enichioi there is a secondary school where 164 children attend it, where children from Bobocica and Tolica come as well. At the moment 1789 inhabitants live, where 986 are women and 803 men. The direct distance to the town of Cantemir is 25 km. The direct distance to the town of Chisinau is 91 km
6. Visniovca is located at 46.3333 latitude, 28.4494 longitude and 113 meters altitude above sea level. Visniovca village has a rather developed local economy represented via 19 economic agents: out of which 1 is an agricultural and production association, 7 LLCs and other 10 peasant's households, 4 individual enterprises and 7 food shops, most of the local economy is focused on agriculture and commerce. Likewise, there are 4 lakes where they grow fish. If there is needed to benefit of certain social services or sell their agricultural products, citizens are going to the towns of Cantemir or Comrat, which are 2 closest rayonal centers. The future of the local economy of Visniovca village is connected to ecological agriculture due to the average surfaces of agriculture fields (2420ha) and with the bonita of land of 69%.

In the village of Visniovca is functioning a secondary school where 137 students attend it and 22 children from Samalia village commute every day. Another unique description of this village is that it is a multiethnic locality where 12 ethnicities live in peace. The streets of the village are wide which makes it easy to develop infrastructure projects. At the moment 1437 inhabitants live in this village (655 men and 782 women).

7. Samalia is a small village where 756 inhabitants live, more specifically 382 women and 374 men. In 2017 the secondary school was closed and, therefore, 22 children are transported for education in the Secondary school of Visniovca, and in the local kindergarten 8 children attend it in a mixt group. The economy of this village is rather small: it is functioning 2 food shops, 1 LLC, 3 peasant's households and 2 enterprises that produce oil out of sunflower seeds. Nowadays continues to activate the public library, entertainment center and Center of family doctors

PROJECT'S ENVIRONMENTAL & SOCIAL IMPACTS Generally, no major project environmental and social impacts are expected. Most of them will be temporary and local, mostly during the construction phase and will cause only minor, localized and short-term negative effects. Most of these impacts will be mainly linked with the rehabilitation works such as leveling, grading, potholes patching, cracks priming, surfacing, quarrying, use of hazardous materials, such as combustive-lubricating ones, bitumen, etc., traffic of construction vehicles/hauling of road-building materials, building materials stockpiling and use of waste disposals. These impacts are common in road rehabilitation works and can be mitigated by existing management techniques.

Impacts originated from use of asphalt-concrete mixtures, bitumen and other hazardous materials, and their hauling from sites where they are produced to the sites where they are applied had been considered, as well. All these impacts are also common for such kind of works and can be easily mitigated through application of existing techniques and measures.

After completion, the project will have positive indirect impacts on human welfare, safety, health and socio-economic environment through reduced vehicles operating cost, decreased number of accidents; reduced air pollution resulted from vehicles emissions on rehabilitated road sections; cleaning up of roadside drains; reduced risk of soil pollution and erosion, and water pollution resulting from rehabilitation of drainage system, reduced risk of landslides due to slope stabilization, better access to settlements and markets, development of new business opportunities, etc.

The land requirements along the project corridor indicate that permanent acquisition of additional public and private land plots will be necessary to ensure safe and compliant road operation. Several sections require extra land to accommodate geometric improvements (increasing the radius of substandard curves, widening the carriageway, and adjusting longitudinal and transverse profiles), as well as the construction of new bus stops, the installation or extension of culverts, and the provision of adequate side ditches and stormwater drainage channels. These interventions are essential for enhancing road safety and climate resilience.

Although limited in extent, these acquisitions are critical to achieving the project objectives of improving traffic safety, ensuring effective water management, and enhancing the overall functionality and resilience of the road.

In several locations, land-take may also affect existing linear and point infrastructure, such as electricity distribution poles, overhead lines, private or communal wells, fences and other ancillary facilities. Where relocation is necessary, the Contractor and the Engineer will coordinate with the respective utility operators and owners to ensure timely dismantling, relocation and reconnection, while compensating affected assets in accordance with national legislation and the Project's resettlement requirements. These activities may generate

temporary access restrictions and short-term livelihood impacts, which will be mitigated through early notification, careful phasing of works and restoration of all disturbed assets and land.

Road users will feel only positive impacts as a result of improved transport infrastructure. First of all, these are:

- increased safety and comfortable traffic conditions;
- fuel economy and reduced wear of a running gear of a vehicle due to driving on a modern road surface and the provided possibility to choose an optimum mode and speed of movement.
- In addition, the design solutions provide for:
 - construction of bus shelters;
 - construction of ramp roads and junctions;
 - installation of stationary artificial lighting;
 - construction of sidewalks;
 - design solutions allowing the accessibility of the facility for low mobility groups.
 - handling of crosswalks;

To minimize potential construction-related negative environmental and social impacts, a combination of preventive actions and monitoring activities should be applied. All these necessary measures are provided in the Environmental and Social Mitigation Plan – Annex 2. Taking them into account, the contract documents for construction/rehabilitation phase will incorporate all requirements to minimize disturbance from civil works, including proper management of construction waste; control measures for waste fuel, oil and lubricants, other hazardous substances; provisions for protection of vegetation and fauna, including migratory species (if applicable), actions to reduce noise and dust levels; soil erosion control, land stabilization and water quality protection, and rehabilitation of areas under construction camp, asphalt-concrete plants and temporary storage of building materials once the project is completed. The necessary mitigating measures would constitute integral part of the project implementation including the contracts binding the contractors to carry out the environmental obligations during road rehabilitation works.

The contract clauses shall include requirements towards compliance with all national construction, health protection, safeguard laws and rules as well as on environmental protection as well as the “chance finds” provisions. Furthermore, the contractor will identify officers responsible for implementation of on environmental protection activities in conformity with instructions received from the design engineer, NRA and project environmental specialist or relevant environmental protection agency/agencies. Materials (e.g. asphalt, stone, sand, etc.) should be supplied only from sources with approved licenses, permits, and/or approvals to ensure environmental and workers safety, and any equipment to be used during construction should meet internationally recognized standards for environmental health and workers safety.

All contracts should specify that (a) contractors should follow a set of environmental and social guidelines for contractors prescribed by the ESMP; and (b) contractors should submit, as part of their bid, a site-specific Contractor’s Environmental and Social Management Plan (C-ESMP based on this ESMP and Annex 3, with the detailed description of implementing arrangements) including organization of training for participating staff.

The implementation of mitigation measures will be monitored by the NRA supervision engineer, jointly with the NRA and project environmental specialist.

Operational impacts will be addressed by NRA in order to avoid deterioration of road conditions and associated safety problems. Among major issues to be addressed during the operation phase are: proper functioning of drainage facilities, landslide and erosion control. During this phase, the potential negative impacts will result also from civil works to be executed as part of the regular maintenance. To minimize

potential operation-related negative environmental and social impacts, some preventive measures should be taken during the design phase, and then a combination of sound operational activities and monitoring should be carried out. The guidelines form the basis of contractual obligations that are to be fulfilled by road maintenance contractors. Contracts for maintenance will include specific clauses for environmental and social protection based on the guidelines.

According to the environmental and social screening no major environmental and social impacts are envisaged because the proposed road works will be carried out on the existing road alignments and within the ROW with several improvements on curves road facilities.

The construction of side roads, sidewalks, and improved access connections may necessitate the relocation of various fixed and informal assets situated within or along the existing Right of Way. These may include electricity towers and overhead lines, wells located in areas where bypass solutions are not feasible, and in some cases religious statues or roadside icons. Vegetation clearing will also be required, including the cutting of trees that interfere with the new road footprint or safety clearances. In addition, several informally established structures—such as fences, benches, small sheds, and household orchards—may be affected and will require removal or relocation. Many residential properties currently have paved access driveways that will be impacted during construction; these will need to be reconstructed to at least their pre-project condition. All such interventions will be carried out with prior notification, consultation with owners, and in accordance with the Project’s resettlement, compensation, and restoration requirements. All these aspects will be further detailed and addressed comprehensively in the Resettlement Action Plan (RAP).

However, some minor impacts may occur during construction such as dust, noise, construction debris and short-term disturbance to the daily business activities of road-side households/businesses, which can be mitigated by applying good construction practices and close supervision. Some additional potential impacts are expected because of labor influx for construction (for instance, GBV) but there are also potential benefits expected, such as construction-related jobs and improved road condition (which will also improve dust levels in the medium and long-term). Most project impacts are expected during construction, though some may be relevant during the maintenance phase, and life, of the project, in particular road safety.

To manage these impacts, the Contractor shall implement a series of preventive actions and minimization measures, as described in this section, to meet the requirements of national laws and the World Bank Environmental and Social Standards. The environment and social impact mitigation and management measures required during pre-construction, construction & operation phases of the project road are described in this section and summarized in Annex 2-3.

The identification of environmental and social risks/impacts due to construction of the project road, including detailed descriptions and corresponding mitigation measures, is summarized in the table below. This consolidated table integrates all identified impacts from the screening and assessment processes, ensuring comprehensive coverage without omission. Mitigation measures are aligned with World Bank Environmental and Social Standards that apply for this project, national regulations, and best international practices for road rehabilitation projects.

Identification of Environmental and Social Risks/Impacts due to construction of project road is summarized in the table below:

Components	Environmental and social Risks	Risk Type
Construction Phase		
Topography & Geology	<ul style="list-style-type: none"> • Change in existing profile of the land due to earthwork and rock excavation. • Disturbance on geological setting due to hill side cutting/quarrying resulting in the accumulation of debris material. 	Low risk
Soil	<ul style="list-style-type: none"> • Loosening of topsoil & loss of vegetative cover along the road due to excavation and back filling which will lead to enhanced soil erosion. 	Low risk
Land Acquisition and economic displacement	<ul style="list-style-type: none"> • Generation of debris waste in the form of excavated material/construction spoils from construction sites, including potentially unauthorized debris disposal in private land (including agricultural land). <ul style="list-style-type: none"> • Land use change: Minimal. The road remains within the existing right-of-way (ROW). Localized land-take is expected only where curve realignments, shoulder standardization, slope/ditch stabilization, bus-bays, guardrails, and visibility triangles at accesses require small strips of adjacent land (mostly agricultural margins). The total areas required amount on C24 are 2.3459 ha of public land and 0.0803 ha of private land, with an additional 0.7952 ha of public land and 2.9989 ha of private land anticipated under future development solutions. These acquisitions are limited in extent but are critical to achieving the project’s objectives of improving traffic safety, ensuring proper water management, and enhancing the overall functionality of the road. • Physical displacement: Not anticipated. No dwellings or auxiliary residential structures are expected to be demolished, as works remain within or directly adjacent to the existing ROW. • Economic displacement: Likely, but minor and localized. It may include partial loss of productive land (field edges, vineyard rows, orchard fringes), trees, temporary construction occupation, temporary access restrictions, and relocation of fences/field entrances/irrigation laterals. • Residential plots near the road: Impacts limited to boundary adjustments (e.g., fence shift to the legal ROW), driveway regrading, culvert/ditch reconfiguration, and temporary access constraints during works. No full plot loss is foreseen. • Other impacts on structures and object including cultural and community structures: impacts on wells that will require relocation or closure, impacts on cultural or religious objects including crosses. 	Moderate risk

	<ul style="list-style-type: none"> • Other impacts or access restrictions on natural resources: impacts on springs. <p>Agricultural lands neighboring the road: Narrow strips may be permanently acquired at curve-widening points and temporarily occupied for site compounds, equipment laydown, haul/service detours, and drainage works.</p>	
Drainage	<ul style="list-style-type: none"> • Chances of filling of existing drainage courses during earth filling. • Scouring of land in the outfall locations of culverts. 	Moderate risk
Water Use	<ul style="list-style-type: none"> • Impact on the local water sources due to its usage as construction water. 	Low risk
Water Quality	<ul style="list-style-type: none"> • Increase of sediment load in the runoff from construction sites and increase in turbidity in receiving streams/water bodies. • Water pollution due to sewage from construction camps. 	Moderate risk
Air Quality	<ul style="list-style-type: none"> • Deterioration of air quality due to fugitive dust emission from construction activities like excavation, backfilling & concreting, hauling & dumping of earth materials & construction spoils, and vehicular movement along unpaved roads. • Deterioration of air quality due to gaseous emissions from construction activities. 	Low risk
Noise Level	<ul style="list-style-type: none"> • Increase in noise level due to construction activities like operation of construction equipment and vehicular traffic. 	Low risk
Flora and Fauna	<ul style="list-style-type: none"> • Loss of flora & loss of habitat of fauna due to felling of trees along the ROW. 	Low risk
Construction Camp	<ul style="list-style-type: none"> • Influx of construction work force and supplier who are likely to construct temporary sheds in the vicinity (it is depending of Contractor arrangements. Usually local contractors are using local/regional available hosting. The international Contractor prefer to have their camps close to work site). • Likely sanitation and health hazards & other impacts on the surrounding environment due to inflow of construction laborers. • Health risks due to lack of health and sanitation conditions through disposal of sewage on open land which may cause mosquito nuisance, water borne diseases etc. Chances of spread of sexually transmittable diseases like AIDs. <p>The establishment of contractor’s work camps may cause adverse impacts if various aspects such as liquid and solid waste management, equipment maintenance, materials’ storage, and provision of safe drinking water are not addressed properly. The site for the work yard will be selected by the contractor.</p>	Moderate risk
Quarries, Borrow areas	Impacts on natural vegetation typically associated with opening new quarry or borrow areas, or constructing new detours and access roads, will	

and material disposal sites	<p>not occur, as the project will rely exclusively on existing licensed borrow pits and quarry sites.</p> <p>Quarry/borrow areas may have occupational health and safety and community health and safety risk (see relevant sections).</p> <p>There are risks related to temporary occupation of land as areas of temporary water storage.</p>	
Climate Risks and Vulnerability Assessment	<ul style="list-style-type: none"> • intense precipitation and local flooding, which may cause erosion, sediment runoff, temporary inundation of work areas, and delays in construction activities; • extreme heat, which may affect workers’ health and safety, reduce productivity, and influence the quality of asphalt laying and curing processes; • strong winds and storms, which may create unsafe working conditions, increase dust emissions, and damage temporary structures or stored materials; • freeze-thaw cycles and low temperatures, which may affect excavation stability, material performance, and construction scheduling. 	Moderate risk
Occupational Health & Safety	<p>Health & safety related risks to construction workers due to inadequate health & safety measures.</p> <p>Health & safety risks to workers in borrow pits or quarries from inadequate health & safety measures.</p>	Moderate risk
Road Safety	<ul style="list-style-type: none"> • Increase on incidence of road accidents due to disruptions caused in existing traffic movements. 	Moderate risk
Traffic safety	<p>Heavy traffic of large cars and trucks to and from construction sites and quarry/borrow sites, as well as partial closures of the carriageway complicate the road situation and increase the risk of road accidents involving contractor’s machinery, transit vehicles, pedestrians and cyclists from the local population.</p> <p>During the exploitation of road, the number of accidents caused by high speed may increase.</p>	Moderate risk
Access restrictions	<p>The construction activities as part of civil works on the road may cause temporary access restrictions to businesses, homes, land plots or other private or public facilities.</p>	Moderate risk
Labour risks associated with contracted workers	<p>Construction activities carry risks related to labour and working conditions, including lack of compliance with national labour laws and the project LMP.</p> <p>If foreign workers are involved, there are additional risks related to discrimination, abusive labour practices, and lack of access to health and accident insurance, improper training due to language barriers.</p>	Low risk

<p>Community Health and safety risks</p>	<p>The use of large construction equipment, the location of the contractor's camp with places of residence for the workforce, the partial blockage of traffic on the road, the involvement of flammable materials in the process of work can be a risk to the health and safety of residents living nearby. Also conflicts between local population and Contractor`s work force could be happening. Conflicts between the local population and the contractor's workforce can arise due to various factors, often stemming from differences in culture, language, socio-economic status, and expectations. The contractor's workforce may come from different regions or even different countries, bringing with them their own cultural norms and practices. These differences can lead to misunderstandings or clashes with the local population, especially if there's a lack of cultural sensitivity or awareness.</p> <p>Construction projects often impact the environment, whether through noise, pollution, or changes to the landscape. If the local population feels that their environment is being degraded or endangered by the contractor's activities, it can lead to protests or conflicts. Limited interaction and integration between the contractor's workforce and the local community can exacerbate tensions. Language barriers or cultural differences may hinder communication and bonding between the two groups, fostering distrust or hostility.</p> <p>The operation of borrow pits and quarries used for the project may carry community health and safety risks from open excavations, traffic and inadequate closure/rehabilitation. If there is blasting, drilling, or heavy equipment involved impacts on surrounding households could include noise, dust, and potentially impacts to structures.</p> <p>Addressing these underlying issues requires proactive measures such as community engagement, cultural sensitivity training for the contractor's workforce, transparent communication about project goals and impacts, and equitable distribution of benefits from the project to the local population. Building constructive relationships between the contractor, the local community, and relevant stakeholders is crucial for mitigating conflicts and ensuring the successful completion of the project.</p>	<p>Moderate risk</p>
<p>Sexual exploitation and gender-based violence (GBV)</p>	<p>Potential negative impacts related to women can include sexual exploitation, abuse, and sexual harassment, and gender-based violence (GBV) through the establishment of temporary, community-based workers' accommodation during the implementation of roadworks.</p>	<p>Low risk</p>
<p>Impacts on vulnerable groups</p>	<p>The social risks of the Project may also affect aspects of social inclusion, especially related to vulnerable groups and disadvantaged communities</p>	<p>Moderate risk</p>

	<p>and minorities. As per ESS 10, the stakeholder dialogues in the preparation of the SEP identified these vulnerable groups.</p> <p>Stakeholder dialogues are essential for understanding the perspectives and concerns of these groups, as outlined in Environmental and Social Standard 10 (ESS 10). By actively involving these stakeholders in the preparation of the Social and Environmental Plan (SEP), the project can better address their needs and mitigate potential negative impacts, thus promoting social inclusion and equity. This approach aligns with principles of responsible and sustainable development. Projects may affect vulnerable groups economically by disrupting their livelihoods or access to resources. Infrastructure projects may affect access to essential services such as water, sanitation, education, and healthcare. Vulnerable groups, including women, children, the elderly, and people with disabilities, may face barriers to accessing these services if they are not adequately considered in the project planning and implementation</p>	
Risk of spreading HIV / AIDS and viral diseases and Covid-19	The operation of long-term construction camps with permanent non-local labour increases the project risk associated with the spread of HIV / AIDS and viral diseases such as COVID-19.	Low risk
Operational Phase		
Land Use & Encroachment	<ul style="list-style-type: none"> • Change of land use by squatter/ encroachment within ROW and induced development outside the ROW. • New spaces generated due to shift in alignment could be encroached by local people or other people. 	Moderate risk
Drainage	<ul style="list-style-type: none"> • Environment degradation is due to improper maintenance of drainage. 	Moderate risk
Climate Risks and Vulnerability Assessment	<ul style="list-style-type: none"> • flooding or water accumulation on the carriageway and adjacent areas due to more intense rainfall events and insufficient drainage capacity; • higher temperatures and prolonged heatwaves, which may accelerate pavement deterioration, rutting, and deformation of asphalt surfaces; • more frequent freeze-thaw cycles, which may contribute to cracking, pothole formation, and reduced pavement lifespan; • erosion or slope instability in sensitive sections, potentially affecting embankments, shoulders, culverts, and other road structures; • reduced road safety caused by extreme weather events, including heavy rainfall, ice, snow, fog, or storm-related debris. 	Moderate risk
Air Quality	<ul style="list-style-type: none"> • Air pollution due to vehicular emission from road traffic. 	Low risk
Noise Level	<ul style="list-style-type: none"> • Noise pollution due to increased traffic. 	Low risk

Access	<ul style="list-style-type: none">• Significant severance problem on pedestrian & animal crossing and cross traffic due to widening, partially access control & increase in traffic speed.	Low risk
Road Safety	<ul style="list-style-type: none">• Impacts on human health due to accidents.• Damage of road due to wear and tear.	Low risk

5. MITIGATION OF POTENTIAL PROJECT ENVIRONMENTAL AND SOCIAL IMPACTS MITIGATION OF POTENTIAL PROJECT ENVIRONMENTAL AND SOCIAL IMPACTS

Components	Environmental and Social Risks	Risk Type	Mitigation Measures
Construction Phase			
Topography & Geology	<ul style="list-style-type: none"> • Change in existing profile of the land due to earthwork and rock excavation. • Disturbance on geological setting due to hill side cutting/quarrying resulting in the accumulation of debris material. 	moderate	<p>Implement erosion control measures such as silt fences, sediment basins, and slope stabilization using bio-engineering techniques (e.g., vetiver grass planting) during earthworks. Conduct pre-construction geological surveys to identify unstable areas and develop site-specific stabilization plans. Ensure debris is stockpiled in designated areas away from watercourses and rehabilitated post-construction per the Site Restoration Plan in the C-ESMP. Monitor slopes quarterly during construction, with NRA oversight, to prevent landslides.</p>
Soil	<ul style="list-style-type: none"> • Loosening of topsoil & loss of vegetative cover along the road due to excavation and back filling which will lead to enhanced soil erosion. 	moderate	<p>The main activities to reduce the impact that road reconstruction could have on the soil are:</p> <ul style="list-style-type: none"> · safe temporary storage of the soil so that it can be later re-used in the green rehabilitation works of the green areas. · removal of contaminated soil when accidental spills of petroleum products or mineral oils are identified; Temporary drainage and timely information to the public on the location, type and schedule of planned activities. <p>On the road sections of the route that pass through the villages, mud will be created during construction works and in order to minimize the discomfort, these sectors will be regularly cleaned, at certain intervals, as instructed by the Engineer-Supervisor.</p> <p>Other mitigation measures:</p> <ul style="list-style-type: none"> - Strip and store topsoil separately (20–30 cm humus layer) prior to excavation. - Place topsoil in designated, marked storage piles protected against erosion (berms, silt-fences, geotextile cover where needed). - Prevent mixing topsoil with subsoil, gravel, or sterile materials. - Reuse topsoil for rehabilitation of embankments, slopes, and green areas after construction. - Shape and compact embankments and cut slopes according to the approved design.

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Components	Environmental and Social Risks	Risk Type	Mitigation Measures
			<ul style="list-style-type: none"> - Stabilize vulnerable slopes using erosion-control mats, geomats, biodegradable blankets, or geotextile. - Install proper drainage structures (ditches, toe drains, catch channels) to control surface runoff. - Re-seed disturbed areas immediately after construction with native, erosion-resistant grass species. - Plant shrubs or deep-rooted vegetation on steep or sensitive slopes.
Land Use	<ul style="list-style-type: none"> • Generation of debris waste in the form of excavated material/construction spoils from construction sites. • Changes in existing land use pattern of the ROW for construction of the road. • Roadside agricultural public and private land will be affected by unauthorized debris disposal. 	Moderate	<p>In most cases the Contractor will lease the land from LPA to put temporary labor camp location and its machinery. At the end of the project the land has to correspond to the previous state of the land use. The location of the camp should be decided together with the mayoralty. Conduct pre-construction land use surveys to map ROW and adjacent agricultural lands. Develop a Debris Disposal Plan within the C-ESMP, designating licensed disposal sites and prohibiting unauthorized dumping. For temporary camps, require joint site selection with local authorities (mayorality) and include lease agreements ensuring full restoration to pre-project conditions, including topsoil replacement and revegetation. Monitor land use changes via monthly site inspections by the Contractor's Environmental, Health, and Safety Manager (EHSM), with reporting to NRA. Compensate affected agricultural lands per the Resettlement Policy Framework (RPF) for any verified losses.</p>
Drainage	<ul style="list-style-type: none"> • Chances of filling of existing drainage courses during earth filling. • Scouring of land in the outfall locations of culverts. 	Moderate risk	<p>Implement temporary drainage systems (e.g., diversion channels, geotextile filters) during earthworks to prevent siltation. Conduct pre-construction drainage assessments and rehabilitate all culverts with energy dissipation structures (e.g., riprap) at outfalls to minimize scour. Regular cleaning of drains during construction, with bi-weekly inspections, and post-construction verification by the Engineer-Supervisor to ensure functionality. Integrate into the Water Management Plan of the C-ESMP.</p>
Water Use	<ul style="list-style-type: none"> • Impact on the local water sources due to its usage as construction water. 	Low risk	<p>Identify water sources during pre-construction (e.g., rivers, ponds) with permissions from owners, local authorities, District Environmental Inspectorate, and National Administration "Apele Moldovei". Prohibit use of centralized systems or artesian wells for construction; prioritize low-impact sources and monitor usage to avoid competition with local</p>

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Components	Environmental and Social Risks	Risk Type	Mitigation Measures
Water Quality	<ul style="list-style-type: none"> • Increase of sediment load in the runoff from construction sites and increase in turbidity in receiving streams/water bodies. • Water pollution due to spills from construction camps. 	Moderate	<p>needs. Include in C-ESMP's Water Management Plan, with quarterly abstraction logs submitted to NRA.</p> <p>In order to minimize such risks, the following rules will be met: · execution of construction works, as much as possible, during the low water flow season in order to minimize the threat of water contamination; · carrying out excavations, minimizing the storage of materials near the running waters; · adequate protection to prevent the washing of the earth used as material. · minimizing the cutting of riverain vegetation during the implementation of the works. · not admitting the sediment discharges from washing the equipment directly into surface water, · these being unloaded in sedimentary lagoons and tanks. · installation in workplaces near the watercourses of mobile WCs, located firmly on land and at a suitable distance from rivers / small rivers, in accordance with the legislation in force, and their regular service. · supplying drinking water for the office and workers camps will be performed from the centralized aqueduct and connection to wastewater networks. · monitoring the water quality of rivers and lakes. Install sediment traps and silt fences around sites; treat camp sewage via septic systems connected to municipal networks or approved disposal. Conduct baseline and monthly water quality monitoring (turbidity, pH, sediments) by an accredited lab, per WHO and national standards.</p>
Air Quality	<ul style="list-style-type: none"> • Deterioration of air quality due to fugitive dust emission from construction activities like excavation, backfilling & concreting, hauling & dumping of earth materials & construction spoils, and vehicular movement along unpaved roads. • Deterioration of air quality due to gaseous emissions from construction activities. 	Moderate	<p>Air pollution due to construction techniques and trucks for transportation of construction materials may be reduced, to a certain extent, using equipment that is in good working condition from the very beginning, maintained and serviced appropriately throughout the construction works. Establishing rules of conduct can still be a good practice of good performance - by achieving strict speed control (especially in villages) and strictly requiring workers to stop engines when it is not necessary for them to work. In order to minimize the risk of damage due to dust, the contract and the C-ESMP will include provisions on regular road spraying, as necessary, during dry periods of time. When elaborating the dust suppression measures, water scarcity will be taken into account due to insufficient reserves and duly consideration will be given to the needs of local population in this respect (see below). Use low-emission equipment meeting international</p>

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Components	Environmental and Social Risks	Risk Type	Mitigation Measures
			standards; implement dust suppression via water spraying (considering local water needs) and covering stockpiles. Enforce speed limits (30 km/h in villages) and no-idling policies. Conduct bi-weekly air quality monitoring (PM10, NOx) near settlements.
Noise Level	<ul style="list-style-type: none"> • Increase in noise level due to construction activities like operation of construction equipment and vehicular traffic. • Prolonged exposure to vibrations could weaken the building foundations and can cause cracks and ceilings. This can lead to safety concerns and costly repairs. 	Moderate	Elevated noise levels cannot be entirely avoided during construction, but can be controlled at source, e.g. by fitting and maintaining appropriate mufflers on earth-moving and other vehicles on the site; by enclosing noisy equipment; by providing noise attenuation screens, where appropriate. Workers shall be sensitized about minimizing noise while working inside of or near to settlements (e.g. avoid idling of vehicles, minimizing the use of horns etc.). Local communities shall receive timely information on construction taking place in the villages. Working hours – including material transport - inside the settlements shall be limited such as to minimize nuisance for the local communities. Should unavoidable out-of-hours work occur local residents shall be given timely notice. Limit work hours (7 AM-7 PM) near settlements; use mufflers and barriers. Conduct pre-construction vibration surveys for nearby structures and compensate damages per verified claims. Monitor noise levels weekly near sensitive receptors.
Flora and Fauna	<ul style="list-style-type: none"> • Loss of flora & loss of habitat of fauna due to felling of trees along the ROW. 	Moderate	To minimize the damage to green areas at the edge of the road, the following conditions shall generally be met: Timely training, if necessary, on a daily basis, of the personnel involved in the works near the tree alignments of the road; Not allowing the temporary storage of construction materials, excavated soil, inert waste and other materials in immediate vicinity to trees and shrubs (at least 1.5 meters). Prohibition of any excavation or compaction works near the trees without the permission of the competent institutions; Temporary fencing of work sites and storages around the green areas with fences (made of wood or other light material); Installation of tree protection signs at certain intervals. The indicators must contain the information, „Tree protection area; Respect the distance”. The Contractor will be responsible for the tree clearance and accidental destruction, direct or indirect, unplanned due to the carried-out activities. In order to encourage the careful and proper execution of site works, the unintended / unplanned tree losses because of the Contractor will have to be compensated, at the

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Components	Environmental and Social Risks	Risk Type	Mitigation Measures
			<p>Contractor’s own expenses at the rate of 3:1. The trees in the RoW are the property of the NRA, therefore, for any planned deforestation, the Contractor shall obtain the agreement from the local subdivision of the NRA and the Deforestation authorization of the District Ecological Inspectorate. The cut wood after deforestation will be taken to the local offices of the NRA. Prior to commencing tree deforestation, the Contractor, in the presence of the owner and representative of the State Environment Inspectorate. IER, shall clearly mark the trees to be cut and properly record the number and size of these trees (the diameter at breast height), to determine the species and the place of reference for subsequent replacement with other trees. Instead of the deforested trees, new plantations will be planted at a 2:1 rate in case of trees of DBH ≤30 cm or 3:1 rate in case of some trees taller than DBH. To minimize the damage to bird nesting during the breeding period, their cutting will be restricted until the end of the breeding period (i.e. the limited period will be from September to mid-March). Planting of trees and shrubs along the roads of the Project is usually carried out upon the completion of these works. But if the section is released for planting before the end of the works it is recommended to plant the trees in advance. Planting details, such as compensating species, the exact planting places, interval between newly planted trees, etc., will be established in a joint consultation between the Contractor, the Engineer, the NRA representatives and the District Environmental Inspectorate. Preferably, according to the Project, only aboriginal species adapted to the environmental conditions in the area should be used for planting. Obtain deforestation permits; compensate at 2:1 or 3:1 ratio with native species. Fence protected areas; restrict cutting to non-breeding seasons. Post-construction revegetation monitored annually.</p>
Construction Camp	<ul style="list-style-type: none"> • Influx of construction work force and supplier who are likely to construct temporary sheds in the vicinity (it is depending of Contractor arrangements. Usually local contractors are using local/regional available hosting. 	Moderate	<p>The Engineer-Supervisor's approval is required to select the location of the camp for office and containers for workers. The NRA, however, encourages the Contractors to explicitly use the existing facilities for accommodating their staff and the existing industrial facilities in the area as they are at a distance close to the road site. The proposed environmental management mechanism will be described in the Contractor Specific Plan, developed and approved in the manner</p>

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Components	Environmental and Social Risks	Risk Type	Mitigation Measures
	<p>The international Contractor prefers to have their camps close to work site). • Likely sanitation and health hazards & other impacts on the surrounding environment due to inflow of construction laborers. • Health risks due to lack of health and sanitation conditions through disposal of sewage on open land which may cause mosquito nuisance, water borne diseases etc. Chances of spread of sexually transmittable diseases like AIDs. The establishment of contractor’s work camps may cause adverse impacts if various aspects such as liquid and solid waste management, equipment maintenance, materials’ storage, and provision of safe drinking water are not addressed properly.</p>		<p>established by the Engineer, for the construction phase, detailing the approach and measures. If the Contractor decides to place his living quarters with all working facilities, accommodation of workers, kitchens and / or offices with all necessary hygienic facilities, shall be taken all necessary measures for an appropriate solid waste management system and sewer operation. In the Contractor's ESMP shall be included measures to ensure safe storage and relocation of potentially hazardous materials, such as fuels, lubricants and other products, while minimizing the risk of accidental leakage and pollution soil or waste water. Also, in this Contractor’s ESMP will be addressed the anti-incendiary requirements for the camp area and its territory. Develop and approve Camp Management Plan including layout, sewage (sanitary latrines, septic systems), waste (bins, licensed disposal), and fuel storage (bunded, >50m from water). Consult local authorities for site selection and water sources; provide potable water per standards. Conduct bi-annual health awareness training; monitor sanitation weekly.</p> <p>The site for the work yard will be selected by the contractor. To ensure that potentially resulting impacts are kept at a minimum the contractor will be required to prepare the following plans or method statements:</p> <ul style="list-style-type: none"> · Layout plan of the work camp including a description of all precautionary measures proposed to avoid potential adverse impacts on the receiving environment (surface and ground water, soils, ambient air, human settlement); · Sewage management plan for provision of sanitary latrines and proper sewage collection and disposal system to prevent pollution of watercourses or groundwater; · Waste management plan covering the provision of garbage bins, regular collection and disposal in a hygienic manner, as well as proposed disposal sites for various types of wastes (e.g., domestic waste, used tires, etc.) consistent with applicable national regulations; and · Description and layout of equipment maintenance areas and lubricant and fuel storage facilities including distance from water sources and irrigation facilities. Storage facilities for fuels and chemicals will be located away from watercourses. Such facilities will be bounded and provided with impermeable lining to contain spillage and prevent soil and water contamination. These plans will be approved by the Engineer prior to beginning of construction. Prior to establishment of the work

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			camp(s) the contractor shall conduct consultations with local authorities to identify sources of construction water and potable water for the workforce that will not compete with the needs of the local population. Potable water for the workforce shall comply with the national quality standards.
Occupational Health & Safety	<ul style="list-style-type: none"> • Health & safety related problems to construction workers due to inadequate health & safety measures. Specific risk is: <ul style="list-style-type: none"> - Worker exposure to moving heavy machinery and collision risks in confined or poorly signaled work zones. - Unsafe excavation works (risk of trench collapse, falls, and entrapment). - Working at heights, including bridge elements, culverts, and slope stabilization operations. - Insufficient use of PPE leading to injuries (cuts, eye injuries, hearing loss, chemical exposure). - Traffic-related risks due to poor traffic management and interaction between construction traffic and public traffic. - Electrical hazards, welding works, and use of high-power equipment. - Noise, dust, and vibration exposure affecting both workers and nearby residents. 	Moderate	<p>Contractor will prepare the OHS Plan, subject to NRA and Engineer approvals before works commencement.</p> <p>All contractors will be required to follow Project’s LMP, including procedures to establish and maintain a safe working environment as per requirements of ESS2 and national legislation.</p> <p>A Health and Safety Plan must be prepared and approved prior to any works commencing on site and also become a part of Contractor ESMP. The H&S Plan must demonstrate the Contractor’s understanding of how to manage safety and a commitment to providing a workplace that enables all work activities to be carried out safely. The H&S Plan must detail reasonably practicable measures to eliminate or minimize risks to the health, safety and welfare of workers, contractors, visitors, and anyone else who may be affected by the operations. The H&S Plan must be prepared in accordance with the World Bank’s EH&S Guidelines and the relevant country health and safety legislation. All contractors and subcontractors will be required to have a written contract with their workers materially consistent with objective of ESS2 and will have a workers grievance mechanism. Road improvement works do not exclude health and safety risks, so all workers will need to be equipped with the necessary personal protective equipment, according to the standards in force and the relevant legal requirements for the risks at the individual workplace. The road constructions require the following equipment from the personal endowment, but not limited to: Protective footwear: Shoes with non-slip sole and cannot be pierced. Footwear with a protected toe to prevent crushing injuries to the toes (when working around equipment or heavy objects that can fall over the toes); Protective gloves: Workers should wear appropriate gloves depending on the work performed (e.g. rubber gloves for heavy duty concrete work, gloves for welding, insulated gloves and sleeves, when there is a risk of exposure to electric current); Protective helmets: Workers must wear helmets</p>

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Components	Environmental and Social Risks	Risk Type	Mitigation Measures
	<ul style="list-style-type: none"> - Heat stress, dehydration, and fatigue, especially during summer works. - Lack of emergency preparedness and poor first-aid response capacity. - Poor housekeeping on site creating trip/fall hazards and increasing accident potential. 		<p>made of rigid material in case of objects falling over their heads, hitting the head of some fixed objects, or accidentally contacting the head with a dangerous place i.e. electrocution; Ear protection: In the event of a loud noise during the operation of a chain saw or heavy noisy technique, ear protectors / ear muffs shall be worn; Clearly visible clothing: All workers, including emergency response brigades in exceptional cases, which can occur at the roadside and are at risk from traffic, transport, or work equipment in the organization area temporary road traffic, shall always wear brightly colored clothing with reflective effect, visible during day and night. The responsible person of the Contractor (EHSM) will organize for all the workers before starting the work, basic training on risks at individual workplaces. During the work according to a predetermined schedule, they will periodically have thematic trainings on these aspects of health and safety at work. For health and technical security purposes, Health conveniences on site (mobile WCs) shall be provided at appropriate locations after consultation with local authorities. Responsible for the service of these commodities will be a sub-contractor, who will take care of them at certain intervals and in accordance with the legislation in force. The places proposed for these conveniences will be determined by the Contractor / Manager of the Contractor responsible for the environment and technical security and will be approved by the Engineer-supervisor before starting the works. According to legislation the meal and water has to be provided to workers. In case of employment of a large number of not local workers that are accommodated on the site, a specific HIV/AIDS awareness campaign shall be organized, foreseen at an early stage of project construction works and repeated over appropriate intervals. From similar Projects up to 70 employees can be hosted during construction period. The detailed information on Labor H&S are provided in LPM developed for MRCP. Approve OHS Plan per ESS2; provide PPE (helmets, gloves, etc.) and mandatory training (initial + periodic). Establish GRM for workers; provide sanitation and meals. Monitor incidents monthly, reporting to NRA.</p>

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Traffic Safety	<ul style="list-style-type: none"> Increase on incidence of road accidents due to disruptions caused in existing traffic movements. 	Moderate	<p>To effectively manage such issues the Contractor shall prepare a Road Traffic and Safety Management Plan identifying risks that may occur during the various stages of construction and that may affect road users / users of public space in villages. The Plan will describe efficient traffic and road safety management arrangements that will be implemented at the various stages of construction including specific provisions for drivers, cyclists, and pedestrians as appropriate. Proper securing of ongoing construction sites during construction and out of working hours (e.g. during the night and / or during weekends or public holidays) shall be specifically addressed. The Plan will require approval by the Traffic Police (National Police) as well as timely review and approval from the Engineer-Supervisor. Road safety and road safety issues will be identified in this plan and temporary organizational measures will be presented, which will need to be provided at all stages of road rehabilitation and in all places where there are road safety issues and risks. Measures may include but not be limited to the provision of flagmen during the day, the use of various types of signalizations, temporary detours, provision of temporary safety barriers, provision of appropriate measures and/or devices to secure road safety where construction sites may need to be left open during the night. Appropriate training of all construction workers on the provisions of the Plan and strict enforcement thereof will help to maximize efficiency. Active communication with the local authorities, timely information of the public on construction schedules can help to increase awareness and preparedness of road users and to generally increase road safety conditions during construction. Develop and approve Traffic Management Plan with police; use signage, flagmen, barriers. Train workers; inform communities weekly on schedules.</p>
	Heavy traffic of large cars and trucks to and from construction sites, as well as partial closures of the carriageway complicate the road situation and increase the risk of road accidents involving contractor's machinery, transit	Moderate risk	As above (integrated with Road Safety measures); enforce speed limits and vehicle escorts during peak hours. Post-construction, install speed humps and signage to mitigate high-speed risks, monitored by Traffic Police.

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	vehicles, pedestrians and cyclists from the local population. During the exploitation of road, the number of accidents caused by high speed may increase.		
Access Restrictions	The construction activities as part of civil works on the road may cause access restrictions to homes, land plots or other private or public facilities.	Moderate	To minimize associated nuisance the Contractor shall envisage appropriate and timely provisions for alternative access and provide such local facilities as to ensure all time accessibility of relevant assets, including agricultural land. Early communication with the affected individuals will be important to increase the acceptance of such temporary inconveniences and to achieve a good relationship with the local population. Provide temporary access ramps/paths; notify affected parties 48 hours in advance via community meetings. Monitor access daily; compensate verified disruptions per RPF.
Labor Risks Associated with Contracted Workers		Low	<p>Ensure all contracts include ESS2-compliant terms (fair wages, hours, non-discrimination); prioritize local hiring (20-25%). Establish worker GRM; conduct quarterly audits by EHSM.</p> <p>All contractors will be required to have a written contract with their workers materially consistent with objective of ESS2. The number of workers is estimated to be approximately 150 for the entire project but not all at the same time according to the work program and method statement. According to the procurement plan for this project, 1 or 2 contractors and subcontractors will do the works. All contractors and subcontractors will be required to have a written contract with their workers materially consistent with objective of ESS2 and will have a workers grievance mechanism.</p> <p>The LMP is developed and is applied for monitoring and mitigation of Labor Risks Associated with Contracted Workers.</p>
Child Labour in Civil Works for Road Rehabilitation	Prohibited under Moldavian law. LMP is prepared for monitoring and supervision of potential risk of child labor.	Low	Enforce zero-tolerance policy per national law and ESS2; include in contracts and training. Monitor via unannounced inspections; report incidents to NRA and authorities.

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Components	Environmental and Social Risks	Risk Type	Mitigation Measures
Community Health and Safety Risks	<p>The use of large construction equipment, the location of the contractor's camp with places of residence for the workforce, the partial blockage of traffic on the road, the involvement of flammable materials in the process of work can be a risk to the health and safety of residents living nearby. Also conflicts between local population and Contractor's work force could be happening. Conflicts between the local population and the contractor's workforce can arise due to various factors, often stemming from differences in culture, language, socio-economic status, and expectations. The contractor's workforce may come from different regions or even different countries, bringing with them their own cultural norms and practices. These differences can lead to misunderstandings or clashes with the local population, especially if there's a lack of cultural sensitivity or awareness. Construction projects often impact the environment, whether through noise, pollution, or changes to the landscape. If the local population feels that their environment is being degraded or endangered by the contractor's activities, it can lead to protests or conflicts. Limited interaction and integration between</p>	Moderate	<p>Implement Influx Management Plan with cultural training for workers; conduct monthly community engagement sessions via SIMC. Secure sites with proper fencing, provide fire safety for flammable materials. Monitor conflicts via GRM;</p> <p>The Contractor will implement a structured community safety awareness campaign, including:</p> <ul style="list-style-type: none"> - Informational meetings with local leaders, schools, elderly groups, and farm owners ((via SIMC)). - Distribution of leaflets, posters, and visual materials explaining construction phases, specific hazards, and safe behavior near worksites. - Public warnings near schools, playgrounds, markets, and bus stations to inform parents and children about traffic and machinery risks. - Installation of visible safety signage (danger zones, detours, reduced speed zones). - Regular communication with the local mayoralities to ensure residents receive timely updates (via SIMC).

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	<p>the contractor's workforce and the local community can exacerbate tensions. Language barriers or cultural differences may hinder communication and bonding between the two groups, fostering distrust or hostility. Addressing these underlying issues requires proactive measures such as community engagement, cultural sensitivity training for the contractor's workforce, transparent communication about project goals and impacts, and equitable distribution of benefits from the project to the local population. Building constructive relationships between the contractor, the local community, and relevant stakeholders is crucial for mitigating conflicts and ensuring the successful completion of the project.</p>		
<p>Increased Traffic Congestion and Accidents</p>	<p>1. Increased traffic flow on public streets and introduction of restrictions on traffic and/or pedestrians. 2. Impact on road surface 3. The possibility of an accident occurring during construction that could affect construction workers, the local population and/or the environment on site.</p>	<p>Moderate</p>	<p>As per Traffic Management Plan; use detours and signals to minimize congestion. Emergency response protocols in OHS Plan; quarterly drills.</p>

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Components	Environmental and Social Risks	Risk Type	Mitigation Measures
Sexual Exploitation and Abuse / Sexual Harassment	Potential risks of SEA/SH arising from presence of workers and/or establishment of temporary, community-based workers' accommodation during the implementation of roadworks. The influx of labor, interaction between workers and local communities, and socio-economic vulnerabilities present elevated risks of Gender-Based Violence (GBV), including Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH). One of the principal GBV risks is the presence of a predominantly male workforce, often composed of transient or subcontracted workers, which can create imbalances in power dynamics within host communities. These risks are particularly heightened in areas where social services and law enforcement capacities are limited, and where community members may be economically vulnerable, increasing the potential for exploitative behavior. In this context, SEA can arise when individuals in positions of perceived authority (e.g., contractors, supervisors, security personnel) misuse their role to solicit or coerce sexual favors in exchange for jobs, services, or material benefits. Sexual	Low	Contractor will have in place a Code of Conduct to prevent, respond and monitor sexual exploitation and abuse / sexual harassment (SEA / SH) incidents. Complaints related to SEA / SH cases shall be handled in accordance with the project's GRM in a survivor centred and confidential manner including anonymous complaints. . All SEA/SH incidents, with consent from survivor, shall be reported immediately to NRA. Mandatory SEA/SH training for all workers; confidential GRM with anonymous reporting. Zero-tolerance policy; refer cases to authorities. Monitor via quarterly surveys. Recognizing, assessing, and mitigating GBV/SEA/SH risks is a critical component of the project's environmental and social management plan.

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

National Road Administration Corridor 24: R34 – Ciobalaccia – Tartaul – G132 – Baimaclia – Enichioi – R35

Components	Environmental and Social Risks	Risk Type	Mitigation Measures
	<p>harassment may occur on construction sites or in offices, affecting both female employees and community stakeholders engaging with the project. Additionally, local girls and young women may be especially at risk due to their age, economic dependency, or lack of awareness regarding their rights. Further exacerbating these risks is the lack of familiarity with international GBV standards among contractors, and the potential absence of robust, confidential grievance mechanisms for survivors to report incidents without fear of stigma or retaliation. Failure to address these risks could undermine community trust, affect worker morale, and expose the project to reputational and legal consequences.</p>		
<p>Impacts on Vulnerable Groups</p>	<p>The social risks of the Project may also affect aspects of social inclusion, especially related to vulnerable groups and disadvantaged communities and minorities. As per ESS 10, the stakeholder dialogues in the preparation of the SEP identified these vulnerable groups. Stakeholder dialogues are essential for understanding the perspectives and concerns of these groups, as outlined in Environmental and</p>	<p>Moderate risk</p>	<p>Per ESS10 and SEP, prioritize vulnerable groups in consultations; ensure designs include accessibility (e.g., ramps for disabled). Monitor impacts via SIMC; provide targeted support (e.g., alternative access).</p>

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

National Road Administration Corridor 24: R34 – Ciobalaccia – Tartaul – G132 – Baimaclia – Enichioi – R35

Components	Environmental and Social Risks	Risk Type	Mitigation Measures
	<p>Social Standard 10 (ESS 10). By actively involving these stakeholders in the preparation of the Social and Environmental Plan (SEP), the project can better address their needs and mitigate potential negative impacts, thus promoting social inclusion and equity. This approach aligns with principles of responsible and sustainable development. Projects may affect vulnerable groups economically by disrupting their livelihoods or access to resources. Infrastructure projects may affect access to essential services such as water, sanitation, education, and healthcare. Vulnerable groups, including women, children, the elderly, and people with disabilities, may face barriers to accessing these services if they are not adequately considered in the project planning and implementation.</p>		
<p>Risk of Spreading HIV / AIDS and Viral Diseases and Covid-19</p>	<p>The operation of long-term construction camps with permanent non-local labour increases the project risk associated with the spread of HIV / AIDS and viral diseases such as COVID-19.</p>	<p>Low</p>	<p>HIV/AIDS and STDs Prevention Measures:</p> <ul style="list-style-type: none"> · Launching awareness programs on HIV/AIDS and STDs prevention for PAP in the vicinity of the site camp · Launching awareness programs on HIV / AIDS prevention and STDs for construction workers · Introducing intervention clauses in the construction contracts for the prevention of HIV and STDs · Discourage drug abuse (alcohol and narcotics). Taking into consideration local work force when hiring for construction and maintenance sites. · Focus on transportation workers with high-risk behavior (including young workers), ensuring an education at their level. · Conceiving general messages to the workforce as well as men and

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

National Road Administration Corridor 24: R34 – Ciobalaccia – Tartaul – G132 – Baimaclia – Enichioi – R35

Components	Environmental and Social Risks	Risk Type	Mitigation Measures
			<p>women. · Use professional organizations such as NGOs and COs that deal with HIV prevention. · Designing HIV prevention programs in communities along the road, adapted to specific needs, local language and traditional/preferred communication tools. · Popularization and increase of condom acceptability through condom promotion campaigns and social marketing in communities along the road. · Free distribution of condoms to men and women, construction workers, women working in the project area and young people. Provide complete information on access to HIV and STDs services · Educate communities and workers about how to avoid STDs, how to recognize the common symptoms of STDs, and how to seek treatment through confidential addressing systems. · Provide information on voluntary testing and counseling services in the project area or anywhere near the project area · Make public the existence of anonymous voluntary testing and counseling services (testing, pretesting and post-test counseling) Provide information on access to opportunistic infections · Educate people how to avoid opportunistic infections, how to recognize the common symptoms of these diseases, and how to seek treatment. Study health care aids and services in transport organizations and evaluate worker involvement in receiving HIV and AIDS care. A requirement and a reporting system to the NRA and the responsible government authorities, of suspicions or known THB incidents, as well as the relegation of potential victims to law enforcement agencies. Mandatory awareness campaigns (initial + quarterly); free condom distribution; integrate COVID-19 protocols (masking, distancing). Partner with NGOs for testing/counseling.</p>
Resettlement and Land Acquisition	The temporary resettlement could affect people with borders of the land neighbouring the permanent area where the road will pass. Permanent damage of the acquired land by the Design of the road.	Moderate	The land acquisition must be done before the beginning of works, there could be cases when a couple of meters from the acquired land was not given the proper money or it was omitted when it was measured first time in order to pay. The PAP could file for a complaint of a small parcel that was not paid. As in terms of temporary resettlement, the PAP would expect monetary retribution for temporary loss of harvest for the time when the works would be carried out. From previous cases, people would expect that the land one is rearranging the plot of land the same stage as it was before it was used for temporary resettlement. Implement

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

National Road Administration Corridor 24: R34 – Ciobalaccia – Tartaul – G132 – Baimaclia – Enichioi – R35

Components	Environmental and Social Risks	Risk Type	Mitigation Measures
			RPF fully pre-construction; verify payments and restore lands post-temporary use. GRM for complaints; compensate crop losses at market rates.
Operational Phase			
Land Use & Encroachment	<ul style="list-style-type: none"> • Change of land use by squatter/encroachment within ROW and induced development outside the ROW. • New spaces generated due to shift in alignment could be encroached by local people or other people. 	Moderate	Monitor ROW quarterly for encroachments; enforce boundaries via signage and patrols. Promote equitable induced development through SEP consultations; regulate via local authorities.
Drainage	<ul style="list-style-type: none"> • Environment degradation is due to improper maintenance of drainage. 	Moderate	Regular maintenance contracts with NRA; seasonal inspections and cleaning. Integrate bio-drains for sustainability.
Air Quality	<ul style="list-style-type: none"> • Air pollution due to vehicular emission from road traffic. 	Low	Promote low-emission vehicles; annual emission monitoring. Plant roadside trees to filter pollutants.
Noise Level	<ul style="list-style-type: none"> • Noise pollution due to increased traffic. 	Low	Install noise barriers near settlements; enforce speed limits. Monitor annually.
Access	<ul style="list-style-type: none"> • Significant severance problem on pedestrian & animal crossing and cross traffic due to widening, partially access control & increase in traffic speed. 	Low	Design includes pedestrian crossings and underpasses; maintain access during widening. Community monitoring via SIMC.
Road Safety	<ul style="list-style-type: none"> • Impacts on human health due to accidents. • Damage of road due to wear and tear. 	Low	Install signage, lighting, and rumble strips; regular maintenance. Traffic Police monitoring; awareness campaigns.

The above table provides a consolidated framework for mitigation, drawing from the detailed measures outlined in the ESMP. Pre-construction activities include procurement of compliant equipment, site selections, and C-ESMP preparation (including OHS, Waste, Influx, Traffic, and GRM plans), approved by NRA. Construction activities emphasize site-specific implementation, monitoring (air, noise, water, soil), and addressing social issues like vibrations, utility disruptions, GBV, and diseases via Codes of Conduct and awareness. Operational phase focuses on NRA-led maintenance, monitoring, and bio-engineering. Contractual aspects require lump-sum budgeting for mitigations, licensed materials, and high standards per ESS and national laws. The Social Impact Monitoring Committee (SIMC) will oversee community inputs, enhancing transparency and trust. Positive impacts post-completion include enhanced safety, reduced emissions/dust, economic opportunities, and equitable benefits per ESS10, monitored through SEP and GRM.

2. MITIGATION OF POTENTIAL PROJECT ENVIRONMENTAL AND SOCIAL IMPACTS

This chapter presents the mitigation measures to be implemented to avoid, minimize, reduce, or compensate for the potential environmental and social impacts identified in Chapter 5.

To minimize potential *construction-related negative environmental impacts*, a combination of preventive actions and monitoring activities should be applied. All these necessary measures are provided in the Environmental and Social Mitigation Plan – Annex 2. Taking them into account the contract documents for construction/rehabilitation phase will incorporate all requirements to minimize disturbance from civil works, including proper management of construction waste; control measures for waste fuel, oil and lubricants, other hazardous substances; provisions for protection of vegetation and fauna, including migratory species (if applicable), actions to reduce noise and dust levels; soil erosion control, land stabilization and water quality protection, and rehabilitation of areas under construction camp, asphalt-concrete plants and temporary storage of building materials once the project is completed. The necessary mitigating measures would constitute integral part of the project implementation including the contracts binding the contractors to carry out the environmental obligations during road rehabilitation works.

The contract clauses shall include requirements towards compliance with all national construction, health protection, safeguard laws and rules as well as on environmental protection as well as the “chance finds” provisions. Furthermore, the contractor will identify officers responsible for implementation of on environmental protection activities in conformity with instructions received from the design engineer, SRA and project environmental specialist or relevant environmental protection agency/agencies. Financial penalties will be associated with compliance failure but with overall coverage by the contractors. Materials (e.g. asphalt, stone, sand, etc.) should be supplied only from sources with approved licenses, permits, and/or approvals to ensure environmental and workers safety, and any equipment to be used during construction should meet internationally recognized standards for environmental health and workers safety.

All contracts should specify that (a) contractors should follow a set of environmental guidelines for contractors prescribed by the ESMP; and (b) contractors should submit, as part of their bid, a site-specific Contractor’s Environmental and Social Management Plan (C-ESMP based on this ESMP and Annex 3, with the detailed description of implementing arrangements) including organization of training for participating staff.

The implementation of mitigation measures will be monitored by the SRA supervision engineer, jointly with the SRA and project environmental specialist.

Operational impacts will be addressed by SRA in order to avoid deterioration of road conditions and associated safety problems. Among major issues to be addressed during the operation phase are: proper functioning of drainage facilities, landslide and erosion control. During this phase, the potential negative impacts will result also from civil works to be executed as part of the regular maintenance. To minimize potential operation-related negative environmental impacts, some preventive measures should be taken during the design phase, and then a combination of sound operational activities and monitoring should be carried out. The guidelines form the basis of contractual obligations that are to be fulfilled by road maintenance contractors. Contracts for maintenance will include specific clauses for environmental and social protection based on the guidelines.

According to the environmental and social screening no major environmental and social impacts are envisaged because the proposed road works will be carried out on the existing road alignments and within the ROW,

However, some minor impacts may occur during construction such as dust, noise, construction debris and short-term disturbance to the daily business activities of road-side households/businesses, which can be mitigated by applying good construction practices and close supervision. Some additional potential impacts are expected because of labor influx for construction (for instance, GBV) but there are also potential benefits expected, such as construction-related jobs and improved road condition (which will also improve dust levels in the medium and long-term). Most project impacts are expected during construction, though some may be relevant during the maintenance phase, and life, of the project, in particular road safety.

To manage these impacts, the Contractor shall implement a series of preventive actions and minimization measures, as described in this section, to meet the requirements of national laws and the World Bank Environmental and Social Standards.

The environment and social impact mitigation and management measures required during pre-construction, construction & operation phases of the project road are described in this section and summarized in Annex 2-3

6.1 Soil

The possible impact on land near the road in the improvement process is expressed by soil pollution that causes disturbances in its normal functioning as an environmental factor, especially by affecting the bio reproductive capacity of the soil.

The genesis and evolution of soil types are directly related to the geological substrate, climatic and vegetation conditions, the relief setting, the influence of groundwater, and human intervention.

The possible sources of pollution are as follows:

- Accidental fuel and lubricant leakage to machinery supply, repair work as well as unsatisfactory technical equipment;
- backfill for the construction of road infrastructure and utility networks;
- soil infiltration of pollutants and pollutant emissions, as well as chemical reactions in contact with water;
- solid household waste.

The most important aspect of the problem is the earth mass that will support various interventions. The statement refers to earthworks that lead to soil degradation in the work area. In affected areas, full restoration of vegetation lasts between 5 and 15 years.

The negative impact on the land is expressed by the excavation / elimination of the vegetal soil layer and the change of the morphological aspect through excavations and sloping.

The negative impact on land is expressed by:

- disturbance of soil horizons, soil elimination works consisting of excavation, evacuation and transportation of surplus land (usually fertile soil);
- damage to flora and microflora due to excavations, with natural geochemical modification of soil elements.
- The main activities to reduce the impact that road reconstruction could have on the soil are:
- safe temporary storage of the soil so that it can be later re-used in the green rehabilitation works of the green areas.

- removal of contaminated soil when accidental spills of petroleum products or mineral oils are identified;

The excavations and the temporary storages of the excavated soil, as well as the construction works, replacement or repair of drainage structures, are potential negative impacts on drainages in the construction and surrounding areas, resulting in discomfort and dangerous road safety for all participants in road traffic and / or native population.

To prevent such situations, measures are proposed such as temporary drainage and timely information to the public on the location, type and schedule of planned activities. On the road sections of the route that pass through the villages, mud will be created during construction works and in order to minimize the discomfort, these sectors will be regularly cleaned, at certain intervals, as instructed by the Engineer-Supervisor.

6.2 Surface waters

During the works, the rivers and lakes can be unintentionally contaminated by spillages and accidental spills due to working techniques, improper waste management or storage during construction, or erosion during work performed near the surface water courses. Aquatic objectives may also be polluted by uncontrolled leakage of wastewater, household and construction waste from the camp (if any). In places of construction and rehabilitation of the culverts, it is possible to disturb the waters and its silting. During the rains, the construction materials, such as gravel, sand, the earth filler, could be washed and taken to the rivers and water courses.

In order to minimize such risks, the following rules will be met:

- execution of construction works, as much as possible, during the low water flow season in order to minimize the threat of water contamination;
- carrying out excavations, minimizing the storage of materials near the running waters;
- adequate protection to prevent the washing of the earth used as material.
- minimizing the cutting of riverain vegetation during the implementation of the works.
- not admitting the sediment discharges from washing the equipment directly into surface water, these being unloaded in sedimentary lagoons and tanks.
- installation in workplaces near the watercourses of mobile WCs, located firmly on land and at a suitable distance from rivers / small rivers, in accordance with the legislation in force, and their regular service.
- supplying drinking water for the office and workers camps will be performed from the centralized aqueduct and connection to wastewater networks.
- monitoring the water quality of rivers and lakes

6.3 Groundwater

These are represented by mine wells and springs located within the RoW (right of way) or near the RoW. During construction works, there is a risk of negative impacts (e.g. dust or other air pollution when these wells do not have a cover, or unorganized surface water leakage or leakage of harmful substances in the event of accidents). The risk of pollution remains in effect during operation due to the location of wells in the vicinity of the road. In order to know the initial quality of water from decentralized sources, it is recommended to provide a water quality test plan in all the wells located at a distance of about 5 m from the edge of the road, which corresponds approximately to the width of the road.

These tests will be done before starting the construction works in order to examine the current situation based on current national standards and the World Health Organization's guiding principles on drinking water

quality. Water testing will be the responsibility of the Contractor, who will conclude a works contract with an accredited laboratory for these services.

Depending on the test results and the number of affected wells in the RoW, the SRA will examine the possibility of local alternative sources for water supply and will include in the project the related costs. For the wells with good water quality, it can be provided drainage arrangements for floods or permanent protection measures to minimize long-term risks due to the location alongside the road, these being described in consultation with Regional or local authorities. It is probable that some wells will be in the area where road improvement works will be carried out, in which case they will be demolished but with the consent of the population who benefits from that water supply.

To minimize the risks of pollution or damage to wells and springs, the following steps will be taken by the Contractor:

- adequate coverage of all phreatic wells in the potential area of influence, which are still unprotected;
- ensuring appropriate measures to effectively eliminate water floods.
- monitoring the water quality of wells and springs out of which the population drinks.

6.4 Water for construction work

During the implementation of the Project, water will be needed for various purposes (washing of equipment, spraying of temporary road surfaces, production areas, others). As a rule, the nearest source of water (river, pond, water tank) shall be identified. The use of water from this source can only take place with the permission of the owner / manager, with the consent of the local public authority, the District Environmental Inspectorate and, in some cases, the "Apele Moldovei" Agency. It is not recommended to use water from existing centralized systems as well as artesian wells for technological purposes.

6.5 Green areas around the road

In order to minimize potential deforestation, the ESMP includes provisions under which the Contractor is required to carry out carefully the operations on site, generally following the guiding principles described and illustrated below.

The negligence in the improvement works may be another cause of tree destruction, which may, in the worst case, cause them to dry out. In the context of the Project, such scenarios could happen during excavations, parking or driving cars or heavy machinery under or near the trees, or in case of storage of construction materials. In this regard, the most sensitive spot in the vicinity of the trees is the place under the crown of the tree till the drip line and the root system extension (radius: 1.5 m around the drip line) around the tree.

To minimize the damage to green areas at the edge of the road, the following conditions shall generally be met:

- Timely training, if necessary, on a daily basis, of the personnel involved in the works near the tree alignments of the road;
- Not allowing the temporary storage of construction materials, excavated soil, inert waste and other materials in immediate vicinity to trees and shrubs (at least 1.5 meters).
- Prohibition of any excavation or compaction works near the trees without the permission of the competent institutions;
- Temporary fencing of work sites and storages around the green areas with fences (made of wood or other light material);
- Installation of tree protection signs at certain intervals. The indicators must contain the information, „Tree protection area; Respect the distance”.

The Contractor shall be responsible for the tree clearance and accidental destruction, direct or indirect, unplanned due to the carried-out activities. In order to encourage the careful and proper execution of site works, the unintended / unplanned tree losses because of the Contractor will have to be compensated, at the Contractor's own expenses at the rate of 3:1.

The trees in the RoW are the property of the SRA, therefore, for any planned deforestation, the Contractor shall obtain the agreement from the local subdivision of the SRA and the Deforestation authorization of the District Ecological Inspectorate. The cut wood after deforestation will be taken to the local offices of the SRA.

Prior to commencing tree deforestation, the Contractor, in the presence of the owner and representative of the IER, shall clearly mark the trees to be cut and properly record the number and size of these trees (the diameter at breast height), to determine the species and the place of reference for subsequent replacement with other trees. Instead of the deforested trees, new plantations will be planted at a 2:1 rate in case of trees of DBH ≤ 30 cm or 3:1 rate in case of some trees taller than DBH.

To minimize the damage to bird nesting during the breeding period, their cutting will be restricted until the end of the breeding period (i.e. the limited period will be from September to mid-March).

Planting of trees and shrubs along the roads of the Project is usually carried out upon the completion of these works. But if the section is released for planting before the end of the works it is recommended to plant the trees in advance. Planting details, such as compensating species, the exact planting places, interval between newly planted trees, etc., will be established in a joint consultation between the Contractor, the Engineer, the SRA representatives and the District Environmental Inspectorate. Preferably, according to the Project, only aboriginal species adapted to the environmental conditions in the area should be used for planting.

6.6 Protected Areas

No protected areas are in the RoW or immediate vicinity. According to Map of Institute of Geography and Ecology, no State Protected Areas are closer than 2 km from RoW.

The Contractor shall ensure that all the works are carried out in accordance with the legislation in force. The following issues will need to be strictly avoided:

- Pollution of environmental components (air, water, soil, vegetation);
- Extraction of construction materials;
- Throwing away the excavated land;
- Disposal or temporary storage of waste;
- Destruction of vegetation - trees, shrubs and herbaceous plants;
- Destruction of terrestrial animal habitats;
- Destruction or pollution of water sources.

6.7 Atmospheric air protection

Rehabilitation works are usually the cause of a temporary excess of air pollution caused by such pollutants as exhaust gases and dust, as well as pestilent odors, both on site and outside the site. Another cause of air pollution with a direct or indirect influence over a temporary period is pollutants generated during the transport, use and / or temporary storage of asphalt concrete, bitumen and other potentially hazardous materials. The main air pollutants are: dust, SO₂, NO_x, CO, benza-pyrene and carbohydrates. Negative impacts on air quality occur mainly in the vicinity of construction and demolition sites along the roads that lead to these sites.

Careful planning and organization of work operations, the level of such impacts, and the discomfort created for natives can be reduced to an acceptable level.

Air pollution due to construction techniques and trucks for transportation of construction materials may be reduced, to a certain extent, using equipment that is in good working condition from the very beginning, maintained and serviced appropriately throughout the construction works. Establishing rules of conduct can still be a good practice of good performance - by achieving strict speed control (especially in villages) and strictly requiring workers to stop engines when it is not necessary for them to work.

In the process of construction works, under dry weather conditions, there is inevitably a high pollution with dust. This not only has an impact on health and creates discomfort for the affected local population but is also a negative safety factor for road users and construction teams. In order to minimize the risk of damage due to dust, the contract and the Environmental Plan will include provisions on regular road spraying, as necessary, during dry periods of time. When elaborating the dust suppression measures, water scarcity will be taken into account due to insufficient reserves and duly consideration will be given to the needs of local population in this respect (see below).

6.8 Combating noise and vibration

A road construction site is a mixed source of noise, consisting of separate point sources or spatial sources of permanent and temporary noise, which varies both within a separate day time and during the individual periods of construction. The noise intensity of road construction machinery depends on the type of machinery, equipment and vehicles used and on the distance between the respective construction activity and local residential developments and other sensitive receptors. The most elevated construction noise is caused by bulldozers, vibrators, compressors, excavators, and diesel trucks and also by cold recycling where milling machines will create temporarily elevated noise levels. The noise produced during such operations is short-term and localized, but can still create significant nuisance, especially where it occurs close to settlements or businesses and even more, when schools or health facilities are affected.

Elevated noise levels cannot be entirely avoided during construction, but can be controlled at source, e.g. by fitting and maintaining appropriate mufflers on earth-moving and other vehicles on the site; by enclosing noisy equipment; by providing noise attenuation screens, where appropriate. Workers shall be sensitized about minimizing noise while working inside of or near to settlements (e.g. avoid idling of vehicles, minimizing the use of horns etc.). Local communities shall receive timely information on construction taking place in the villages. Working hours – including material transport - inside the settlements shall be limited such as to minimize nuisance for the local communities. Should unavoidable out-of-hours work occur local residents shall be given timely notice.

Where heavy equipment is used close to man-made structures (houses, walls etc.) vibration may in unfavorable cases lead to physical damage. In villages where such risks cannot be avoided the Contractor will establish the pre-construction status of any buildings that may be affected and provide compensation should damage occur as a result of construction.

6.9 Construction waste

During construction the Project will generate different types of waste, including but not limited to:

- Solid inert waste such as demolition materials, concrete, bricks, plastic, metals (e.g. empty barrels or other containers), bitumen, batteries and used tires etc.
- Waste oil and brake fluid;

- Vegetal waste from the clearance of the construction corridor (grass layers, tree branches, shrubbery, etc).
- Non-recyclable materials (e.g., resulting from the cleaning of ditches, others);
- Household solid waste and wastewater from the construction camps (if any).

To properly manage waste issues the Contractor shall prepare a comprehensive Waste Management Plan as part of his ESMP. This Plan will establish all types of wastes generated under the Project and identify their respective management along the mitigation hierarchy (avoid; recycle; dispose) in line with the applicable legislation.

6.10 Health protection of workers and labor safety

A Health and Safety Plan must be prepared and approved prior to any works commencing on site. The H&S Plan must demonstrate the Contractor's understanding of how to manage safety and a commitment to providing a workplace that enables all work activities to be carried out safely. The H&S Plan must detail reasonably practicable measures to eliminate or minimize risks to the health, safety and welfare of workers, contractors, visitors, and anyone else who may be affected by the operations. The H&S Plan must be prepared in accordance with the World Bank's EH&S Guidelines

(<https://documents1.worldbank.org/curated/en/157871484635724258/pdf/112110-WP-Final-General-EHS-Guidelines.pdf>) and Annex 8 to this ESMP and the relevant country health and safety legislation.

Road improvement works do not exclude health and safety risks, so all workers will need to be equipped with the necessary personal protective equipment, according to the standards in force and the relevant legal requirements for the risks at the individual workplace. The road constructions require the following equipment from the personal endowment, but not limited to:

- Protective footwear: Shoes with non-slip sole and cannot be pierced. Footwear with a protected toe to prevent crushing injuries to the toes (when working around equipment or heavy objects that can fall over the toes);
- Protective gloves: Workers should wear appropriate gloves depending on the work performed (e.g. rubber gloves for heavy duty concrete work, gloves for welding, insulated gloves and sleeves, when there is a risk of exposure to electric current);
- Protective helmets: Workers must wear helmets made of rigid material in case of objects falling over their heads, hitting the head of some fixed objects, or accidentally contacting the head with a dangerous place i.e. electrocution;
- Ear protection: In the event of a loud noise during the operation of a chain saw or heavy noisy technique, ear protectors / ear muffs shall be worn;
- Clearly visible clothing: All workers, including emergency response brigades in exceptional cases, which can occur at the roadside and are at risk from traffic, transport, or work equipment in the organization area temporary road traffic, shall always wear brightly colored clothing with reflective effect, visible during day and night.

In addition to PPE, the contractor will apply the following safety measures, where relevant:

- Ensure equipment operators are certified and machinery is regularly inspected and maintained.
- Maintain traffic separation using barriers, cones and signs to prevent worker exposure to live traffic.

- Provide adequate lighting of night works, ensuring visibility.
- Provide fall protection (guardrails, harnesses) for any work at heights or with elevated structures.
- Provide protection for workers in excavations through sloping, benching, shoring, and other measures as relevant.

The responsible person of the Contractor (EHSM) will organize for all the workers before starting the work, *basic training on risks at individual workplaces*. During the work according to a predetermined schedule, they will periodically have thematic trainings on these aspects of health and safety at work. If foreign workers are employed, materials related to health and safety, as well as training, code of conduct, and other relevant documents, shall be provided to them in a language they can understand.

For health and technical security purposes, Health conveniences on site (mobile WCs) shall be provided at appropriate locations after consultation with local authorities. Responsible for the service of these commodities will be a sub-contractor, who will take care of them at certain intervals and in accordance with the legislation in force. The places proposed for these conveniences will be determined by the Contractor / Manager of the Contractor responsible for the environment and technical security and will be approved by the Engineer-supervisor before starting the works.

According to legislation the meal and water has to be provided to workers.

In case of employment of a large number of not local workers that are accommodated on the site, a specific HIV/AIDS awareness campaign shall be organized, foreseen at an early stage of project construction works and repeated over appropriate intervals. From similar Projects up to 70 employees can be hosted during construction period.

The detailed information on Labor H&S are provided in LPM developed for MRCP. If foreign workers are employed, materials related to health and safety, as well as training, code of conduct, and other relevant documents, shall be provided to them in a language they can understand.

6.11 Labor and Working conditions

Contractor will prepare the OHS Plan, subject to NRA and Engineer approvals prior to any works commencing on site.

The OHS Plan must demonstrate the Contractor's understanding of how to manage safety and a commitment to providing a workplace that enables all work activities to be carried out safely. The H&S Plan must detail reasonably practicable measures to eliminate or minimize risks to the health, safety and welfare of workers, contractors, visitors, and anyone else who may be affected by the operations. The OHS Plan must be prepared in accordance with the World Bank's EH&S General and industry specific Guidelines, as relevant, and the relevant country health and safety legislation.

A Code of Conduct is included as annex of this ESMP and need to be signed by Contractor and applied to all employees and subcontractors.

Road improvement works do not exclude health and safety risks, so all workers will need to be equipped with the necessary personal protective equipment, according to the standards in force and the relevant legal requirements for the risks at the individual workplace. This will require the contractor to carry out job-specific hazard identification and risk assessment to determine the appropriate measures. The road constructions require the following equipment from the personal endowment, but not limited to:

- Protective footwear: Shoes with non-slip sole and cannot be pierced. Footwear with a protected toe to prevent crushing injuries to the toes (when working around equipment or heavy objects that can fall over the toes);
- Protective gloves: Workers should wear appropriate gloves depending on the work performed (e.g. rubber gloves for heavy duty concrete work, gloves for welding, insulated gloves and sleeves, when there is a risk of exposure to electric current);
- Protective helmets: Workers must wear helmets made of rigid material in case of objects falling over their heads, hitting the head of some fixed objects, or accidentally contacting the head with a dangerous place i.e. electrocution;
- Ear protection: In the event of a loud noise during the operation of a chain saw or heavy noisy technique, ear protectors / ear muffs shall be worn;
- Clearly visible clothing: All workers, including emergency response brigades in exceptional cases, which can occur at the roadside and are at risk from traffic, transport, or work equipment in the organization area temporary road traffic, shall always wear brightly colored clothing with reflective effect, visible during day and night.

In addition to PPE, the contractor will apply the following safety measures, where relevant:

- Ensure equipment operators are certified and machinery is regularly inspected and maintained.
- Maintain traffic separation using barriers, cones and signs to prevent worker exposure to live traffic.
- Provide adequate lighting of night works, ensuring visibility.
- Provide fall protection (guardrails, harnesses) for any work at heights or with elevated structures.
- Provide protection for workers in excavations through sloping, benching, shoring, and other measures as relevant.

The responsible person of the Contractor (EHSM) will organize for all the workers before starting the work, *basic training on risks at individual workplaces*. During the work according to a predetermined schedule, they will periodically have thematic trainings on these aspects of health and safety at work. If foreign workers are employed, materials related to health and safety, as well as training, code of conduct, and other relevant documents, shall be provided to them in a language they can understand.

For health and technical security purposes, Health conveniences on site (mobile WCs) shall be provided at appropriate locations after consultation with local authorities. Responsible for the service of these accommodations will be a sub-contractor, who will take care of them at certain intervals and in accordance with the legislation in force. The places proposed for these conveniences will be determined by the Contractor

/ Manager of the Contractor responsible for the environment and technical security and will be approved by the Engineer-supervisor before starting the works.

According to legislation the meal and water has to be provided to workers.

In case of employment of a large number of not local workers that are accommodated on the site, a specific HIV/AIDS awareness campaign shall be organized, foreseen at an early stage of project construction works and repeated over appropriate intervals. From similar Projects up to 70 employees can be hosted during construction period.

The detailed information on Labor H&S are provided in LPM developed for MRCP. All contractors will be required to follow Project's LMP, including procedures to establish and maintain a safe working environment as per requirements of ESS2 and national legislation.

6.12 Construction Camps

Selection of construction camps and other spaces for the use of the contractor will be based on voluntary agreements that may include payment of agreed rates, which need to be secured and documented by the contractor. Sites that require involuntary land taking or where failure to reach a negotiated agreement would result in involuntary land taking, will not be used. Similarly, the contractor will not use sites that could cause involuntary physical relocation or impacts on assets or livelihoods of any users or occupants, including renters or informal occupants.

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The Engineer-Supervisor's approval is required to select the location of the camp for office and containers for workers. The NRA, however, encourages the Contractors to explicitly use the existing facilities for accommodating their staff and the existing industrial facilities in the area as they are at a distance close to the road site. The proposed environmental management mechanism will be described in the Contractor Specific Plan, developed and approved in the manner established by the Engineer, for the construction phase, detailing the approach and measures. If the Contractor decides to place his living quarters with all working facilities, accommodation of workers, kitchens and / or offices with all necessary hygienic facilities, shall be taken all necessary measures for an appropriate solid waste management system and sewer operation.

In the Contractor's ESMP shall be included measures to ensure safe storage and relocation of potentially hazardous materials, such as fuels, lubricants and other products, while minimizing the risk of accidental leakage and pollution soil or waste water. Also, in this Contractor's ESMP will be addressed the anti-incendiary requirements for the camp area and its territory.

To ensure that potentially resulting impacts are kept at a minimum the contractor will be required to prepare the following plans or method statements:

- Layout plan of the work camp including a description of all precautionary measures proposed to avoid potential adverse impacts on the receiving environment (surface and ground water, soils,

- ambient air, human settlement);
- Sewage management plan for provision of sanitary latrines and proper sewage collection and disposal system to prevent pollution of watercourses or groundwater;
- Waste management plan covering the provision of garbage bins, regular collection and disposal in a hygienic manner, as well as proposed disposal sites for various types of wastes (e.g., domestic waste, used tires, etc.) consistent with applicable national regulations; and
- Description and layout of equipment maintenance areas and lubricant and fuel storage facilities including distance from water sources and irrigation facilities. Storage facilities for fuels and chemicals will be located away from watercourses. Such facilities will be bounded and provided with impermeable lining to contain spillage and prevent soil and water contamination.

Prior to establishment of the work camp(s) the contractor shall conduct consultations with local authorities to identify sources of construction water and potable water for the workforce that will not compete with the needs of the local population. Potable water for the workforce shall comply with the national quality standards.

6.13 Organization in exceptional emergency situations

In order to assure proper professional measures in case of accidents or injuries, a contingency & outbreak plan should be prepared in exceptional emergency situations. On site shall be the elementary medical first aid equipment offered in the camps, taking into account, when elaborating the plan, the distance to the nearest hospital. An alternative will be to have basic medical services on site and a contract with a medical institution. In order to maximize the efficiency of such organizational measures, it will be essential for workers to know and be aware of the established procedures and facilities available.

6.14 Road traffic and road safety assessment

Construction activities inside the settlements and also outside these areas will have a temporary impact on local traffic and on road safety – for both motorized and non-motorized road users. This relates to the presence and movement of large construction vehicles on narrow rural roads, to construction taking place in small villages with restricted space and to the actual rehabilitation of the roadway itself. Ongoing construction sites do not only represent temporary obstacles but can also be dangerous for motorists or generally for users of the public space where construction takes place.

To effectively manage such issues the Contractor shall prepare a *Road Traffic and Safety Management Plan* identifying risks that may occur during the various stages of construction and that may affect road users / users of public space in villages. The Plan will describe efficient traffic and road safety management arrangements that will be implemented at the various stages of construction including specific provisions for drivers, cyclists, and pedestrians as appropriate. Proper securing of ongoing construction sites during construction and out of working hours (e.g. during the night and / or during weekends or public holidays) shall be specifically addressed. The Plan will require approval by the Traffic Police (National Police) as well as timely review and approval from the Engineer-Supervisor.

Road safety and road safety issues will be identified in this plan and temporary organizational measures will be presented, which will need to be provided at all stages of road rehabilitation and in all places where there are road safety issues and risks. Measures may include but not be limited to the provision of flagmen during the day, the use of various types of signalizations, temporary detours, provision of temporary safety

barriers, provision of appropriate measures and/or devices to secure road safety where construction sites may need to be left open during the night.

Appropriate training of all construction workers on the provisions of the Plan and strict enforcement thereof will help to maximize efficiency. Active communication with the local authorities, timely information of the public on construction schedules can help to increase awareness and preparedness of road users and to generally increase road safety conditions during construction.

6.15 Access to land and properties

Construction activities and especially the relocation of utilities and construction of drainage structures and pedestrian walks in the villages bear the risk to cause temporary disruption of access to land and properties. To minimize associated nuisance the Contractor shall envisage appropriate and timely provisions for alternative access and provide such local facilities as to ensure all time accessibility of relevant assets, including agricultural land. Early communication with the affected individuals will be important to increase the acceptance of such temporary inconveniences and to achieve a good relationship with the local population.

6.16 Operational Impacts and Their Mitigation Measures

Operational impacts mainly relate to the gradual deterioration of road conditions and drainage, due to inappropriate maintenance or a complete lack thereof, ultimately resulting in road safety problems. Typical maintenance aspects are: proper functioning of drainage facilities, landslide and erosion control; regular seasonal inspections of signage and replacement of worn-out materials and monitoring of roadside vegetation and tree or shrub plantations on landslide areas which require regular timely pruning / trimming to ensure healthy growth and longevity and to minimize risks from falling branches.

Improved rural roads often encourage unsafe driving behavior such as over-speeding, ultimately resulting in increased accident numbers. Such issues would be monitored by the Traffic Police which ensures the implementation of the legislation.

Then roads are rehabilitated, it can indeed lead to various induced development impacts. Better roads can enhance access to previously isolated areas as mentioned in Cula River basin, opening them up for development. This increased accessibility can stimulate economic activities such as tourism, commerce, and industry. Also, rehabilitated roads often lead to increased property values along their routes, as they become more desirable locations for residential, commercial, and industrial purposes.

Better roads facilitate the movement of goods between regions, potentially boosting trade activities and economic growth. This can be particularly significant in these rural areas, where access to markets is essential for agricultural products and other goods. As economic activities grow along the newly rehabilitated roads, there may be increased demand for supporting infrastructure such as utilities (water, electricity, telecommunications), healthcare facilities, and educational institutions. Improved roads can also have social impacts, such as better access to healthcare and education facilities, reduced travel times for commuting and leisure activities, and increased social integration by connecting previously isolated communities.

While rehabilitating C24 road can have numerous positive development impacts, careful planning and monitoring are necessary to manage any potential negative consequences.

6.17 Positive Impacts

Upon completion, the Project will have positive long-term environmental and socio-economic impacts on people's welfare, road health and safety, and better conditions through reduced vehicle operating costs,

reduced number of accidents; reduced emissions from vehicles thanks to smoother traffic without bumps on road surface after improvement, and will also reduce dust pollution.

Road access to settlements and markets will also improve, resulting in the development of new business opportunities, etc. The environment will benefit from reduced risk of soil pollution and erosion, from reduced water pollution due to improved, safe and cleaned road drainage systems, from the elimination of dust nuisance due to a paved road surface. A reduced risk of landslides, stable slopes through new plantations in sensitive sections will add to the overall improvements.

7.16 Social Mitigation measures

Social Impact Monitoring Committee. The Social Impact Monitoring Committee (hereinafter SIMC) should will be established to provide community support in monitoring the social/environmental impact of the reconstruction of Corridor 24. In the previous WB project and other projects in the country, SIMC was a very useful tool to involve the population and other beneficiaries in the implementation of the project. In 2018 a SIMC was developed for C24 and this year will be relaunched.

The SIMC will be developed as a social, nongovernmental and non-political structure for Project under SRA responsibility. It will be established on a project basis with members from sub-project affected localities with the aim to provide community inputs in monitoring of environmental/ social impact on the local communities that may arise in course of Project implementation.

The SIMC will strive to strengthen stakeholders' engagement, increase transparency and promote trust. In addition, the SIMC will facilitate communication between Project communities and Contractors with an aim to create mutual understanding between the interested parties and to create a friendly, cooperative, participatory atmosphere within the Project communities.

Mitigation measures of the social impact specifically related to resettlement must be respected. The objectives of the document, with reference to social issues, are:

Ensure that adverse effects on the affected population, other than resettlement, are avoided or attenuated.

The Resettlement Policy Framework (RPF), prepared for the overall Project, establishes the principles, organizational arrangements, and procedures for preparing an implementing Resettlement Action Plans (RAPs) for managing land acquisition and economic displacement impacts in all sub-projects financed under the Program.

For Corridor 24, the RPF provides the guiding framework to ensure that:

- any land acquisition or restriction of access is carried out in full compliance with World Bank Environmental and Social Standard 5 (ESS5) and relevant national legislation (Law No. 488/1999 on expropriation for public utility, Government Decision No. 660/2006, and related cadastral regulations);
- Project-Affected Persons (PAPs) are identified, informed, consulted on their preference and alternatives available to them, and compensated at full replacement cost, with particular attention to vulnerable groups;
- involuntary resettlement and economic displacement are avoided or minimized through careful design, alignment optimization, and use of the existing right-of-way.

The RPF thus provides the procedural and institutional backbone for all land-related activities within this sub-project.

Avoidance and Minimization of Economic Displacement

Consistent with the RPF’s principles of avoidance, minimization, and mitigation, the following measures have been or will be implemented:

- **Alignment optimization:** The road design stays almost entirely within the existing ROW, with minor realignments only at curvature corrections to meet design and safety standards.
- **Design alternatives:** Each point of potential land-take was reviewed to minimize parcel intrusion through reduced slope footprints, retaining structures, and shoulder adjustments.
- **Construction planning:** Temporary sites (lay-down areas, detours) will be located on public or previously disturbed land wherever feasible, to avoid private land occupation.
- **Access management:** All existing driveways and agricultural accesses will be maintained or restored immediately after construction; temporary alternative accesses will be provided if required.
- **Vegetation preservation:** Productive trees or vineyard rows within safety clearances will only be removed where technically unavoidable, and with advance notification and compensation.

Through these measures, the Project minimizes both permanent and temporary economic displacement, keeping residual impacts small and localized.

Identification and Management of Economic Displacement Impacts

The economic displacement impacts identified in Section 4.10—including limited partial loss of agricultural margins, temporary occupation, and ancillary asset relocation—will be managed in accordance with the RPF through the preparation of a site-specific Resettlement Action Plan (RAP). The specific requirements of the RAP are outlined in the RPF.

The project may affect cultural or religious objects such as crosses and community assets such as wells. The RAP will take into account the following aspects in relation to these affectations:

Cultural Objects

- Include an inventory of cultural objects and associated spaces (shrines, burial sites, etc), document their significance, and community use. Apply measures to avoid impacts on these objects.
- Conduct consultations with communities to determine options for protection or relocation, based on local cultural norms and national law.
- The RAP should describe the process and agreed upon solutions and include a specific protocol for the protection or relocation of these objects/sites in a manner consistent with ES5, ESS8, as well as national law, which may include the participation of licensed specialists.

Wells and other water sources

- Identify the location and type of well or water source, as well as its function (domestic supply, irrigation, livestock).
- Assess the household and/or community ownership and/or usage of the wells or other water sources including informal users. Carry out consultations.

- Define eligible owners and users and include the measures to mitigate impacts to the owners and users of the well or water source, including relocation, compensation, connection to an alternate water supply, etc. based on consultations with PAPs.
- If relevant, include measures to ensure uninterrupted access to water resources.

The preliminary scope of impacts is described in this ESMP. However, additional impacts may be identified and will be included in the RAP. In general, the RAP will:

1. Describe the nature and scope of resettlement impacts, as well as measures taken to minimize involuntary resettlement
2. Summarize the results of the socioeconomic assessment of PAPs
3. Quantify affected assets and PAPs via a Detailed Measurement Survey (DMS) and cadastral overlay;
4. Define eligibility and entitlements for PAPs based on the census, socioeconomic survey, and RPF entitlement matrix;
5. Apply compensation rates at full replacement cost, verified by independent valuation, as well as necessary assistance measures;
6. Where there are impacts to income or livelihoods, include livelihood restoration measures;
7. Summarize the consultation process including how PAPs have been given options and alternatives from which to choose,
8. Describe the Grievance Redress Mechanism (GRM) to ensure timely resolution of PAP concerns;
9. Detail the implementation schedule, institutional responsibilities, budget, and monitoring arrangements.

Timeline for RAP Implementation

The RAP needs to be prepared according to the principles in the RPF and above, finalized and approved by the NRA and the World Bank, prior to carrying out the relevant works. Before taking possession of the land and related assets, full compensation must have been provided and as applicable, displaced people must have been resettled and moving allowances must have been provided.

Ensuring Avoidance of Other Adverse Social Effects

Beyond land-related impacts, the RPF and ESMP jointly ensure that other adverse social effects—such as restricted community access, disruption of public services, or safety risks to residents—are mitigated through:

- Continuous community engagement and information disclosure throughout construction;
- Inclusion of traffic safety and pedestrian protection measures in the contractor’s method statements;
- Dust, noise, and vibration controls near settlements;
- Prioritization of local labor and suppliers to support community benefits;
- Operation of a Project Grievance Mechanism accessible at local level.

Ensure that the benefits of road rehabilitation are proportionate to all affected persons, women and men, the elderly, the young and the disabled. A SEP document is also available for population including the GRM mechanism.

Recommended mitigation measures include:

Planning construction activities to avoid or reduce their impact on shops and businesses along the road and houses.

Public consultation during the design period on the expected social benefits, such as improving access to markets, bus stops, etc. which occurs with each affected community. The purpose of this activity was (1) to ensure that relations with the affected communities remain positive during the project construction process and during the exploitation period; (2) to treat the specific needs of the components of this document and (3) to ensure that the project has a specific policy for relations with third parties.

Trafficking in human beings is defined as the recruitment, transportation, transfer, hosting or receiving of persons through threats or the use of force or other form of coercion, kidnapping, fraud or deception, abuse of power or due to a vulnerability position or by offering or receiving payments or benefits to obtain the consent of a person exercising control over another person for the purpose of exploitation. Exploitation includes at least exploitation of prostitution or other forms of sexual exploitation, forced labor or services, slavery or practices similar to slavery, slavery or organ harvesting.

Avoiding conflicts with local communities by providing the resources required for workers' needs in stores on the site camp and organizing site visits.

Potential avoidance of spreading vector diseases and communicable diseases such as STDs and HIV/AIDS through awareness programs and prevention activities among construction workers.

Preparing workers to avoid conflict situations through guidance and awareness programs.

Conduct awareness programs about HIV/AIDS prevention and STD for the affected population in the vicinity of the site camp areas.

Organizing awareness programs for workers on the subject of trafficking in human beings and zero tolerance policy.

Informing the public on the timing and duration of interruption of water, electricity, post, telecommunication or other services.

Avoiding damage to utilities by ensuring that vehicles and equipment are used by qualified personnel and this is adequately supervised.

Informing the affected community about the program when the utilities need to be relocated or services should be interrupted.

HIV/AIDS and STDs Prevention Measures:

- Launching awareness programs on HIV/AIDS and STDs prevention for PAP in the vicinity of the site camp
- Launching awareness programs on HIV / AIDS prevention and STDs for construction workers
- Introducing intervention clauses in the construction contracts for the prevention of HIV and STDs
- Discourage drug abuse (alcohol and narcotics). Taking into consideration local work force when hiring for construction and maintenance sites.
- Focus on transportation workers with high-risk behavior (including young workers), ensuring an education at their level.
- Conceiving general messages to the workforce as well as men and women.
- Use professional organizations such as NGOs and COs that deal with HIV prevention.
- Designing HIV prevention programs in communities along the road, adapted to specific needs, local language and traditional/preferred communication tools.

- Popularization and increase of condom acceptability through condom promotion campaigns and social marketing in communities along the road.
- Free distribution of condoms to men and women, construction workers, women working in the project area and young people.

Provide complete information on access to HIV and STDs services

- Educate communities and workers about how to avoid STDs, how to recognize the common symptoms of STDs, and how to seek treatment through confidential addressing systems.
- Provide information on voluntary testing and counseling services in the project area or anywhere near the project area
- Make public the existence of anonymous voluntary testing and counseling services (testing, pretesting and post-test counseling)

Provide information on access to opportunistic infections

- Educate people how to avoid opportunistic infections, how to recognize the common symptoms of these diseases, and how to seek treatment.

Study health care aids and services in transport organizations and evaluate worker involvement in receiving HIV and AIDS care.

A requirement and a reporting system to the SRA and the responsible government authorities, of suspicions or known THB incidents, as well as the relegation of potential victims to law enforcement agencies

Contractor's main environmental and social mitigation and management measures required during pre-construction, construction & operation phases of the road project

These are summarized below:

Pre-construction activities

- Procurement and mobilization of construction equipment / machinery such as crushers, hot mix plants, batching plants and other construction equipment and machinery
- Identification and selection of material sources (quarry and borrow material, water, sand etc.) and debris disposal locations
- Planning traffic diversions and detours, including arrangements for establishing campsites, workforce camps, material stack yards, crusher units, batch mix plants, hot mix plants, rented accommodation for supervisory staff. This activity includes identification of suitable lands, wherever required and obtaining requisite permissions or closing lease agreements
- Applying and obtaining of requisite permits/licenses, permissions for construction water sourcing, labour permission and similar other regulatory compliance requirements
- Preparation of C-ESMP which include, OHS plan, Water and Waste Management Plan, Influx management Plan, Worker's camp management plan, Traffic Management Plan, Quarry/borrow area management plan, establishment of GRM for workers, Site restoration Plan, among others in accordance with the national, WB and other international rules and guidelines. All such plans prepared by contractor will be reviewed and approved by the SRA, prior to commencement of construction works

Construction activities

- Implementation of site-specific mitigation/management measures

- Monitoring the environmental quality parameters along the road project operational sites and other sites like material stack yard, camp site offices, workforce camps, hot mix plants, crusher sites, batch mix plants
- Environmental monitoring parameters may include air, noise, water and soil
- Social issues which need to be handled during construction phase include:
 - Loss of land due to land-slides resulting from hill cutting activities
 - Vibrations and cracks in structures or damage in buildings (of all types) adjacent to RoW due to construction works e.g., excavation activities within RoW
 - Drying up of seasons springs or streams due to excavation operations
 - Disruption to services such as water supply, power supply due to utility relocation and/or at times due to construction activities
 - Disruption to access to private houses/properties during construction activities;
 - Disruption to traffic movement leading to time delays;
 - Different impacts on vulnerable and disadvantaged population
 - Dust emissions during construction leading to impacts on community health, crops and trees
 - Likelihood of accidents due to road construction works;
 - Possibility of gender-based violence arising from influx of migrant construction workers;
 - Possibility of HIV/AIDS, other contagious diseases among construction workers and roadside community;

Operations activities

The ESMP measures during operation phase largely include environmental and social monitoring, maintenance of nature-based bio-engineering solutions along project road. This shall be carried out by the contractor appointed by SRA for the maintenance of the project road.

Contractual aspects

The Environmental and Social Mitigation Plan as presented in Annex 2, together with the Contractor's Environmental and Social Management Plan (C-ESMP), constitute the primary instruments for environmental and social management during project implementation.

The C-ESMP shall be submitted within 30 days of contract award, and pre-construction and construction works may commence only after the C-ESMP is formally reviewed and approved by the National Road Administration (NRA) and the Supervision Engineer. Preparation of the C-ESMP will start immediately after the contract is signed. For this purpose, the Contractor must appoint or hire qualified and experienced Environmental and Social Specialists, including at minimum an Environmental Specialist, a Social/Labor Specialist, and a Health & Safety (H&S) Expert, all with verifiable experience on internationally funded infrastructure projects.

Structure and Content of the Contractor's ESMP (C-ESMP)

The C-ESMP shall follow the structure established in the World Bank's General EHS Guidelines (2007) and project-specific ESMP. At minimum, the C-ESMP must include the following components:

1. Environmental and Social Policy Statement
2. Legal and Institutional Framework
3. Project Description and Work Methodologies
4. Environmental and Social Risk Assessment (aligned with Annex 2 and Contractor's Method Statements)
5. Detailed Mitigation Measures (specific to each construction stage)

6. Occupational Health & Safety Plan
7. Traffic and Road Safety Management Plan
8. Waste and Hazardous Materials Management Plan
9. Water, Air and Noise Management Plan
10. Biodiversity and Vegetation Protection Plan
11. Community Health & Safety Plan
12. Labor Management Procedures (including worker GRM)
13. Emergency Preparedness and Response Plan
14. Chance Finds Procedure
15. Camp and Site Facilities Management Plan
16. Monitoring Program (parameters, methods, frequency, locations)
17. Organizational Structure and Staffing
18. Training Plan
19. Documentation, Reporting, and Record-Keeping Requirements
20. Budget and Costs for Mitigation and Monitoring
21. Costing of Mitigation and Monitoring Activities

The Contractor shall update the C-ESMP periodically to reflect changes in design, method of work, or environmental conditions, subject to approval by the Engineer.

The construction contract shall clearly indicate that:

- All costs for environmental and social mitigation measures must be included in the Contractor's Bill of Quantities (BoQ) as a lump sum item.
- The lump sum must also include the cost of:
 - Periodic water quality analyses
 - Air quality and dust monitoring
 - Noise level measurements
 - Soil erosion control and site rehabilitation
 - H&S measures and PPE provision
 - GRM implementation and community engagement activities

No additional payments will be authorized for mitigation measures required by the ESMP, unless justified by significant design changes approved by the Engineer.

22. Reporting Requirements for C-ESMP Implementation

The Contractor must report the implementation of the C-ESMP as follows:

- Monthly Environmental and Social Progress Reports to the Supervision Engineer.
- Monthly ESHS Compliance Reports summarizing:
 - Mitigation measures implemented
 - Monitoring results
 - Non-compliances and corrective actions
 - Worker and community grievances
 - Accidents and near misses
 - Changes in site layout or working methods
- Immediate incident notification (within 24 hours) for any environmental or social incident.
- Quarterly consolidated ESHS reports submitted through the Engineer to NRA and the World Bank.

All monitoring data (air, noise, water, waste records) must be archived and made available for inspection.

23. Supervision and Responsibilities

- The Contractor is fully responsible for implementing all environmental and social mitigation measures, monitoring programs, and reporting requirements defined in the ESMP and the C-ESMP.
- The Supervision Engineer will:
 - Review and approve the C-ESMP.
 - Perform routine site inspections and audits.
 - Verify monitoring results and compliance with ESHS requirements.
 - Issue instructions and non-compliance notices when necessary.
- The NRA (Implementing Agency) has overall responsibility for:
 - Ensuring contractual compliance
 - Reviewing consolidated ESHS reports
 - Liaising with the World Bank
 - Ensuring high-level oversight of ESMP implementation

6. INSTITUTIONAL ARRANGEMENTS FOR ESMP IMPLEMENTATION

Institutional arrangements for implementation of ESMP have an objective to achieve environmentally as well as socially sustainable project activities and to meet the WB ESS (Environment and Social Standards), to comply with the GoM regulations during the pre-construction, construction and operational phases of the road project. The ESMP implementation arrangements will also ensure to comply with loan covenants as specified by the various conditions of loan agreement between the World Bank and the GoM.

Accordingly, details of institutional arrangements and the roles and responsibilities of various institutions in the implementation of ESMP are presented below.

The key agencies with major roles in the implementation of ESMP are:

- NRA / Project Implementation Unit (with Environmental & Social Specialists)
- Contractor (with an assigned Environmental, Social, Health and Safety Officer)
- Supervision Engineer (with Environmental & Social Specialist)
- NRA resettlement and land acquisition specialist
- Local Ecological Inspections (which will inspect compliance with environmental legislation)
- Local Centers for Public Health (which also will inspect compliance with the national legislation)
- Social Impact Monitoring Committees

National Road Administration. The proposed project will be implemented by the National Road Administration (NRA), being assisted by a Project Implementation Unit (PIU). Its responsibilities would include: procurement, financial management, contract management, project and program monitoring and evaluation, and reporting, as well as ensuring that all subprojects are subject to the ESA as well as the civil works are implemented in accordance with the approved ESMPs.

The PIUs staff involved in E&S implementation

The PIU of SRA will be one environmental and one social specialist as well as at the SRA level resettlement and OHS specialist. The specialists must have an advanced degree in Environmental or Social Science or related field should have at least five years working experience related to environmental or social management, designing and engineering projects (preferably in the road sector). He/ he should be familiar with procedures for environmental and social assessments and monitoring, road construction, maintenance and operational

environmental and social management issues, national and international environmental and resettlement standards and requirements for road management, and should have significant experience in working on environmental and social issues and coordination of public consultations in the Republic of Moldova. The Environmental and Social Specialists should have demonstrated proficiency in English, Romanian and/or Russian and should be computer literate and familiar with all relevant packages.

The environmental specialist is expected to lead, manage and coordinate timely environmental standards implementation and ensure compliance with the World Bank and national requirements of the Republic of Moldova. The environmental specialist shall ensure that all environmental aspects are integrated into the project activities in line with the Environmental and Social Management Framework (ESMF) documents.

The social specialist is expected to lead, manage and coordinate timely social standards implementation and ensure compliance with the World Bank and national requirements of the Republic of Moldova. The social specialist shall ensure that all social aspects are integrated into the project activities in line with the Environmental and Social Management Framework (ESMF) documents.

The Resettlement specialist from SRA will be appointed from the actual staff of SRA dealing with land acquisition.

The H&S specialists will be specialists from SRA designated with H&S receptibilities able to participate in PIUs management and monitoring of Project.

NRA has extensive experience in successfully implementing World Bank and other IFIs projects (e.g. WB, EBRD, EIB implemented and/or roads rehabilitation projects in the country during last years). It has in its staff an Environmental and Social Specialist (E&S), being responsible for coordination of all project safeguards issues. Similarly, the PIU will hire an E&S specialist which would be responsible for the ESS implementation. The WB team will continue closely monitor ESMP implementation, providing, when needed, relevant assistance.

NRA resettlement and land acquisition specialist The main responsibilities of a Resettlement specialist is to examine the cases where lands belonging to the owners have to be purchased by the state authorities and to be given to the owners the appropriate sum of money for the land, or, in exchange some land in other parts of the locality. This specialist has to follow the interest of the State and likewise, make sure that the simple owners that will be permanently affected will not be discriminated on the retribution of sums of money for the purchased land.

NRA Environmental & Social (E&S) Specialists. The main responsibilities of the NRA E&S specialist would include coordination of all related to E&S activities and ensuring the ESS provisions are fully followed during the sub-projects' implementation. The E&S specialist will be also responsible for relevant ESA capacity building activities as well as for integrating ESA issues into the project documents.

NRA E&S specialist specific duties: (a) *Institutional Capacity Building and environmental information dissemination:* (b) *Integration of the ESMF/ESMPs requirements into project documents:* (i) inclusion of environmental requirements in the Project Operational Manual; (ii) inclusion of ESMPs or their major provisions into construction contracts, both into specifications and bills of quantities; (c) *Ensuring the high quality of EA for selected subprojects:* (i) selectively reviewing the subproject EA documents and if needed, providing comments and recommendations; (ii) keeping contacts with and ensuring subproject EA approval by the Environmental Agency; (iii) organizing jointly with the PIU ES all subproject EA documents disclosure and public consultation in the participating local councils; (d) *Ensuring compliance of the construction/rehabilitation activities with the ESMF and approved ESMPs:* (i) conducting periodical and

selective visits to the project sites and checking ESMPs implementation; (ii) reviewing the contractors and PIU progress reports; and (iii) interacting, when needed with the environmental and construction inspectors on the ground.

The PIU Environmental Specialist. The day-to-day EA activities will be the main responsibilities of the PIU ES, including the compliance with the EMF and ESMPs and monitoring of the impact during the project implementation phase. His/her duties will include the following: (a) *Environmental Screening and identification of required types for Environmental Assessments:* (i) screening of road sub-projects' and approving environmental category and specification of details for environmental assessment; (ii) coordinating, when needed, the findings of screening and project environmental categorization with State Ecological Expertise (SEE) with respective divisions of ME and clarification of needs for preparation of Environmental Impact Assessment report or ESMP Checklist or other documentation for SEE; (b) *Preparing Environmental Impact Assessment report and/or ESMPs and organizing, if needed their State Ecological Expertise:* (i) ensuring that required environmental documentation (Environmental Impact Assessment report or ESMP Checklist or other documentation for SEE) for each selected sub-project (or parts of roads) for rehabilitation is prepared. (ii) reviewing the draft EA documents and making sure they are prepared in conformity with EMF requirements; (iii) ensuring that implementation of mitigation measures and carrying out of monitoring are included in the financial plan for road sub-projects; and (iv) ensuring that Environmental Impact Assessment report or ESMP, when needed, are presented to SEE for its review and approval in conformity with national requirements; (c) *Integration of environmental requirements in contracts issued for carrying out of rehabilitation works:* (i) to present at the pre-qualification meetings of contractors the full set of environmental requirements to be followed by the contractors with use of general framework for sub-project evaluation and management; (ii) to exam contractors proposals (in the light of environmental protection requirements) and identify the gaps not covered by the proposed measures or budget; (iii) to prepare the environmental clauses which will be included in the contractor's contracts for implementation of road sub-projects; (iv) to ensure that sub-contracts proposed by the contractors are prepared for agencies which provide goods and services (particularly, for those providing and producing constructional materials – borrow materials, asphalt plants etc.) and have respective valid licenses and environmental permits in conformity with national environmental requirements; (d) *Supervision and monitoring:* (i) to organize and ensure that public participates in discussion on ESMP reports for selected sub-projects; (ii) to supervise independently or jointly with the State Ecological Inspectorate the mitigation and environmental protection measures stipulated in ESMP for each sub-project selected for rehabilitation of roads; and (iv) to ensure implementation of the monitoring plan of sub-projects as well as establishing of baseline for sub-projects and efficiency of mitigation measures; (e) *Reporting:* (i) to prepare semi-annual reports on the progress of implementation of measures proposed by the ESMPs; (ii) to prepare outline and requirements for contractors reports related to the implementation of mitigation and environmental protection measures and to analyze completed reports; and (iii) to present the effects of mitigation and environmental protection measures applied for overall public by specific publication or/and by annual seminars.

Monitoring and enforcement of the requirements are necessary aspects of the process. There will be a **Supervision Engineer (SE)** for each contract to ensure all works are in compliance with the contract requirements including the ESMP. The SE will periodically provide relevant reports to the NRA, including with regard to overall ESMPs implementation.

The **Contractor** is responsible for implementing the ESMP in accordance with the conditions in the contract documents. This Environmental and Social Management Plan, together with the C-ESMP are the basis for environmental and social risks management when implementing the subproject.

The Contractor will develop the C-ESMP document in accordance with this ESMP, and shall be submitted within 30 days of the works contract signature. Preconstruction and Construction works can only commence once the C-ESMP is approved by the NRA and/or the Supervisor Engineer (as the representative of NRA). C-ESMP preparation will start once the contract has been signed.

For this purpose, the Contractor shall:

Appoint a qualified Environmental, Social, Health and Safety (ESHS) Officer;

Ensure environmental and social training for all workers;

Monitor construction activities and maintain records;

Report incidents, accidents, and non-compliance immediately to the SE and PIU;

Implement corrective measures within specified timeframes.

The Contractor will prepare a Quality Assurance Plan which will include implementation of the ESMP, and appoint an Environmental, Social, Health and Safety officer with relevant training and experience in the field. The Contractor shall provide to all Employees general environmental and social awareness training, as part of their standard environmental, social, health & safety. Adherence by the Contractor and construction workers to environmental and social requirements is a major aspect of environmental and social protection in road projects. This adherence is best achieved through training and contract stipulations, as outlined in contract documents.

The Contractor's internal communication should include reporting of any incident involving environmental contamination and/or damage presented to the Contractor's Environmental, Social Health & Safety Officer. The Contractor shall immediately determine corrective action and inform the NRA Project Manager.

The Contractor will prepare quarterly reports and present those to Supervision Engineer, in case Contractor will identify pollution, reports will be presented within a week to SE and to NRA and correction measures will be immediately issues (within 1-2 days by SE) to rehabilitate the situation and diminish the caused pollution. Correction measures/actions will be sent also to NRA and monitored by SE in terms of their implementation by the Contractor. A monitoring report should be presented quarterly by SE to the NRA and PIU E&S Specialist. Competent Environmental Protection Authorities should be informed, if pollution cases occur. Any problem requiring immediate attention should be noted by the Contractor and brought IMMEDIATELY to the attention of SE who is responsible for ensuring that the Contractor complies with the contract. SE will use authorized laboratories from the State Ecological Inspectorate to carry out necessary tests and develop reports.

Social Impact Monitoring Committees – it is a gathering body of people coming from different institutions and also simple inhabitants of the affected communities where the road will pass through. The role of SIMC is to inform the local population and institutions of what is happening every couple of weeks on and off site.

If during the construction works carried out by Contractor, the members of SIMC will observe or discover the fact that there were not respected the social and ecology laws of Rep of Moldova, the SIMC member(s) would record the complaint and transmit it to the decision making factors NRA, Supervision & Consulting company that is usually called the Engineer. Sometimes the SIMC will receive the complaints and with some

help from the decision factors from Contractor were able to solve the grievance, if it was a minor one, before it reaches the NRA or Engineer company.

7. GRIEVANCE REDRESS MECHANISM

The GRM is described in details in the SEP (<https://www.andsa.md/files/21260>).

The goal of the GRM is to strengthen accountability to beneficiaries and to provide channels for project stakeholders to provide feedback and/or express grievances related to project supported activities. The GRM is a mechanism that allows for the identification and resolution of issues raised by stakeholders. By increasing transparency and accountability, the GRM aims to reduce the risk of the project negatively affecting citizens/beneficiaries and serves as important feedback and learning mechanism that can help improve project impact. The mechanism focuses not only on receiving and recording complaints but also on resolving them. While feedback should be handled at the level closest to the complaint, all complaints should be registered and follow the basic procedures set out in this chapter.

SCOPE: GRM will be available for project stakeholders and other interested parties to submit questions, comments, suggestions and/or complaints, or provide any form of feedback on all project-funded activities.

GRM's users: Project beneficiaries, project affected people (i.e. those who will be and/or are likely to be directly or indirectly affected, positively or negatively, by the project), as well as the broader citizenry can use the GRM for the above purposes (see Scope).

GRM's management: The GRM is managed by the NRA's PIU.

GRM at the level of SIMC: For each sub-project affected localities Social Impact Monitoring Committee (SIMC) will be created. Affected people from the community could submit in written form the complaint, request or grievance to the SIMC. The Contractor will also be present at the meetings with SIMCs and the NRA representatives. The communication with PAPs should be done in a diplomatic, peaceful way in order not to develop scandals and misunderstandings when it comes to communication without violence.

Submission of complaints: Complaints can be expressed at any time throughout project implementation.

If a grievance is concerning the Contractor's bad working conditions, then this grievance is filled at the SIMC and NRA institution and that is because the Contractor will try to hide the grievance and not make it public. For this reason, there should be appointed an employee of OHS, social and environmental issues that will obey not just the management of the Contractor, but also report verbally and in written form to the PIU and NRA.

Dissemination of channels of information at the work site – there should be a mail box, where the employees would drop the suggestions or anonymous complaints if they did not want their name to be disclosed to the management of the Contractor.

Grievance Investigation and Resolution Process

GRM at the Project level will be maintained during the entire period of Project implementation. The GRM will ensure that all stakeholders can effectively be engaged in the Project design, implementation, provide project staff with practical suggestions/feedback on Project activities allowing them to be more accountable, transparent, and responsive.

This mechanism will follow the following principles:

- Grievances will be treated confidentially, assessed impartially, and handled transparently.
- The submitting and readdressing of the grievances will be free of charge for complainants.

- The NRA will ensure that all project-affected parties will have equal opportunity to submit their grievance in accessible way. The Project beneficiaries may use a range of contact options (telephone number, e-mail address and postal address, etc.). The GRM is accessible to all stakeholders.
- The channels for filling in grievance form should be disclosed on official sources.
- The NRA will provide an opportunity to submit a grievance anonymously.
- Affected persons may raise a complain at any time of project related activity.
- The GRM is designed to be responsive to the needs of all complainants, including anonymous ones.
- All grievances, simple or complex, will be addressed and resolved as quickly as possible. The action taken on the grievance will be swift, decisive, and constructive.
- In cases where the aggrieved individuals or group is not satisfied with the outcome of the amicable mechanism, they will always be able to file to the court at any stage in the resolution process;
- All grievances will be registered and documented, and each grievance resolution process and communication will be systematically tracked;
- The channels for filing complaints will be listed in SEP and communicated to the public during the consultations.

The Project implementation entities will ensure equal and non-discriminatory access to grievance mechanisms, but the special attention will be given to the most vulnerable groups: people less informed, with limited legal knowledge, the poorest community members, with limited or no access to internet. The project team will be working together with social assistances and community mediators to provide access for complaints and ensure that the most vulnerable groups views are taken into account.

The Social Specialist will serve as Grievance Focal Point(s) who will register the submitted grievances in the Grievance Log (database) and review within 15 (fifteen) calendar days, including the information verification, cross-checking, and analysis, and follow-up with the complainant as needed. As necessary, the Grievance Focal Point will involve the other relevant units' specialists in this activity.

Sub-project level GRM mechanism.

Will be operated through the SIMC (will be established at the later stages of the Project).

The Mayor's Office Secretariat is designated as the Reception Point for collecting grievances/complaints from community people from the localities where SIMC operates.

- The grievance redress mechanism should be communicated to community people and contact details should be made available to all.
- Complaints & grievances will be addressed through the following steps and actions:
- First, complaints should be logged at the Social Impact Monitoring Committee (SIMC) at the local administration offices where resolution will be attempted with the involvement of the Engineer or can be contacted a SIMC member directly.
- The affected person/s may call Engineer representative directly and make an appointment to discuss their issues. Should the complaint arise from direct fault of Contractor to comply with environmental and social requirements set out by Employer, Engineer will take immediate action for resolution of grievance in the promptest time by asking immediate rectification from Contractor.
- SIMC shall collect, document and address grievances referred by the local police officer in case community people are not aware of the grievance mechanism established by Engineer and the grievance is filed at the local police office. Accordingly, the local police officer should be informed that citizens can choose addressing their grievance to the SIMC and ask prompt involvement of Engineer in resolving the matter.
- The grievances may be recorded as anonymous, should this be asked by the affected person.

- The complaint/grievance will be filed in a template Letter of Complaint, attached hereto.
- If no solution is reached within 15 days, the affected person/community can further submit their case to the appropriate department of the NRA.

SEA/SH GM

Sexual exploitation and abuse / sexual harassment (SEA/SH) grievance redress mechanism is a grievance mechanism that allows for safe and ethical handling of SEA/SH allegations. This is project level grievance mechanism adapted for SEA/SH cases.

The Project level GRM will be designed to also address SEA/SH cases in ethical and confidential manner. The complainant will be able to submit the grievance with the help of project level GRM, also possibility of anonymous grievance submission will be ensured by NRA. The envelopes with NRA office post address and post stamps will be placed in contractor`s camp`s and Engineer`s offices for ensuring that employees have a possibility to submit the complaint anonymously. The special designated GBV focal point in NRA will undergo sensitization on SEA/SH handling issue process and be responsible for investigation of the SEA/SH cases and communicate with Project staff with GM responsibilities to investigate and address the grievance. The confidentiality of complainant`s personal data will have a high priority.

The special SEA/SH grievances handling and investigation trainings based on World Bank guidelines and requirements will be organized by NRA focal point for staff with GRM responsibilities.

GRM for employees

A locally-based project-specific GRM, proportionate to the potential risks and impacts of the project, will be established, building upon existing labor practices and HR procedures. In addition, a GRM specifically for direct and contracted workers will be provided in accordance with ESS2. The GRM will be designed at an early stage and will be formally established by project effectiveness and before any disbursements and start of the civil works.

Channels to Make Complaints

Project proposes the following channels through which citizens, beneficiaries and PAPs can make complaints regarding project-funded activities:

National Road Administration	
<u>By Email:</u>	serviciu@andsa.md
<u>Web page:</u>	www.andsa.md
<u>In writing:</u>	Chisinau, Bucuriei str. 12A MD 2004 Republic of Moldova
<u>Social Media:</u>	https://www.facebook.com/anddrum
<u>Phones:</u>	+373 22 22 11 14
<u>Call center 24/24</u>	+37360477117
<u>SIMC</u>	Contact number of SIMC from the affected locality

Grievance Log

It is important that all complaints, including the anonymous ones, to be recorded (logged) in writing and stored in a database.

Each grievance should be assigned with an individual reference number and appropriately tracked and recorded actions are completed. The all grievances submitted will be registered / entered by NRA/MCS in to a unique register/database. The directly received grievances by local group will also be sent to NRA for registration in the unique register. NRA will be the grievance focal point of this Project. Thus, NRA will collect the grievances and further will direct them to the local level or to the Project level for examination and solution depending on the subject and location of the grievance.

A simple database will be developed under the Project to manage and monitor the grievances. The documentation on grievances will include:

- the name and contact details of the complainant;
- the date and nature of the complaint;
- the group charged with addressing the complaint;
- any follow up actions taken;
- the proposed resolution of the complaint; and
- how and when relevant Project decisions were communicated to the complainants.

For the verbal grievances, it will be suggested to the complainant to file a written grievance/complaint or to use the number phone and email address appointed for Project grievances in order to be directed to relevant staff/groups for appropriate grievance resolution.

The Grievance log will be submitted to the Bank of quarterly basis for review.

Awareness Building

The information about the Grievance Redress Mechanism will be available at the online platform and will be included in the communications conducted with the project stakeholders through the communications methods and tools that are part of this stakeholder engagement plan and communications plan under the project, including emails, website, workshops, meetings, consultations, etc

Monitoring and reporting on GRM implementation

Policies, procedures and regular updates on the GRM system will be made available for all stakeholders. The PIU will regularly track and monitor the status of complaints to ensure that all grievances are resolved within the established timeframe. The PIU will also provide and publish reports available to the World Bank team, and all stakeholders that would contain the following information:

- Status of establishment of the GRM (procedures, staffing, awareness building, etc.)
- Quantitative data on the number of complaints received, the number that were relevant, and the number resolved;
- Qualitative data on the type of complaints and answers provided, issues that are unresolved;
- Time taken to resolve complaints;
- Any issues faced with the procedures/staffing or use;
- Factors that may be affecting the use of the GRM/beneficiary feedback system;
- Any corrective measures suggested/adopted and satisfaction of the complainants.

The PIU will compile a report summarizing SEP results on annual basis. This report will provide a summary of all public consultation issues, grievances and resolutions. The report will provide a summary of relevant public consultations’ findings from informal meetings held at community level. This report will be available on-line for general population. Stakeholders should be reminded once again that the grievance mechanism is available and important. The SEP will be revised and updated, supplemented as needed with project-specific arrangements and will be publicly disclosed.

World Bank Grievance Service (GS)

Communities and individuals who believe that they are adversely affected by World Bank supported projects may submit complaints to existing project-level grievance redress mechanisms or the WB’s Grievance Service (GS).

The GS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of World Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond.

For information on how to submit complaints to the World Bank’s GRS, please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service> .

For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

8. IMPLEMENTATION SCHEDULE

The project road construction and implementation schedule are about 36 months. Tentative implementation schedule of the project is listed below:

Project phase	Time
Procurement:	6-12 month (March 2026)
Construction commencement:	July 2026-
Project Completion	36 months
Defects Liability Period:	12 months
Preparation of Site-specific C-ESMP by contractor based on ESMP:	Within one month after contractor’s signing, prior to commencement of works on site

9. CONSULTATIONS AND STAKEHOLDER ENGAGEMENT

Summary of 2025 Public Consultations

A new public consultation was held on 1 April 2025 at 11:00, in the premises of the mayoralty of Enichioi village, to discuss the creation of the Social Impact Monitoring Committee (SIMC) for Corridor C24.

A total of 16 participants attended the meeting, of whom 25% were women and 75% were men. Participants included representatives of the road sector/project team, local public authorities, mayoralty representatives, rayon-level representatives, local council representatives, and community representatives from the settlements located along the corridor.

During the meeting, the project and the road corridors planned for rehabilitation were presented. It was explained that the SIMC would serve as an intermediary body between the National Roads Authority, local public authorities, and the local population, helping communicate issues arising during project implementation to the responsible decision-makers. It was also noted that the committee would require a chairperson/focal point and a secretary or deputy chairperson.

The discussion covered several key subjects, including:

- the purpose and role of the SIMC;
- the need for community representation in project monitoring;
- the importance of ensuring greater participation of women in the committee and in infrastructure-related activities;
- promotion of social awareness topics, including gender-based violence prevention and public information campaigns;
- the project's gender inclusion subcomponent, including encouragement of young women to pursue technical and engineering careers;
- the financing timeline of the overall project, with reference to implementation deadlines up to 2027–2028;
- the division of the corridor into lots;
- the expected timeline for procurement and construction works, including the postponement of tender announcements and the expectation that road works would most realistically begin in 2026 / the following spring;
- whether political factors could interfere with implementation;
- the possibility of adjusting the composition of the SIMC over time, depending on project needs;
- the total number of corridors planned for financing and changes in the broader project pipeline;
- the concern that southern regions may receive less infrastructure investment than other parts of the country.

Participants also discussed that, depending on the issue under review at future meetings, additional specialized representatives could be invited, for example in relation to tree cutting, wells, or other site-specific matters.

As a result of the consultation, the SIMC for Corridor C24 was established, with members nominated from the communities and institutions along the corridor. It was also concluded that the committee should aim to ensure at least 40% women's representation in its composition. Participants expressed the view that the implementation of the road project should proceed without interference from political developments and that

the SIMC would play an important role in supporting communication and local monitoring throughout the project.

Summary of 2018 Public Consultations

Public consultations for the initial stages of Corridor 24 were conducted in 2018 as part of the early project preparation process. These meetings were organized by the State Road Administration in coordination with local public authorities along the proposed alignment. The discussions focused on preliminary design options, anticipated environmental and social impacts, land-acquisition needs, and community safety concerns. Participants provided comments regarding road safety, drainage, access to agricultural lands, and potential impacts on private properties. The feedback collected in 2018 was incorporated into the subsequent project design iterations and helped shape the scope of the updated ESMP.

The new WB standard on Stakeholder Engagement and Information Disclosure 10 (“ESS10”) recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice.

The public consultations—preceded by the public disclosure of the draft updated ESMP on the NRA website for a statutory 30-day period in accordance with the national legislation—were organized and facilitated by the NRA in line with the project’s Stakeholder Engagement Plan (SEP). The consultations were conducted at the local level along the C24 corridor, specifically in Enichioi village, on 1 April 2025.

The primary objective of this meeting was to constitute a new, functional, and representative Social Impact Monitoring Committee (SIMC) to act as a liaison platform between the local community, the Contractor, and public authorities, including the NRA. The SIMC is intended to strengthen communication, ensure timely grievance resolution, and support transparent monitoring of environmental and social performance during project implementation.

The minutes and consultation report are provided in Annex 7 of this ESMP.

The project also recognizes the importance of ensuring affected people are involved in mitigation measures, road safety programs, as well as continuing monitoring of project activities.

The objectives of the consultations and SEP requirements are:

- To identify all project stakeholders including their priorities and concerns, and ensure the project has ways to incorporate these;
- Identify strategies for information sharing and communication to stakeholders, including project information on social risks and impacts, as well as consultation of stakeholders in ways that are meaningful and accessible throughout the project cycle;
- To specify procedures and methodologies for stakeholder consultations, documentation of the proceedings and strategies for feedback;
- To establish an accessible, culturally appropriate and responsive grievance mechanism, and
- To develop a strategy for stakeholder participation in the monitoring of project impacts.

The ESMP and SEP are a living document and will continue to be updated as the project progresses from pre-civil works to civil works and operation.

The following aspects were presented during the public consultation meeting:

- Objectives of local roads rehabilitation project,

- Corridors selected for the first phase of the project,
- Period of works execution,
- Necessity to develop and the goal of the Environmental and Social Management Plan
- Methodology to collect data to develop ESMP

Presentation of identified and collected data **Summary of consultation on land acquisition process.**

On 15 October 2024, a meeting of the Preliminary Investigation Commission was held in Chişinău, at the Government House (2nd floor, office 246), regarding the declaration of public utility of national interest for the construction/rehabilitation works of the national roads G131 R35 – Bobocica – G132, G132 R35 – Baimaclia – Taraclia de Salcie – R32 (Tartaul – Baimaclia section), and G133 G132 – Tartaul – Goteşti – R34 (Corridor No. 24). The meeting was conducted in accordance with Law No. 488/1999 on expropriation for public utility purposes and Government Decision No. 660/2006, with the objective of assessing the national interest justification and the socio-economic, environmental, and spatial planning premises supporting project implementation. During the meeting, the Commission Chair, Mr. Nicolai Mîndra (State Secretary, Ministry of Infrastructure and Regional Development), presented the project information, and Commission members (representatives of the Ministry of Environment, Ministry of Finance, Ministry of Economic Development and Digitalization, Cantemir District Council, and local public authorities from the affected localities) reviewed the technical and cadastral data. Based on the comparison between the technical design documentation and the national cadastral database, it was confirmed that the works require expansion beyond the boundaries of state-owned land allocated to national roads; for Sector I, 14 privately owned plots (0.5699 ha) and 23 publicly owned plots (approximately 3.3594 ha) were identified as affected. The Commission concluded that the project is expected to generate positive impacts on the national and local economy by improving transport conditions and mobility, and by majority vote decided on the need to declare the works as being of public utility of national interest, with the application of the legally required expropriation and fair prior compensation procedures, as applicable.

3. MONITORING AND REPORTING

Reporting on the implementation of the Environmental and Social Management Plan (ESMP) will be carried out systematically throughout the project cycle. The Contractor will prepare monthly Environmental and Social (E&S) progress reports, summarizing compliance with mitigation measures, site observations, incidents, and corrective actions taken. These reports will be reviewed by the Supervision Engineer, who will verify implementation on-site and compile a quarterly consolidated report for submission to the Project Implementation Unit (PIU) and the financial institution (World Bank). The reporting process ensures continuous monitoring, accountability, and adaptive management of environmental and social performance.

The monitoring of environmental and social indicators and mitigation measures performance will be a part of the overall project monitoring. The NRA environmental and social specialists will have overall responsibility for the implementation and supervision of the related site-specific ESMPs, as well as the SEP, LMP, RPF. They will ensure Project compliance with the applicable social and environmental requirements.

The NRA environmental and social specialists will review the environmental and social status of the sub-project areas to assist with the establishment of a baseline for the major environmental parameters and set up a monitoring program for periodic review of the sub-project's impact on environment. Monitoring of

implementation of environmental and social mitigation measures in road rehabilitation sub-projects, established within specific ESMPs, will be the responsibility of:

- Civil works Contractors;
- NRA environmental and social specialists and
- Rayon ecological inspectors.

The PIU will collect the information and will prepare subsequently the summary for the reports to NRA related with SEP implementation and also relevant monitoring of PAPs and land acquisitions needs for Project and action done. This information will be part of progress reports provided by NRA to WB.

The findings of the relevant monitoring activities will be reflected in quarterly and annual progress reports. The progress reports will cover the implementation proposed by ESMP, activities, as well as extent of environmental impacts (if any). The site supervisors should be trained to be able to inspect construction sites, borrowing and dumping areas, and other potentially affected areas. Specific aspects to be monitored include:

- Carrying out of monitoring during construction;
- Monitoring of significant impacts during the operation of roads.

Monitoring indicators shall be developed for both the construction and operation phases of each road sub-project. Monitoring of construction activities will have to ensure that mitigation measures of construction impacts are being implemented properly, while the monitoring of operation is to ensure that no unforeseen negative impacts are arising. Periodic monitoring of roads will be conducted by NRA environmental and social specialist and would include the following: (i) review and approve environmental and social management plans (ESMP) of roads to be funded under the program; (ii) monitor compliance with ESMP by the various players involved in the implementation of the project; and (iii) collect data to document that the environmental and social procedures are being met.

NRA environment specialist will supervise and monitor the overall activities and prepare a semi-annual report on the application of environmental guidelines and other frameworks and action plans during the planning, design and construction phase of the project. He will also develop the reporting requirements and procedures to ensure compliance of the contractors, conduct public consultation and implement public awareness programs, and hold periodic training for field engineers and contractors, as appropriate.

A detailed monitoring program designed to validate the effectiveness of the mitigating measures shall to be included in the ESMPs for individual sub-projects. It should contain detailed environmental compliance-monitoring requirements, including parameters and indicators for all activities relating to the recommended mitigation measures.

The SEP and RAP implementation monitoring will be also in the responsibility of NRA Environmental & Social specialists with support of other PIUs staff.

Incidents and Accidents Reporting

Despite significant efforts to manage the risks, including environmental and social, associated with MRCP project activities, incidents and accidents may occur. An incident or accident in this context is a negative event resulting from failure on the part of the implementing party to comply with national legislation and WB ESF and Environmental, Health & Safety Guidelines (EHSGs) requirements, or because of unexpected or unforeseen events during subproject implementation.

MRCP project's ESCP includes clear requirements for NRA and MCS through PIUs to promptly notify the World Bank of any incident or accident relating solely to the project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers, including those resulting

in death or significant injury to workers or the public; acts of violence, discrimination or protest; unforeseen impacts to cultural heritage or biodiversity resources; pollution of the environment; dam failure; forced or child labor; displacement without due process (forced eviction); allegations of SEA/SH; or disease outbreaks.

ANNEX 1: ENVIRONMENTAL SURVEY CORIDOR 24

Km.	Name/type of identified object	Roadside, distance from centerline (m)	Road side	Note
0,0	Village Gotești			
4,5	Stand of poplars			50 trees, marked
6,9	Stream, bridge			
7,0	Well			
7,5	Well			
8,7	Stream, pond, crucifixion			
8,8	Well			
8,9	Well			
	Village Ciobolaccia			
9,1	Well			
9,2	Market, gas station			
10,0	Well			
10,1	Well			
10,3	Well			
10,6	Well			
10,9	Stream, well			
11,2	Wetland, village Larga		Right	
11,9	Halt			
13,7	Well			
13,8	Ravine			
14,1	Well			
14,2	Well			
14,4	Well			
14,6	Well			
14,7	Well			
14,8	Well			
	Village. Baimaclia			

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

National Road Administration Corridor 24: R34 – Ciobalaccia – Tartaul – G132 – Baimaclia – Enichioi – R35

Km.	Name/type of identified object	Roadside, distance from centerline (m)	Road side	Note
0,0	School, bus station, well, crucifixion			
0,3	Bus station			
0,5	Gas station			
1,2	Well			
1,7	Ravine, bridge, landfill		Right	
1,9	Well, crucifixion		Right	
5,4	Well, crucifixion			
5,5	Well			
5,7	Well			
6,0	Deep valley, lowland			
8,7	Bus station, crucifixion			
8,8	Well			
9,0	Well			
9,1	Well			
18,0-20,0	Pond		Left	
	Village Vișniovca			
21,6	Well			
21,8	Well			
21,9	Well			
22,0	Well			
22,1	Well			

ANNEX 2. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

This Environmental and Social Management Plan (ESMP) has been prepared for the Corridor C24 road rehabilitation project, a component of the Moldova Rural Connectivity Project (P180153). This document outlines the specific mitigation, management, and monitoring measures required to address the environmental and social risks and impacts identified during the project's assessment phase. The ESMP is designed to ensure that all project activities are implemented in full compliance with both the national legislation of the Republic of Moldova and the Environmental and Social Standards of the World Bank.

This section details the specific actions and measures designed to prevent, reduce, mitigate, or compensate for potential adverse environmental and social impacts throughout the project lifecycle, from pre-construction through to operation. These measures are designed to be practical, effective, and directly integrated into the project's design and execution. The implementation of this Mitigation Plan is a binding contractual obligation for the Contractor and will form an integral part of the works agreement, ensuring that environmental and social performance is a core component of project delivery.

Phase			Environmental and Social Risks & Impacts, and Opportunities	Receptors / beneficiaries	Significance	Location	Mitigation measures
P	C	O					
			<i>Road rehabilitation works will involve various – yet unspecifiable – contractor activities requiring management of environment, health and safety issues</i>	NRA	High	All Project locations	<p><i>Contractor to prepare a Contractor’s Environmental and Social Management Plan (C-ESMP) and obtain approval thereof the NRA / SE prior to start of works. The following issues are to be addressed as a minimum:</i></p> <ul style="list-style-type: none"> • Contractor’s Environmental Management System; • Pre-construction planning (topsoil removal and temporary storage; temporary protection of roadside trees); • Health & Safety Management Plan; (including incident management, trainings, performance reporting, medical treatments, hazardous operations, emergency etc.); • The Contractor has mandatory to Report in 24 hours every incident

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Phase			Environmental and Social Risks & Impacts, and Opportunities	Receptors / beneficiaries	Significance	Location	Mitigation measures
P	C	O					
							<p>/accident to NRA. NRA will report to WB.</p> <ul style="list-style-type: none"> • Site and Camp establishment - if any – and operation (siting, topsoil clearing; camp establishment, effluent; waste management; fires; demobilisation); • Waste / hazardous waste management (general waste generation; Waste separation and transport; Waste storage, handling & disposal (incl. hazardous waste; disposal etc.); • Fire safety; • Oil and fuel & chemicals management; • Spill prevention and response; • Mobile asphalt plant if the case (site preparation; site management; operation; demobilization); • Resource management (incl. energy, water, aggregates, living resources); • Sites proposed for material extraction*; material storage; • Materials (handling and transport; spill management; storage; traffic machinery and equipment accidents); • Logistics management (vehicle and machinery movement; road access; travelling speed; compliance with traffic safety principles); • Vehicle and equipment maintenance (vehicle washing; effluent handling methods statement; refuelling; fuel and lubricant handling);

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P	C	O					
							<ul style="list-style-type: none"> • Protection of roadside trees / tree plantations; • Site rehabilitation; • GRM • Code of Conduct covering SEA/SH • Labor Management in accordance with LMP, and measures to mitigate risks of labor influx <p>In developing the CESMP the Contractor will be responsible to ensure compliance of the proposed approaches with the applicable legislation and best practice. The plan will be updated periodically as appropriate.</p>
			<p>Land Acquisition and economic displacement. Economic displacement:</p> <p>Likely, but minor and localized. It may include partial loss of productive land (field edges, vineyard rows, orchard fringes), temporary construction occupation, temporary access restrictions, and relocation of fences/field entrances/irrigation laterals.</p> <p>Residential plots near the road: Impacts limited to boundary adjustments (e.g., fence shift to the legal ROW), driveway regrading, culvert/ditch reconfiguration, and temporary access constraints during works. No full plot loss is foreseen.</p> <p>Agricultural lands neighboring the road: Narrow strips may be</p>	NRA / LPA/ PAPs	High	Specific project locations for land acquisitions	<p>A RAP document will be developed.</p> <ul style="list-style-type: none"> • Alignment optimization: The road design stays almost entirely within the existing ROW, with minor realignments only at curvature corrections to meet design and safety standards. • Design alternatives: Each point of potential land-take was reviewed to minimize parcel intrusion through reduced slope footprints, retaining structures, and shoulder adjustments. • Construction planning: Temporary sites (lay-down areas, detours) will be located on public or previously disturbed land wherever feasible, to avoid private land occupation. • Access management: All existing driveways and agricultural accesses will be maintained or restored immediately

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			<p>permanently acquired at curve-widening points and temporarily occupied for site compounds, equipment laydown, haul/service detours, and drainage works.</p>				<p>after construction; temporary alternative accesses will be provided if required.</p> <ul style="list-style-type: none"> • Vegetation preservation: Productive trees or vineyard rows within safety clearances will only be removed where technically unavoidable, and with advance notification and compensation. • Describe the nature and scope of resettlement impacts, as well as measures taken to minimize involuntary resettlement • Summarize the results of the socioeconomic assessment of PAPs • Quantify affected assets and PAPs via a Detailed Measurement Survey (DMS) and cadastral overlay; • Define eligibility and entitlements for PAPs based on the census, socioeconomic survey, and RPF entitlement matrix; • Apply compensation rates at full replacement cost, verified by independent valuation, as well as necessary assistance measures • Where there are impacts to income or livelihoods, include livelihood restoration measures. • Summarize the consultation process including how PAPs have been given options and alternatives from which to choose, • Describe the Grievance Redress Mechanism (GRM) to ensure timely resolution of PAP concerns;

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P	C	O					
							<ul style="list-style-type: none"> Detail the implementation schedule, institutional responsibilities, budget, and monitoring arrangements.
			<i>Preparatory works for the site locations</i>	General public and traffic	High	All Project locations	<ul style="list-style-type: none"> Signalling of the work area; Verifying the existence and position of any utilities in the area or in its vicinity; All measures will be taken for the safe execution of the works; Plotting the works; Ensuring water drainage from the site
			<p><i>Siting, construction and operation of Contactor’s yard / camp (e.g. with offices; workshop; material storage areas and staff accommodation facilities - if any⁹)</i></p> <p>Creation of pollution & health and safety risks through inappropriate storage and handling of hazardous materials and waste; Risk of temporary nuisance or impact on public health and well-being; Site impact (vegetation loss, erosion, soil contamination, water pollution etc.)</p>	General public	NA	NA	<ul style="list-style-type: none"> CESMP to address the site-specific environmental and social management aspects such as siting, site preparation, design, temporary operation and rehabilitation of the site upon completion of construction; Consult with local officials prior to site selection; Site selection to observe relevant criteria to primarily protect the general public and sensitive environmental receptors; Obtain approval from NRA / SE and responsible local authorities.
			<p><i>Construction materials</i></p> <p>Sourcing of materials</p>	General public	Moderate	Borrow sites and quarries	Construction materials will be exclusively sourced from quarries and existing borrow sites that hold appropriate license under Moldavian legislation;

⁹ Note that the NRA explicitly encourages Contractors to accommodate the workforce in the local villages and to possibly use existing industrial facilities in the region.

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Phase			Environmental and Social Risks & Impacts, and Opportunities	Receptors / beneficiaries	Significance	Location	Mitigation measures
P	C	O					
			Transportation of construction materials by heavy trucks has potential to cause nuisance through noise and dust pollution and also to create road safety hazard	General public	Moderate	Whole routes	Carefully select haul routes to minimize nuisance of local residents through noise and dust and to possibly minimize risks of road safety – especially when passing through villages
			Transportation of construction materials such as soil, bitumen, asphalt-concrete mixtures, concrete, cement-concrete slabs, gravel, etc. has potential to cause nuisance and soil and water contamination through accidental spillage	General public	Moderate	Whole route / Site location	<ul style="list-style-type: none"> • Carefully plan construction works to minimize pollution risk through accidental spillage or accidents; • Ensure proper condition of transport vehicles at all times; • Train workforce on proper management practices and safe handling and transport of materials; • Avoid overloading and / or effectively cover haul trucks; • Ensure prompt clean-up of any spills of construction materials.
			Construction water The need for construction water and water for dust management may cause ecological damage or create conflicts through competing interests with the needs of the local communities	General public	Low	Construction site; approved water abstraction point	Identify the most appropriate source of construction water and obtain approval from local authorities on location and quantities for abstraction prior to the start of operations
			Air quality impact through construction emissions and side activities Temporary impact on air quality through increased emissions from construction traffic and equipment, potentially affecting local residents, road users and the construction crew	Local flora and fauna Residential and commercial areas	Low	All Project locations	<ul style="list-style-type: none"> • Contractor to ensure that all construction equipment and vehicles will be in proper technical condition at all times; • Ensure regular maintenance and servicing of all construction machinery and haulage trucks throughout construction; • Strictly implement speed controls - especially within villages; • Strictly require workers to shut down engines that are not directly needed;

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P	C	O					
							<ul style="list-style-type: none"> Transport tires must be cleaned when leaving work areas if they are used on public roads.
			Temporary generation of elevated levels of suspended dust through material transport and storage	Local flora and fauna Residential and commercial areas		All Project locations	<ul style="list-style-type: none"> Cover all trucks carrying fine materials with tarpaulin to minimise dust generation; Sprinkle construction site and haul routes as appropriate / as directed by the Engineer during dry periods or in case of complaints; Ensure that only approved sources of water will be used for dust management; Cover all fine material stockpiles materials or take other precautionary measures as appropriate or directed by the SE to minimise dust pollution effects;
			Combustion gases from automobile transport	Residential and commercial areas	Low	All locations with sensitive receptors	<ul style="list-style-type: none"> Air quality along the road section to be monitored at locations near the closest residential buildings for an initial period during operation; Establishing speed limits in residential areas.
			Burning of construction waste		Low	All Project locations	There will be no open burning of construction/waste material at the site.
			Damage to land / soils due to: <ul style="list-style-type: none"> Site preparation works earthworks; Impact on soil structure due to vehicle traffic and temporary storage of construction materials (cement-concrete slabs, gravel, etc.) in the	Local soil	Moderate	All Project locations	<ul style="list-style-type: none"> Removal and storage of top soil for subsequent site rehabilitation as required; Implementation of other site management measures in compliance with provisions of the approved CESMP, including Emergency Preparedness and Response Plan.

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P	C	O					
			immediate vicinity of road rehabilitation works; Land damage / soil pollution by bitumen, asphalt concrete mixtures during loading-unloading/ transport and laying.				
			Construction noise impact Temporarily elevated noise levels through the operation of heavy equipment; potential noise impact on specifically sensitive receptors Disturbance of local residents in village sections along the project route	Residential and commercial areas	Moderate	All locations with sensitive receptors	<ul style="list-style-type: none"> • In case were noisy construction activities are unavoidable and likely to affect communities or other sensitive receptors CC to provide timely information on the location and schedule to the local authorities; • Within settlements restrict noisy construction activities and material transport to the period Monday to Friday 8.m. – 6p.m.; on Saturdays 8 a.m. to 3 p.m.; • Suspend construction activities during Sunday and public holidays; • Separation of activities that generate a significant level of noise in different periods of time; • Fit and maintain appropriate mufflers on earth-moving and other vehicles on the site; • Noise levels to be monitored at locations near the closest residential buildings before construction and during construction; • Avoid idling of vehicles and minimize use of horns.
			Noise levels from automobile transport is expected to be reduced	Residential and	Moderate	All locations	<ul style="list-style-type: none"> • Noise levels must be measured at least at representative receivers (residential areas)

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P	C	O					
			due to improved road surface but increase is also possible due to traffic levels growth.	commercial areas		with sensitive receptors	<ul style="list-style-type: none"> on the side of the road every six months for a period of 2 years after construction; Performance evaluation of installed sound panels.
			Vibration Use and work of transport vehicles and heavy machinery. Risks of physical damage to the residential buildings and other structures due to vibration impact.	Residential and commercial areas	Low	All locations with sensitive receptors	<ul style="list-style-type: none"> Good construction practice. Standard mitigation measures; Assessment of current conditions of affected buildings identified based on the consultations with local authorities and visual observations during the site visits for residential buildings located closer than 30 m from the road; Instrumental observation of vibration level for the identified affected structures, development and implementation of vibration management and mitigation measures during construction, monitoring of potential damage.
			<i>Impact on local water resources</i> Pollution risk through contaminated runoff / erosion / accidental spillage / inadequate storage of construction materials or unmanaged construction waste disposal	Local water resources	Moderate to Low	All Project locations	<ul style="list-style-type: none"> Provision of appropriate drainage of all work sites throughout the construction period; Cover storage areas for construction materials; Ensure proper management of any solid or liquid construction waste throughout the construction period in accordance with the approved CESMP on construction waste management and applicable national legislation; Consult with local officials to identify possible areas for the temporary storage of waste;

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P	C	O					
							<ul style="list-style-type: none"> • Use only technical water for dust suppression; • Use of mobile ecological cabins (toilets) that can be emptied for site personnel; • The repair of vehicles and machinery will be carried out only in specially arranged spaces; • Baseline surface water studies to be performed before the start of construction works and used as a reference for surface water quality monitoring during major reconstruction activities near watercourses at the construction phase.
			<p><i>Management of stormwater from torrential rains</i></p> <p><i>Blockage of storm drains and drains</i></p>	Local water resources	Low	All Project locations	<ul style="list-style-type: none"> • Carrying out maintenance works to prevent the clogging and blockage of storm drains;
			<p><i>Demolition of drainage structures; construction of new culverts may cause pollution of local streams / rivers</i></p>	Local water resources	Low	Construction sites of new drainage structures	<ul style="list-style-type: none"> • As much as possible construction should be undertaken during the low flow season to minimize the threat of water contamination; • Excavation should be done such as to minimize stockpiling of materials near flowing water; • Appropriate protection should be provided to prevent soil materials to be washed away. • Cutting riparian vegetation shall be reduced to the minimum required to implement the works. • The discharge of sediment laden construction water directly into surface watercourses or ponds will be forbidden.

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P	C	O					
							<ul style="list-style-type: none"> • Sediment laden water will be discharged into settling lagoons and tanks prior to final discharge; • Where construction takes place close to surface streams mobile toilets shall be provided at the work site on stable ground and at appropriate distance from the river / stream in line with the applicable legislation and regular servicing ensured.
			<p>Pollution risk for local groundwater wells Potential impact on local – partly uncovered - groundwater wells through dust and other air pollutant or through surface runoff; spillage of harmful substances in case of accidents</p>	Local water resources	Low	Local wells along the Project route	<ul style="list-style-type: none"> • Provision of appropriate cover for all local groundwater wells in the potential area of influence that are yet unprotected; • Provision of appropriate storm water drainage arrangements; • Baseline groundwater studies to be performed before the start of construction works and used as a reference for ground water quality monitoring during major reconstruction activities near wells at the construction phase.
			<p>Wastewater Generation of communal waste water. Potential risk of washing of working areas with storm waters.</p>	Local area Local water resources	Low	All Project locations	<ul style="list-style-type: none"> • Mobile toilets must be regularly serviced and maintained; • Avoidance of storm water discharge in the proximity to the watercourses.
			<p>Soil erosion Earth works and the utilization of heavy construction equipment entail the risk to cause soil erosion and indirectly destabilize adjacent areas</p>	Local soil	Low	All Project locations	<ul style="list-style-type: none"> • The Contractor is responsible to ensure that erosion is contained by soil conservation and protection methods. The Contractor will: <ul style="list-style-type: none"> • Reduce the extent of excavations to minimize erosion risk; • Apply soil conservation and soil protection methodologies in

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P	C	O					
							<p>sensitive areas to prevent / minimize storm water runoff carrying eroded materials offsite;</p> <ul style="list-style-type: none"> • Avoid excavations and operating machinery in wet conditions.
			<p>Construction waste Demolition and construction and works will generate different types of waste incl. but not limited to: Solid inert waste such as demolition material, concrete, bricks, plastic, metals, bitumen and (shredded tyres) etc. Waste oil</p>	Local area	Moderate to Low	All Project locations	<p>As part of his CESMP the Contractor will prepare a comprehensive Waste Management Plan. This Plan will establish all types of wastes generated under the Project and identify their respective management along the mitigation hierarchy (avoid; recycle; dispose). As a minimum the following principles will be considered:</p> <ol style="list-style-type: none"> 1. Whenever feasible viable materials will be recycled (except when containing asbestos). Removed asphalt will be reused on the Project through cold recycling processes; what cannot be recycled shall be managed as directed by the client for temporary storage and subsequent re-use at other road rehabilitation sites 2. Waste collection and disposal pathways and sites will be identified for all major waste types expected from excavation, demolition and construction activities. 3. Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and temporarily stored in appropriate containers. 4. Construction waste will be collected and disposed properly in an approved registered landfill by licensed collectors

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P	C	O					
							5. Waste oils must not be mixed with other kinds of waste but be separately collected and stored for either recycling/reuse in an environmentally sound manner or disposed of by a licensed contractor in line with the applicable legislation. 6. Records of waste disposal will be maintained as proof for proper management. 7. No temporary storage of waste in flood-prone areas. 8. Regular transportation of construction materials will be carried out without stockpiling of large batches of materials at construction sites.
			Vegetation clearance (trees; shrubs) Impact on bird nesting	Local area	Moderate to Low	Construction site	<ul style="list-style-type: none"> • Schedule / execute the clearance of trees and shrubs outside the bird nesting period, i.e. restrict clearance to the period from mid' August to mid-March • Temporary storage of cleared materials in heaps of manageable size in accordance with disposal or re-use requirements.
			Impact on existing roadside trees Unavoidable tree losses: 133 trees, Ø < 30cm	Local area	Moderate	Construction site	<ul style="list-style-type: none"> • Cutting trees only after obtaining the Deforestation Authorization • Compensation of tree losses: Upon completion of construction compensate all tree losses (planned and unintended) through new plantations within the road or in other plots approved by the owner/manager of the land with loss of trees; • Records of unavoidable losses of roadside trees;

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							<ul style="list-style-type: none"> Unintended/accidental tree losses will be replaced at a ratio of 3:1 at the Contractor's own expense.
			<p>Unintended damage of roadside trees <i>Construction and related activities may result in unintended direct or indirect damage and in the unfavorable case in the loss of roadside trees that grow close to the construction corridor (note that NRA considers a damaged tree to be 'lost' when 30% of the branches have been damaged!).</i></p>	Local area	Moderate	Construction site Monitor compliance	<p>Plan and adopt such operational strategies as appropriate to avoid accidental losses/damage to trees. Describe the proposed approaches in a separate Method Statement (or as part of the CESMP) for the protection of roadside trees and seek approval from the SE. The measures could include but may not be limited to the following</p> <ul style="list-style-type: none"> Temporary fencing of trees/groups of trees. for preservation <p>Within a radius of 1.5m around the drip line of existing roadside trees Contractor to avoid or at least effectively minimize the following activities:</p> <ul style="list-style-type: none"> Relocation of utilities; Driving; Soil compaction; Excavations; Temporary storage of fuels, chemicals, construction materials/waste. <p>During the application of bitumen trees and any other woody vegetation will be effectively protected from physical damage. Timely protection of tree crowns:</p> <ul style="list-style-type: none"> Trimming of branches where required between late autumn or early spring / outside the breeding period;

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							<ul style="list-style-type: none"> Duly consider pivoting the range of large construction equipment that may need to be used in the vicinity of existing roadside trees and take appropriate protective measures (e.g. in the context of relocating utilities).
			<p>Insignificant impact at the local level may be on the spontaneous vegetation that grows along the existing road. The impact at the local level will be brought to the population, who live in the project area and who had free access to the forests, which will be deforested.</p>	Local area	Moderate	<p>Construction site Monitor compliance</p>	<p>Plan and adopt such operational strategies as appropriate to avoid accidental losses/damage to trees. Describe the proposed approaches in a separate Method Statement (or as part of the CESMP) for the protection of roadside trees and seek approval from the SE. The measures could include but may not be limited to the following</p> <ul style="list-style-type: none"> Temporary fencing of trees/groups of trees. for preservation <p>Within a radius of 1.5m around the drip line of existing roadside trees Contractor to avoid or at least effectively minimize the following activities:</p> <ul style="list-style-type: none"> Relocation of utilities; Driving; Soil compaction; Excavations; Temporary storage of fuels, chemicals, construction materials/waste. <p>During the application of bitumen trees and any other woody vegetation will be effectively protected from physical damage. Provide free access for population in certain location for entrance/exit from main road/interchanges</p>

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P	C	O					
			Disturbance of wild animal species in their usual breeding, feeding or resting places, as well as along migration routes, at the construction stage of the road, may lead to displacement and exclusion of some species as a result, to the loss or displacement of their habitat. Animal species usually avoid areas in and around the construction zone, for example, due to increased traffic, human presence, as well as noise, dust, pollution, artificial lighting or vibrations caused in during or after the completion of the construction work. Additional impact from the construction works can be the burrows of mammals, the breeding places of insects (bark of trees), the nests of birds and bees in old rotten/dry trees and other places, herbaceous plants are also affected, especially being watering places for reptiles, insects and small mammals.	Local	Moderate	Forest area	<p>In order to avoid the potential impact on nature, in the pre-construction period, it is important that the construction company considers not only the main infrastructure itself, but also all related installations and facilities, such as temporary access roads, storage facilities and equipment, construction compounds, concrete foundations, temporarily installed cables, residues and spaces for depositing excavated earth, etc., to avoid as much as possible damage to the habitats of plants and animals, including birds.</p> <ul style="list-style-type: none"> • An appropriate vegetation management plan shall be developed in order to minimize the trees cutting within the working land and to ensure a proper management of cutting trees • For loss of trees within the working land, adequate compensation shall be established, by planting the same trees species in locations agreed with relevant authorities; • The trees cutting will be outside the breeding and nesting period in the forests
			<i>Site clean-up / stabilisation</i>	Local soil	Moderate	All sites properly re-	Site clean-up in accordance with the approved CESMP / site-rehabilitation plan.

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						instated / recovered with top soil	<p>As a minimum the following shall be undertaken:</p> <ul style="list-style-type: none"> • Rehabilitate all areas disturbed by the work. Provide long-term surface stability by progressively re-vegetating discrete areas of each work site as they are completed. • The sites shall be revegetated by: <ul style="list-style-type: none"> - Raking or loosening any compacted ground surface areas identified for vegetation cover; - Re-spreading stockpiled top soil evenly across completed disturbed sites (including over any permanent fill stockpiles) immediately following construction works. • Sites shall be cleaned up by removing all disabled machinery and construction debris from the works areas.
			<p>Road safety and accessibility issues arising from inconsistent road design</p> <p>There are a number of road safety concerns associated with the existent design.</p> <p>Mobility of pedestrians and motor users and access to public and private properties will be restrained due to inconsistency with the local urban plans</p>	Local communities Users of the road	Major	Project communities	<p>Consultations and engagement, to ensure that sufficient access to community, businesses and all personal assets is retained. Implementation of Traffic Management Plan to maintain vehicle and pedestrian access, safe passage of vehicles and pedestrians, and provide clear warning and instructions to vehicles.</p> <p>Implementation of Mobility and Access Facilitation Plan with measures to ensure people are adequately informed of road closure and alternatives are provided for citizens to access their homes and private properties, as well as public services.</p>

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			<p>Impacts on Community Health & Safety (CHS) during Construction <i>Construction Phase</i> Increased the risk of accidents to the public, largely through the movement of plant and machinery and the delivery of materials. Risk of influx (albeit minor) from workers from outside the area which may give rise to certain risks to the communities. Risks of HIV/STDs</p>	Local community	Major	All Project locations	<p>Contractor CESMP Plan, including Traffic Management Plan. Good site management, security, health & safety measures, warning signs etc. applied by the Contractor to minimise risks to an acceptable level. Fencing and signage to prevent and discourage public from entering the works area Appropriate siting of Workforce Accommodation (if any) and good community engagement mechanisms along with a grievance process. clauses in the construction contracts for the prevention of HIV and STDs</p>
			<p>Occupational Health & Safety, Labor and Working Conditions and Risks to Worker Health & Safety <i>Construction Phase</i> The works will give rise to occupational, health and safety risks to workers, including those related to working with plant and machinery, formation of asphalt, use of cement, working near utilities. <i>Operations</i> Occupational health and safety risks to road maintenance workers</p>	Onsite workers	Major	All Project locations	<p>Contractor's CESMP, including Health and Safety provisions, in accordance with the Employer's Requirements and the Law on the Safety and Health at Work. Good workforce management, conduct training and implementation & enforcement of code of conduct, provision of health surveillance & healthcare access for workers. Occupational health and safety provisions in OHS Plan C-ESMP will incorporate requirements of Project LMP Grievance mechanism for Workers established, disclosed and implemented. The arrangement of works will include technical safety measures that comply with current standards and rules for prevention of accidents and occupational diseases as well as improvement of labour conditions. When</p>

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							<p>planning the construction site, it is envisaged that requirements for required distances, passes and traffic passages width between temporary buildings and structures will be met.</p> <p>The labour protection arrangements must comply with all applicable national norms and requirements.</p> <p>Compliance with safety regulations and instructions, including the use of personal protective equipment, will be enforced and regularly monitored by the OH&S engineer and the Supervision Consultant.</p> <p>The Contractor will also be responsible for:</p> <ul style="list-style-type: none"> (i) Development of an OH&S training programme. All workers will undergo OH&S training during the first week of work on the construction site. (ii) OH&S briefings will be conducted on a regular basis. Subcontractors' representatives of will also be involved in OH&S training. (iii) The Contractor will conduct regular inspections, testing and maintenance of scaffolding, handrails, work platforms, lifts and other lifting, ascending and lighting facilities. Equipment that is damaged, dirty, improperly placed, or shows signs of improper or unsafe operation, must be repaired or replaced immediately.

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Phase			Environmental and Social Risks & Impacts, and Opportunities	Receptors / beneficiaries	Significance	Location	Mitigation measures
P	C	O					
							<p>(iv) OH&S tools and personal protective equipment must be available on the construction site at all times. The Contractor will take measures to ensure the effective use and proper replacement of such equipment and clothing, and all construction installations and equipment used on or around the site must be equipped with appropriate safety devices.</p> <p>(v) The Contractor will ensure that there is sufficient drinking water on the site.</p> <p>(vi) First aid posts. A fully equipped first aid post must be available on the site. The air temperature at the first aid post should be + 20C. The conditions of emergency medical care must be met and compliant with the Engineer’s requirements. The Contractor will sign a contract with the nearest health care facility to provide medical care to the employees.</p> <p>(vii) All subcontractors / suppliers must be familiar with this plan and have its copies to ensure compliance with the plan at all subcontracting levels. All subcontractors must assign an OH&S officer, who will be present on the site throughout the whole subcontracted operating period, unless the Engineer gives written permission to the contrary. In this case, the Engineer will, to the extent possible, ensure that employees at all levels adhere to this plan.</p> <p>The Contractor must comply with the requirements of the Labour Management</p>

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Phase			Environmental and Social Risks & Impacts, and Opportunities	Receptors / beneficiaries	Significance	Location	Mitigation measures
P	C	O					
							Procedures document, which is part of the bidding documentation, and prepare a Labour Management Plan prior to civil works commencement.
			<p>Contractor's camp</p> <p>Waste generation; environmental pollution; violation of public order; risk of erosion, spread of HIV / AIDS etc.</p>	Local community	Major		<p>As part of ESMP, the works Contractor will address the location, construction, operation and dismantling of the Contractor's camp within its own C-ESMP. This Plan will be prepared prior to construction works and will describe the proposed facilities and management structure in accordance with best practices and in full compliance with national legislation. Issues to be addressed will include, but are not limited to:</p> <ol style="list-style-type: none"> 1. Location: Inconveniences for local settlements should be avoided. The location of sites and access roads in the wind direction and at a minimum distance of 500 m from the nearest settlement should be considered; 2. The Contractor's camp should be located at a safe distance from any rivers or streams in accordance with applicable law; 3. Availability of drainage, septic and other treatment facilities. 4. Availability of solid waste management facilities on the camp territory (collection, sorting, recirculating, temporary storage, disposal); 5. Introduction of approaches to reduce the generation of solid waste, including hazardous waste; 6. Compliance with sanitary norms; Design, maintenance and clearing; 7. Places for builders and staff where food is consumed; 8. Places for safe storage of fuel and chemicals on the camp

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Phase			Environmental and Social Risks & Impacts, and Opportunities	Receptors / beneficiaries	Significance	Location	Mitigation measures
P	C	O					
							territory, which have a solid foundation to protect the soil from spills;9. Defining the service area protected from rain;10. Paved areas, including car parks, workshop and areas for fuel storage, as well as for equipment refuelling.11. Places for maintenance of equipment;12. The emergency response plan for spills;13. Provision with proper and calibrated fire-fighting equipment;14. Special places must be designated for washing and servicing of machinery. The use of natural rivers, streams or other water bodies for these purposes is prohibited;15. Upon the completion of construction works, reclamation of the construction site, landscaping.16. Preparation of signed agreements / permits with competent authorities or landowners for any temporary storage sites that may be outside the right-of-way (e.g. soil composition or topsoil layer storage site), including management and reclamation provisions in accordance with current legislation. Construction and work sites will be equipped with sanitary toilet facilities, which will be located far from social facilities and will not pollute surface water. Regular maintenance will be arranged by a licensed Contractor.During the quarantine restrictions imposed by the Moldavian authorities, the Contractor shall ensure compliance with WHO recommendations on

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Phase			Environmental and Social Risks & Impacts, and Opportunities	Receptors / beneficiaries	Significance	Location	Mitigation measures
P	C	O					
							the prevention of the spread of diseases and viruses.
			<p>SEA/SH/ Gender based discrimination</p> <p>Risk factors that increase the potential for violence against women and sexual harassment during road construction works and gender-based violence (GBV) incidents</p>	Communities in the project area	Minor		<p>Contractors ESMP and individual worker contracts to provide for preventive measures</p> <p>Conduct awareness sessions and implement Code of Conduct</p> <p>Establish, operate and maintain a grievance mechanism equipped to handle complaints related to SEA/SH in a safe, confidential and survivor-centred manner.</p> <p>The project will make a significant contribution to the economy and income level of the population, as well as generate opportunities for men, women and vulnerable groups - the elderly, women with children, young people by involving local skilled and unskilled workers in the construction process, fair wages and drawing up work schedules taking into account the need for employees to perform family responsibilities.</p> <p>It is expected that jobs will be created not only for men (although there will be a great need to attract labour in the transport and construction sectors), but also for women.</p> <p>Creating and expanding of employment opportunities for women in technical and managerial positions as managers and technical advisors is highly desirable.</p> <p>It is desirable to support and conduct job training, internships and advanced training for young students.</p>

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Phase			Environmental and Social Risks & Impacts, and Opportunities	Receptors / beneficiaries	Significance	Location	Mitigation measures
P	C	O					
							In cases of sexual exploitation and abuse / sexual harassment (SEA / SH) and gender-based violence (GBV) incidents, the Contractor will conduct a comprehensive investigation of the situation, taking into account ethical aspects and ensuring the anonymity of the participants. After a detailed study of the situation, it is necessary to take measures to prevent a recurrence of the case in the future.
			Cultural Heritage <i>Construction phase</i> Risk (very minor) to hitherto unknown cultural heritage sites from excavations along the road corridor.	Local area	Minor	All Project locations	Chance Finds Procedure to be developed and implemented by the Contractor(s).
			Noise <i>Construction phase</i> Use and work of transport vehicles and heavy machinery <i>Operations</i> Noise levels from automobile transport is expected to be reduced due to improved road surface but increase is also possible due to traffic levels growth.	Residential and commercial areas	Moderate	All locations with sensitive receptors	Good construction practice. Standard mitigation measures. Noise levels to be monitored at locations near the closest residential buildings before construction, during construction and for an initial period during operation. Implementation of noise mitigation measures based on the results of monitoring and consultations with the affected parties (installation of noise protective shields).
			Stakeholder Engagement Lack of community awareness leading to grievances and project opposition.	Project Affected Communities	Moderate	All project locations	The Contractor shall actively engage with local communities through the established Social Impact Monitoring Committee (SIMC) to provide project schedule updates and address concerns in line with the Stakeholder Engagement Plan (SEP).

ANNEX 3. ENVIRONMENTAL & SOCIAL MONITORING PLAN (ESMP)

The following Environmental and Social Monitoring Plan (ESMP) distinguishes:

- Environmental monitoring based on lab analyses and site monitoring; and
- Environmental monitoring based on visual observations made during site checks.

Part II: Monitoring Plan

This section outlines the monitoring program necessary to ensure the effective implementation of the mitigation measures described in Part I. The Monitoring Plan is designed to track compliance with environmental and social standards, evaluate the performance of mitigation actions, and identify any unforeseen impacts that may occur. The program covers both the construction and operational phases, with clearly assigned responsibilities for monitoring, reporting, and oversight. This structure helps ensure accountability and supports adaptive management throughout the project lifecycle.

Parameter Subject to Monitoring	Where Monitoring Will be Carried Out	How Monitoring Will be Carried Out (Method/Type)	When Monitoring Will be Carried Out (Frequency)	Monitoring Cost (Monthly/Item)	Institutional Responsibility for Monitoring	Date of Commencement	Date of Completion
Topsoil loss, erosion depth, silt runoff, sediment traps	Work sites, embankments, drainage outlets	Visual inspection, soil surveys, sediment measurement, photographic records	Weekly + after rain events	Construction costs	Contractor, Supervision Engineer	Contract start	Practical completion
Water turbidity, suspended solids, contamination	Upstream/downstream of works, culverts	Visual assessment, water sampling, laboratory testing (TSS, pH, oil & grease)	Weekly during water works, monthly thereafter	Construction costs	Supervision Engineer, Environmental Lab, NRA	Contract start	Practical completion + 3 months

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Well water quality, contamination indicators	Community wells ±50m of works	Water sampling, chemical/bacterial testing	Before works, monthly during, post-completion	Construction costs	Contractor, Community, Health Authority	Month -1 (baseline)	3 years post-completion
Water abstraction volumes, source licensing	Abstraction points, licensed sources	Meter readings, consumption records, receipt verification	Weekly meter readings, monthly summary	Construction costs	Contractor, Supervision Engineer, Water Authority	Contract start	Practical completion
Tree protection status, damage assessment, planting survival	Protected tree zones, planting areas	Visual inspection, damage assessment, growth measurement, GPS records	Monthly during works, quarterly Year 1-2	Construction costs	Contractor, Envir. Specialist, NRA	Contract start	2 years post-completion
Biodiversity clearance compliance, fauna incidents, habitat restoration	Forest segment, habitat areas, clearance zones	Ecological supervision, clearance monitoring, incident logs, restoration progress	Daily during clearance, weekly thereafter, monthly post-completion	Construction costs	Environmental Officer, Moldsilva, Contractor, NRA	Contract start	2 years post-completion
Dust visibility, air quality at receptors, particle levels	Work sites, haul roads, sensitive receptors	Visual dust assessment, dust/particle monitoring, community feedback	Daily observation, monthly sampling	Construction costs	Environmental Officer, Contractor, Supervision Engineer	Contract start	Practical completion + 6 months
Noise levels at sensitive receptors, vibration impacts	Dwellings, schools ≥300m from works, structures within 100m	Sound level meters, vibration monitoring, building surveys	Continuous observation, monthly measurements,	Construction costs	Environmental Officer, Contractor,	Month -1 (baseline)	Practical completion + 6 months

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			post-work assessment		Supervision Engineer		
Waste segregation, disposal compliance, site cleanliness	Work sites, waste storage, disposal areas	Visual inspection, waste manifests, disposal records audit	Weekly inspections, monthly manifest review	Construction costs	Environmental Officer, Contractor, Supervision Engineer	Contract start	Practical completion
Accidents/incidents, OHS compliance, PPE usage	Work sites, camps	Incident reports, PPE audits, safety meetings logs, medical records	Daily PPE checks, continuous incident tracking, 24-hour reporting	Construction costs	OHS Officer, Contractor, Supervision Engineer, NRA	Contract start	Practical completion
Emergency response capacity, preparedness testing	Work sites, emergency stations	Emergency drills, equipment inspections, response time testing	Monthly drills, quarterly equipment audits	Construction costs	Contractor, Supervision Engineer	Contract start	Practical completion
Traffic safety measures, accident rates, signage compliance	Work zone entries, haul routes, control points	Visual inspections, traffic counts, accident logs, community reports	Daily checks, weekly audits, continuous incident tracking	Construction costs	Traffic Safety Officer, Contractor, Police	Contract start	Practical completion + 6 months
Access maintenance, grievance logs	Access points, temporary routes, affected locations	Daily access verification, community feedback, grievance records	Daily verification, continuous monitoring	Construction costs	Community Liaison, Contractor, Supervision Engineer	Contract start	Practical completion

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Drainage system functionality, blockages	Culverts, drainage structures, outlets	Visual inspections, flow testing, blockage checking	Monthly during construction, pre-handover	Construction costs	Drainage Engineer, Contractor, Supervision Engineer	Month -2 (baseline)	Practical completion
Right-of-way encroachment incidents	Road corridor, boundary markers	Monthly patrols, visual inspection, GPS documentation	Monthly patrols	Construction costs	Contractor/NRA, Supervision Engineer	Mobilization	Practical completion + 6 months
Site security, public access, housekeeping	Site perimeter, public areas, hazards	Daily inspections, fence integrity, hazard audits	Daily inspections	Construction costs	Site Manager, Contractor, Supervision Engineer	Contract start	Practical completion
GBV incidents, grievance mechanism functionality	Work sites, camps, community locations	Grievance logs, training records, compliance audits, incident reporting	Weekly tracking, monthly audits, continuous training	Construction costs	Social Specialist, Contractor, NRA	Contract start	Practical completion + 12 months
Vulnerable group accessibility, engagement effectiveness	Work sites, consultation venues, community areas	Monthly consultations, accessibility audits, feedback logs	Monthly engagement, quarterly audits, feedback collection	Construction costs	Social Specialist, Contractor, Community Liaison	Contract start	Practical completion + 12 months
Health awareness, facility functionality, incidents	Work sites, camps, hygiene facilities	Facility inspections, awareness tracking, health incident logs	Monthly inspections, quarterly campaigns	Construction costs	Health Officer, Contractor, Health Authority	Contract start	Practical completion

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Chance finds incidents, worker training completion	Excavation areas, work sites	Training records, stop-work compliance, incident logs	Training before excavation, incident-based	Construction costs	Social Specialist, Contractor, Supervision Engineer	Contract start	Practical completion
RAP compensation, grievance resolution, site restoration	Affected properties, temporary occupation sites	Compensation records, grievance logs, restoration verification	Before site entry, monthly during, final closure	Construction costs	Social Specialist, NRA, Contractor, Community	Month -2	2 years post-completion
Labor compliance, child labor prevention, grievances	Work sites, camps, HR office	Audit reports, grievance records, age verification, payroll review	Monthly audits, continuous monitoring, quarterly reports	Construction costs	HR Officer, Contractor, Labor Inspectorate	Contract start	Practical completion
Source licensing, load compliance, haul routes	Borrow pits, quarries, haul routes, exits	Monthly inspections, permit verification, road condition monitoring	Weekly inspections, monthly audits	Construction costs	Materials Engineer, Contractor, Supervision Engineer	Contract start	Practical completion
Asphalt plant permits, emissions, waste management	Temporary asphalt plant site (if applicable)	Permit verification, emission monitoring, waste tracking	Weekly if operational, monthly audits	Construction costs	Environmental Officer, Contractor, Supervision Engineer	If plant used	If plant used
Forest clearance compliance, habitat restoration, monitoring	Forest segment, cleared areas, replanting zones	Ecological supervision, clearance monitoring, restoration assessment	Continuous during works, monthly reports, 2-year post-monitoring	Construction costs	Environmental Officer, Moldsilva, Contractor, NRA	Contract start	2 years post-completion

Monitoring implementation framework

The monitoring program is designed to track implementation of all mitigation measures identified in Part I and to detect conditions requiring corrective actions. Monitoring frequency and intensity vary based on risk level, with High-risk activities subject to continuous or daily monitoring, Medium-risk activities monitored weekly to monthly, and Low-risk activities monitored monthly or periodically.

Monitoring Responsibilities:

- **Contractor:** Conducts day-to-day monitoring and maintains records; reports to Supervision Engineer weekly and incidents to NRA within 24 hours.
- **Supervision Engineer:** Conducts independent field inspections (minimum twice weekly); verifies compliance; approves/rejects corrective actions; submits monthly reports to NRA.
- **NRA Environmental and Social Team:** Provides overall project oversight; conducts quarterly site inspections; reviews monitoring reports; issues corrective action directives; reports quarterly to World Bank.
- **Regulatory Agencies:** Environmental Inspectorate, Moldsilva, Traffic Police, Health Authorities conduct periodic compliance inspections per their mandates.

Reporting Schedule:

- **Weekly Reports:** Contractor E&S report to Supervision Engineer every Friday.
- **Monthly Reports:** Supervision Engineer consolidated monitoring report to NRA by 5th of following month.
- **Reports:** NRA project E&S compliance summary to World Bank by 15th of month following quarter end
- **Incident Reports:** 24-hour notification to NRA of all accidents, spills, violations, and SEA/SH incidents.

ANNEX 4. CHANCE FINDS PROCEDURES

The chance finds procedure objectives are to identify and protect previously unrecorded cultural heritage sites, objects, or features from project-related damages. The protocol applies to potential cultural heritage objects, features or sites identified as a result of vegetation and topsoil removal and other ground disturbing construction activities. The procedure complements the other mitigation measures described in the LAW No. 218 of 09-17-2010 regarding the protection of the archaeological heritage. Published: 03-12-2010 in the Official Gazette No. 235-240.

Two types of chance finds are likely to be encountered during construction works: cultural and non-cultural heritage chance finds.

Non-cultural heritage chance finds may include modern objects and features as well as isolated artefacts. Individual artefacts, even out of their context, may be important indicators of the presence of nearby surface or subsurface cultural heritage sites.

Distinguishing between the two types of chance finds requires the expertise of an archaeologist.

The project's activities are related to repair and rehabilitation works for the existing roads sectors and it is not expected to yield archaeological, paleontological or cultural findings of any significance because infrastructure works will occur in the existing road alignment and ROW.

However, there remains a possibility for (as yet undiscovered) sites of local cultural significance and archaeological sites to exist with project areas.

Bidding and contract documentation for Contractors will include a clause on chance find procedures. In the event of finding of properties of cultural value during construction works, the following procedures for identification, protection from theft, and treatment of discovered artifacts should be followed and included in standard bidding document:

- a) Stop the construction activities in the area of the chance find;
- b) Delineate the discovered site or area; secure the site to prevent any damage or loss of removable objects;
- c) Record details in Incident Report and take photos of the finds
- d) Notify the supervisory Engineer who, in turn, will notify the responsible local authorities;
- e) Responsible local authorities would conduct a preliminary evaluation of the findings to be performed by archaeologists who will assess the significance and importance of the findings according to various criteria, including aesthetic, historic, scientific or research, social and economic values;
- f) Decisions on how to handle the finding shall be taken by the responsible authorities which could result in changes in layout, conservation, preservation, restoration and salvage;
- g) Implementation for the management of the finding communicated in writing; and
- h) Construction work could resume only after permission is given from the responsible local authority concerning safeguard of the heritage.

ANNEX 5. LABOR MANAGEMENT PROCEDURES

Labor Management Procedures (LMP) are mandated by WB ESS2 to identify the main labor requirements and risks associated with a project and to determine the resources necessary to address project labor issues. The LMP is a living document to be reviewed and updated throughout development and implementation of the project. The LMP applies to all project workers, irrespective of contracts being full-time, part-time, temporary or casual.

The LMP can be found as a stand-alone document at NRA website:

<https://www.asd.md/files/21258>

ANNEX 6. GUIDELINES FOR STORAGE, HANDLING AND DISPOSAL OF HAZARDOUS AND NON-HAZARDOUS WASTE,

For storing of hazardous waste (Used oil and waste oil, empty barrels/containers of oil, lubricant and grease, Contaminated cotton rags or other cleaning materials), the Contractor shall follow the guidelines while planning and designing the hazardous waste storage areas:

- The storage area should be provided with concrete floor;
- The storage area floor should be provided with secondary containment;
- Proper slopes as well as collection pit to be provided in the storage area to collect wash water and the leakages/spills etc.;
- Storage area should be provided with the flameproof electrical fittings;
- Automatic smoke, heat detection system should be provided in the sheds;
- Adequate firefighting systems (ABC type fire extinguisher) should be provided for the storage area; and
- The Storage area shall be designed in such a way that the floor level is at least 150 mm above the maximum flood level.

Municipal Solid Waste

- The Contractor shall segregate and store bio-degradable and non-biodegradable municipal solid waste in two separate bins (primary collection point). The storage area should be provided with concrete floor;
- The Storage area shall be designed in such a way that the floor level is at least 150 mm above the maximum flood level.
- The storage area shall be enclosed, or the storage containers shall be covered to prevent vermis and scavengers from littering.

Construction and Demolition Waste

The Contractor shall keep the construction and demolition waste within the premise or at a designated place for the collection of the C&D waste. The designated place shall be decided in consultation with the local body. The agreement with the local body shall essentially mention the end-use of the designated location. The designated site shall be away from:

- Located at least 1000 m away from sensitive locations; do not contaminate any water sources, rivers etc; and
- Lothal site has adequate capacity equal to the number of debris generated;
- Public perception about the location of debris disposal site has to be obtained before finalizing the location;
- Productive lands are avoided; and available waste lands shall be given preference;
- Forest land shall be avoided.
- During the site clearance and disposal of debris, the contractor will take full care to ensure that the public or private properties are not damaged/affected and that the traffic is not interrupted.
- In the event of any spoil or debris from the sites being deposited on any adjacent land, the contractor will immediately remove all such spoil debris and restore the affected area to its original state to the satisfaction of the Authority Engineer.

- The contractor will at all times ensure that the existing water bodies and drains within and adjacent to the site are kept safe and free from any debris.
- In case the dumping operations are carried out in dry and windy condition Contractor will regulate the dumping operations so that the dust generation is minimised, or preferably carry out the operations in early morning when the environment is moist. The contractor may utilize effective water sprays during the delivery and handling of materials.
- Materials having the potential to produce dust will not be loaded to a level higher than the side and tail boards and will be covered with a tarpaulin in good condition.
- Any diversion required for traffic during disposal of debris shall be provided with traffic control signals and barriers after the discussion with local people and with the permission of Engineer.
- During the debris disposal, contractor will take care of surrounding features and avoid any damage to it.
- While disposing debris / waste material, the contractor will take into account the wind direction and location of settlements to ensure against any dust problems. The contractor can also consider the use of dust screens to prevent dust pollution.

EMERGENCY SPILL CONTROL PROCEDURE

Should a spill occur, either through spillage or equipment failure, the applicable emergency spill procedure outlined below must be followed.

Spill Procedure: In the case of a spill, overflow or release fluid into the stream waterway (whether water is flowing during the spill or not), any actions that is practical and safely possible to control the situation, shall be implemented.

- Stop the flow
 - ✓ Stop the release into the stream waterway
 - ✓ Shutdown equipment
 - ✓ Close valves and pumps
 - ✓ Plug hoses
- Remove Ignition Sources
 - Shut off vehicles and other engines
 - Do not allow torches, mobile phone, vehicles, smoking or other sources of ignition near the area. Keep a fire extinguisher on hand but keep it a safe distance away from the potential ignition source (if a fire starts, the extinguisher must be easily accessible).
 - Contact the environmental Officer and initiate Emergency Response
 - Notify the site supervisor and the Contractor's Environmental Engineer and Health and Safety Officer as soon as possible
 - The Environmental Engineer of the Contractor will review the situation and decide if Emergency Services like Fire Brigade are required
 - Appropriate parties to be notified of the spill are The contractor's Project Manager, The Authority Engineer through his designated Environmental Officer, The PIU, Regulatory Agencies like Pollution Control Board, Municipal Authorities, as applicable.

Clean up and Disposal

- Identify nature and type of chemical/fuel spilled through information available onsite or from first responder.
- Refer to the MSDS for any special instruction
- Wear personal protective equipment (PPEs) viz. chemical resistant gloves, safety boots, safety glasses etc. Reach for the spill kit placed at the Contractor Camp.
- In case of spill on land create a dyke on the spill and use readily available sand, saw dust to contain the spill. Use absorbent pads, to clean up the spill. In case of spill in a water channel which is dry use the above method.
- In case the spill occurs within a water body stop any agitation to the water body and place absorbent material to remove the spill.
- Recover the spill contaminated absorbent materials and use pads and store the same in hazardous Waste containers and store it in the waste storage area for disposal.
- For spill on unpaved areas such as soil, remove the upper layer of soil in the contaminated area with a shovel and transfer it to the hazardous waste containers using a bucket.
- If any of your PPEs have been exposed to spill material dispose it off safely in hazardous waste containers

Reporting

- The Contractor's Environmental Officer will document the event and submit reports to the Authority Engineer. The Authority Engineer would send a report of the incident immediately with its observations to the PIU and Environmental Officer at the PMU.
- If required the Client would direct the Contractor to imitate the process of reporting to the regulatory agencies. like the Pollution Control Board.

Procedure Review

- The Environmental Office will review the report, determine if changes are required to procedures and recommend implementation of all required changes. He would also intimate the management of such incident.

ANNEX 7. GUIDANCE NOTE ON SITE CLEARANCE

Vegetation Clearance

Vegetation clearance shall comprise uprooting of vegetation, grass, brushwood, shrubs, stumps, trees and saplings of girth up to 30 cm. measured at a height of one meter above the ground level. Clearing activities should be carried out outside of bird breeding /nesting periods. Where only clearance of grass is involved, it shall be measured and paid for separately. The procedure/ steps involved for uprooting, skating and felling trees are described below.

All trees to be cut require an Environmental Permit from the Environmental Agency. Exceptions include spontaneous vegetation and shrubs

Uprooting of Vegetation

- The roots of trees and saplings shall be removed to a depth of 60 cm. below ground level or 30 cm. below formation level or 15 cm below sub grade level, whichever is lower.
- All holes or hollows formed due to removal of roots shall be filled up with earth rammed and levelled.
- Trees, shrubs, poles, fences, signs, monuments, pipe lines, cables etc. within or adjacent to the area, which are not required to be disturbed during vegetation clearance shall be properly protected by the contractor at his own cost.

Staking and Disposal

- All useful materials obtained from clearing and grubbing operation shall be staked in the manner as directed by the Consultant.
- Trunks and branches of trees shall be cleared of limbs and tops stacked properly at the places indicated by the Consultant. These materials shall be the property of the Government.
- All unserviceable materials are disposed off in such a manner that there is no livelihood of getting mixed up with the materials meant for construction.

Felling Trees

- Marking of trees: Trees, above 30 cm girth (measured at a height of one meter above ground level) to be cut, shall be approved by the Consultant and then marked at the site.
- Felling of trees: Felling of trees shall include taking out roots up to 60 cm. below ground level or 30 cm. below formation level or 15 cm. below sub-grade level, whichever is lower.
- Filling: All excavations below general ground level arising out of removal of trees, stumps etc. shall be filled with suitable material in 20 cm. layers and compacted thoroughly so that the surface at these points conform to the surrounding area.
- Sizing: The trunks and branches of trees shall be cleared of limbs and tops and cut into suitable pieces as directed by the Consultant.
- Staking: The serviceable materials shall be staked in the manner as directed by the Environmental specialist of Supervision Consultant.**Disposal:** The material, which cannot be used or auctioned shall be removed from the area and disposed off as per the directions of the Consultant. Unsuitable waste materials should not get mixed with construction material during disposal.

ANNEX 8. OHS GUIDELINES

The objective of this guideline is to provide guidance on the:

- Key principles involved in ensuring the health and safety of workers is protected;
- Preparation of Health and Safety plans

The key reference document for this Guideline is the World Bank Group's *Environmental, Health, and Safety (EHS) Guidelines* and the World Bank's ESS 4.

1. Principles

Employers must take all reasonably practicable steps to protect the health and safety of workers and provide and maintain a safe and healthy working environment. The following key principles are relevant to maintaining worker health and safety:

1.1 Identification and assessment of hazards

Employer must establish and maintain effective methods for:

- Systematically identifying existing and potential hazards to Employees;
- Systematically identifying, at the earliest practicable time, new hazards to Employees;
- Regularly assessing the extent to which a hazard poses a risk to Employees.

1.2 Management of identified hazards

Each Employer must apply prevention and control measures to control hazards which are identified and assessed as posing a threat to the safety, health or welfare of Employees, and where practicable, the hazard shall be eliminated. The following preventive and protective measures must be implemented in order of priority:

- Eliminating the hazard by removing the activity from the work process;
- Controlling the hazard at its source through engineering controls;
- Minimizing the hazard through design of safe work systems;
- Providing appropriate personal protective equipment (PPE).

The application of prevention and control measures to occupational hazards should be based on comprehensive job safety analyses (JSA). The results of these analyses should be prioritized as part of an action plan based on the likelihood and severity of the consequence of exposure to the identified hazards.

1.3 Training and supervision

Each Employer must take all reasonably practicable steps to provide to Employees (in appropriate languages) the necessary information, instruction, training and supervision to protect each Employee's health and to manage emergencies that might reasonably be expected to arise in the course of work. Training and supervision include the correct use of PPE and providing Employees with appropriate incentives to use PPE.

1.4 General duty of Employees

Each Employee shall:

- Take all reasonable care to protect their own and fellow workers health and safety at the workplace and, as appropriate, other persons in the vicinity of the workplace;
- Use PPE and other safety equipment supplied as required; and Not use PPE or other safety equipment for any purpose not directly related to the work for which it is provided.

1.5 Protective clothing and equipment

Each Employer shall:

- Provide, maintain and make accessible to Employees the PPE necessary to avoid injury and damage to their health;
- Take all reasonably practicable steps to ensure that Employees use that PPE in the circumstances for which it is provided; and
- Make provision at the workplace for PPE to be cleaned and securely stored without risk of damage when not required.

1.5 Design

Effective management of health and safety issues requires the inclusion of health and safety considerations during design processes in an organized, hierarchical manner that includes the following steps:

- Identifying project health and safety hazards and associated risks as early as possible in the project cycle including the incorporation of health and safety considerations into the worksite selection process and construction methodologies;
- Involving health and safety professionals who have the experience, competence, and training necessary to assess and manage health and safety risks;
- Understanding the likelihood and magnitude of health and safety risks, based on:
 - The nature of the project activities, such as whether the project will involve hazardous materials or processes;
 - The potential consequences to workers if hazards are not adequately managed;
- Designing and implementing risk management strategies with the objective of reducing the risk to human health;
- Prioritising strategies that eliminate the cause of the hazard at its source by selecting less hazardous materials or processes that avoid the need for health and safety controls;
- When impact avoidance is not feasible, incorporating engineering and management controls to reduce or minimize the possibility and magnitude of undesired consequences;
- Preparing workers and nearby communities to respond to accidents, including providing technical resources to effectively and safely control such events, in particular relating to traffic;
- Improving health and safety performance through a combination of ongoing monitoring of facility performance and effective accountability.

3. Documentation

A Health and Safety Plan must be prepared and approved prior to any works commencing on site. The H&S Plan must demonstrate the Contractor's understanding of how to manage safety and a commitment to providing a workplace that enables all work activities to be carried out safely. The H&S Plan must detail reasonably practicable measures to eliminate or minimise risks to the health, safety and welfare of workers, contractors, visitors, and anyone else who may be affected by the operations. The H&S Plan must be prepared in accordance with the World Bank's EH&S Guidelines and the relevant country health and safety legislation.

4. Training and Awareness

Provisions should be made to provide health and safety orientation training to all new Employees to ensure they are apprised of the basic site rules of work at / on the site and of personal protection and preventing injury to fellow Employees. Training should consist of basic hazard awareness, site-specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster, as appropriate. Training should also include HIV/AIDS awareness training.

Visitors are not permitted to access to areas where hazardous conditions or substances may be present, unless appropriately inducted.

5. Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) provides additional protection to workers exposed to workplace hazards in conjunction with other facility controls and safety systems. PPE is considered to be a last resort that is above and beyond the other facility controls and provides the worker with an extra level of personal protection. The table below presents general examples of occupational hazards and types of PPE available for different purposes. Recommended measures for use of PPE in the workplace include:

- Active use of PPE if alternative technologies, work plans or procedures cannot eliminate, or sufficiently reduce, a hazard or exposure;
- Identification and provision of appropriate PPE that offers adequate protection to the worker, co-workers, and occasional visitors, without incurring unnecessary inconvenience to the individual;
- Proper maintenance of PPE, including cleaning when dirty and replacement when damaged or worn out. Proper use of PPE should be part of the recurrent training programs for Employees
- Selection of PPE should be based on the hazard and risk ranking described earlier in this section, and selected according to criteria on performance and testing established

4. Monitoring

Occupational health and safety monitoring programs should verify the effectiveness of prevention and control strategies. The selected indicators should be representative of the most significant occupational, health, and safety hazards, and the implementation of prevention and control strategies. The occupational health and safety monitoring program should include:

- Safety inspection, testing and calibration: This should include regular inspection and testing of all safety features and hazard control measures focusing on engineering and personal protective features, work procedures, places of work, installations, equipment, and tools used. The inspection should verify that issued PPE continues to provide adequate protection and is being worn as required.
- Surveillance of the working environment: Employers should document compliance using an appropriate combination of portable and stationary sampling and monitoring instruments. Monitoring and analyses should be conducted according to internationally recognized methods and standards.
- Surveillance of workers health: When extraordinary protective measures are required (for example, against hazardous compounds), workers should be provided appropriate and relevant health surveillance prior to first exposure, and at regular intervals thereafter.

- Training: Training activities for Employees and visitors should be adequately monitored and documented (curriculum, duration, and participants). Emergency exercises, including fire drills, should be documented adequately.
- Accidents and Diseases monitoring. The Employer should establish procedures and systems for reporting and recording:
 - Occupational accidents and diseases
 - Dangerous occurrences and incidents

These systems should enable workers to report immediately to their immediate supervisor any situation they believe presents a serious danger to life or health. Each month, the contractor shall supply data on trainings delivered, safety incidents prevented and any accidents to the Client's Consulting Engineer for reporting to the NRA. These data are to also include incidents related to any sub-contractors working directly, or indirectly, for the Contractor.

The NRA and World Bank shall be notified of any incident in accordance with the standards below:

All Class 1 and Class 2 health and safety incidents must be formally investigated and reported to the NRA and World Bank through an investigation report. This report shall be based on a sufficient level of investigation by the Contractor so that all the essential factors are recorded. Lessons learnt must be identified and communicated promptly. All findings must have substantive documentation. As a minimum the investigation report must include:

- Date and location of incident;
- Summary of events;
- Immediate cause of incident;
- Underlying cause of incident;
- Root cause of incident;
- Immediate action taken;
- Human factors;
- Outcome of incident, e.g. severity of harm caused, injury, damage;
- Corrective actions with clearly defined timelines and people responsible for implementation;
- Recommendations for further improvement.

ANNEX 9: CURRENT PUBLIC CONSULTATION

There were held public consultations on the same corridor in 2018, when there were discussed the old design of the road and encouraged the involvement of people. On 1st of April 2025, the meeting has discussed the creation of a new SIMC that will listen and process the information related to the overall project.

Public Consultation of SIMC creation on corridor C24

Public meeting was scheduled on the 1st of April 2025 in the premises of the Mayoralty of ENICHIOI village starting at 11am.

16 people participated, where 25% were women, 75% men.

Mr. Vladicescu made a Presentation PPT of the project and of the Corridors included in the project that will be rehabilitated. He mentioned that the SIMC Committee will be an intermediary between NRA, local population and LPA mayors. Role of SIMC is to be intermediary so that we tell the Decision makers what is happening on site. We should also elect a president of the SIMC so he or she could be the focal point of contacting the other members of SIMC and a secretary or a deputy president of the SIMC.

Gloria Jigau, the social consultant stressed the fact that SIMCs should have more women involved, as they are more active citizens. During the carrying out meetings of SIMCs should be promoted more the information related to STDs, GBV campaigns for women's protection.

Olga Pac Mayor: What presumes the subcomponent regarding women involvement in Infrastructure projects?

Answer: It is a small subcomponent through which they want to stimulate to inform many young girls as possible to pursue a career at Technical University from Moldova to become Engineers. Nowadays, unfortunately it is a domain where predominantly work men. Also the cooperation between educational institutions, like universities and the State authorities. This whole component it is not developed until the end. All projects had to be ended financing until 2027 or 2028.

Olga Pac Mayor: Our Corridor how many lots does it have?

Answer: At the moment we have 3 lots and I mention them here...Likewise Mr. Vladicescu explained shortly the advantages of the new roads...

Olga Pac Mayor: The open competitions for the roads would be announced or not?

Answer: Not yet, there had to be announced in March 2025, but it will be postponed for the month of May and if we "move", for corridor 8, but there was a change of the auction documents in the WB. It was postponed for the end of May or even beginning of July. The signing of contract had to be done in August. The most realistic way the works on the road would begin next spring.

Mayor Lupasco Vasile – Can the local politics or politicians interfere with the development of the works?

Answer: Short answer – no it cannot affect and we are talking from our previous experience with other corridors.

Mayor, Petru Gandrabur: It is bad that this project will begin in 2026 and we will advertise this meeting and your information presented on the official site of the rayon so that people should know more about it...

Ludmila Virilan answer: the SIMC committee can be modified as a componence along the way. It is not something that is 100% exact and without modification.

Question Mayor Petru Gandrabur: In total how many corridors were scheduled to be financed?

Answer: There was also a corridor of nr 25 in Basarabasca, but it was removed due to the lack of feasibility.

Mayor Petru Gandrabur comment: South region of Moldova (except Gagauzia) was and still is always discriminated when it comes to infrastructure projects for the local people from here, because they do not have money to bribe.

Mayor Lupasco Vasile – I propose from Tartaul and Ciobalaccia to be Mr Parciu, and Mrs Olga or Mrs Luminita from the other lots.

The representatives decided to elect in SIMC of the corridor – Parciu Gheorghe, Filip Dana, Gherta Nina, Savitcaia Tamara, Bolocan Romeo (Gotesti), Nedelcu Vasile (consilier Gotesti), Ciobalaccia representative, Enichioi – Ababii Serghei, Dusa Ioan. Mrs Alina Perju – chief of the Service of Investments and regional development, Tatiana Cechir.

Vladicescu Veaceslav mentioned that at different SIMC meetings depending on the topic, for instance, of cutting trees, or covering wells, will be invited different representatives of the service...

Conclusions of this meeting: the new SIMC was created and the participants truly believe that the carrying out of the road project will not be interfered by political events and likewise, they will include in the compenence of this SIMC at least 40% of the compenence to be women.

National Road Administration NRA

ANNEX 10: SOURCES OF MATERIALS

LOCATION MAP MATERIAL SOURCES



The only granite quarry in the Republic of Moldova is located at the northern border near the

township of Soroca. The location is shown on the attached material sources location map. The quarry produces various fractions of crushed material including sand and fines which can be used as filler for asphalt. A list with the actual type of materials produced according to Russian specification including actual prices is attached. Available test results of material samples from the quarry assumed to be representative for the quarry material show the following main material characteristics:

Crushing resistance 8.5 to 12.9% (similar ACV)

Abrasion resistance 15.2 to 16.9% (Similar LAA)

Elongation/Flakiness 11 to 18% (*Testing according to Russian Standard and Specification*)

The test results show that the material is in general suitable for the production of asphalt and cement concrete. However, comprehensive testing has to be done to show compliance with the project specifications and requirements prior to use in the permanent works. The total usable material deposit is estimated at more than 4.0 Mill. m³

Acquisition of material from the Soroca quarry for the use in the project has to be negotiated and agreed with the operating enterprise and/or relevant authorities.

Limestone quarry Micauti

The limestone quarry Micauti is located near the village of Gornoe about 20 km north of Chisinau.

Crushed limestone is widely used for road construction purposes with the addition of cement to increase the strength. The total usable material deposit is estimated at more than 2.0 Mill. m³

Acquisition of material from the Soroca quarry for the use in the project has to be negotiated and agreed with the operating enterprise and/or relevant authorities.

Limestone quarry Pietris

This existing limestone quarry is located north-west of Chisinau. The location is shown on the attached material sources location map.

The material, a limestone, is in general relatively soft and might only be suitable for incorporation in a road base or subbase course but not for production of asphalt and cement concrete. However, comprehensive testing has to be done to show compliance with the project specifications and requirements prior to use in the permanent works. Crushed limestone is widely used for road construction purposes with the addition of cement to increase the strength.

Permission and licences for the use of the borrow area and exploitation of material have to be obtained from the relevant authorities in agreement with the landowner.

Gravel and sand borrow area Viscauti

This existing borrow area is located about 60 km north of Chisinau. Considering the great distance to the project area, only high quality material for asphalt or cement concrete will be used due to the hauling distance and costs. The location is shown on the attached material sources location map. Information about quantity of remaining usable material as well as material test results will be provided within the next phase of the project. Comprehensive testing of the borrow material has to be done to show compliance with the project specifications and requirements prior to use in the permanent works.

Permission and licences for the use of the borrow area and exploitation of material have to be obtained from the relevant authorities in agreement with the landowner.

Sand borrow pit Cobusca Veche

This borrow area is located about 30 km east of Chisinau and is therefore the nearest borrow area to the project road containing granular material. The location is shown on the attached material sources location map.

Information about quantity of remaining usable material as well as material test results will be provided within the next phase of the project. Comprehensive testing of the borrow material has to be done to show compliance with the project specifications and requirements prior to use in the permanent works. Permission and licences for the use of the borrow area and exploitation of material have to be obtained from the relevant authorities in agreement with the landowner.

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

National Road Administration, Corridor 24: R34 – Ciobalaccia – Tartaul – G132 – Baimaclia – Enichioi – R35

ANNEX 11: ASSETS AFFECTED BY THE EXPROPRIATION PROCEDURE, FOR WHICH CADASTRAL WORKS ARE REQUIRED:

Order No.	Cadastral number	Total area, ha	Expropriated area, ha	Comments
<i>village of Vişniovca</i>				
1	2161101		0.0086	
2	2161101		0.0031	
3	2161101		0.0088	
4	2161101		0.0203	
5	2161101		0.0270	
6	2161301		0.0080	
7	2161301		0.0098	
8	2161301.037	63.56	0.0433, 0.1344	
9	2161301		0.0174	
10	2161301		0.2569	
11	2161301		0.0291	
<i>village of Shamalia</i>				
1	2155301		0.0171	
2	2155301.001-006	1 field		
3	2155301.001	1.75	0.0162	
4	2155201.050-075	1 field		
5	2155201.075	0.41	0.0238	
6	2155201.076	0.41	0.0625	
7	2155201		0.0030	
8	2155301		0.0044	
9	2155301.019-067	1 field		
10	2155301.019	1.48	0.0025	
11	2155201	2 fields		
12	2155201.117	0.36	0.0035	
13	2155201.118	0.39	0.0051	
14	2155201.120	0.39	0.0066	
15	2155201.277	1.3307	0.0192	
16	2155201.278	1.6873	0.0722	
17	2155305		0.0218	
18	2155202	1 field		
19	2155202.935	29.29	0.0227	
<i>Capaclia village</i>				

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

National Road Administration, Corridor 24: R34 – Ciobalaccia – Tartaul – G132 – Baimaclia – Enichioi – R35

1	2116214.390	0.85	0.0156	
2	2116214.391	0.85	0.0369	
3	2116214.392	0.85	0.0420	
4	2116214.393	0.85	0.0146	
5	2116214		0.0030	
village of Enichioi				
1	2132302		0.5264	
2	2132301		0.0323	
3	2132301		0.01	
4	2132301		0.1034	
5	2132301		0.0473	
6	2132203		0.0427	
7	2132202	2 fields		
8	2132202.046	1.54	0.0414	
9	2132202.045	1.53	0.0349	
10	2132202.044	1.53	0.0177	
11	2132202.042	3.06	0.0207	
12	2132202		0.0021	
13	2132202.041	1.53	0.0261	
14	2132202.040	1.53	0.0126	
15	2132202.036	1.53	0.0198	
16	2132202.035	1.53	0.004	
17	2132202		0.0175	
18	2132202.004	1.52	0.0201	
19	2132202.003	1.52	0.0195	
20	2132103		0.0883	
21	2132103		0.0479	
22	2132103		0.0125, 0.0355	
Baimaclia town				
1	2112118.001	0.6515	0.0036	
2	2112103		0.0147	
village of Tartaul				
1	2156304		0.0221	
2	2156304		0.0098	
3	2156304		0.0777	
4	2156204		0.0008	
5	2156204.464		0.0040	
6	2156204		0.0113	

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

National Road Administration, Corridor 24: R34 – Ciobalaccia – Tartaul – G132 – Baimaclia – Enichioi – R35

7	2156203.130		0.153	
8	2156204.498			
9	2156204		0.0232	
10	2156305		0.0007	
com. Ciobalaccia				
1	2119201.286	99.1659	0.0073	
2	2119115.602	0.2404	0.0017	

ANNEX 12: CONTRACTOR’S CODE OF CONDUCT FOR SUBCONTRACTORS PERSONELL & WORKERS

1. Purpose

This Code of Conduct establishes the minimum standards of behavior expected from all workers engaged in the implementation of the Project. It aims to ensure that all project activities are carried out in a safe, respectful, and socially responsible manner, while protecting the rights and well-being of workers and local communities. All employees of the Contractor and subcontractors, including managers, engineers, technical staff, drivers, and laborers, must comply with this Code of Conduct throughout the duration of their involvement in the Project.

2. Scope of Application

This Code of Conduct applies to:

- all employees of the Contractor;
- all subcontractors and their employees;
- temporary and seasonal workers;
- security personnel;
- any other personnel engaged in Project activities.

Compliance with this Code is a mandatory condition of employment on the Project.

3. Expected Standards of Behaviour

All workers must:

3.1 Respect for Local Communities

Workers shall:

- respect the culture, traditions, and social norms of local communities;
- behave respectfully toward all community members;
- avoid conflicts, aggressive behavior, or disturbances;
- comply with all applicable national laws and local regulations.

3.2 Prohibition of Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH)

Workers are strictly prohibited from:

- engaging in sexual exploitation or abuse of any person;
- engaging in any form of sexual harassment in the workplace or community;
- engaging in sexual activities with persons under the age of 18;
- offering money, employment, goods, or services in exchange for sexual favors.

Any violation will result in disciplinary measures, including possible termination of employment and referral to relevant authorities.

3.3 Non-Discrimination and Equal Treatment

Workers shall:

- treat colleagues and community members with dignity and respect;

- not discriminate based on gender, ethnicity, nationality, religion, disability, age, or social status;
- promote a respectful and inclusive working environment.

3.4 Prohibition of Child Labor and Forced Labor

The Contractor strictly prohibits:

- employment of persons under the legal working age;
- any form of forced or compulsory labor.

All employment must comply with national labor legislation.

3.5 Occupational Health and Safety

Workers shall:

- follow all occupational health and safety procedures;
- properly use personal protective equipment (PPE);
- report unsafe conditions or incidents immediately;
- participate in safety trainings provided by the Contractor.

3.6 Alcohol, Drugs, and Illegal Activities

Workers are prohibited from:

- consuming alcohol or drugs during working hours;
- working under the influence of alcohol or drugs;
- engaging in illegal activities including theft, violence, or vandalism.

3.7 Protection of the Environment

Workers shall:

- follow all environmental protection measures established in the ESMP;
- avoid pollution of soil, water, and air;
- properly manage waste generated at the construction site;
- prevent damage to vegetation and wildlife.

3.8 Respect for Cultural Heritage

Workers must:

- respect cultural, religious, and historical sites;
- immediately report any chance finds of archaeological or cultural significance to the site supervisor.

4. Reporting Violations

Any worker who witnesses or becomes aware of a violation of this Code of Conduct should report the incident to:

- the Contractor's site manager;
- the Environmental and Social Officer;

- the Project Grievance Redress Mechanism (GRM).

Reports may be submitted confidentially.

5. Disciplinary Measures

Failure to comply with this Code of Conduct may result in disciplinary actions, including:

- verbal or written warnings;
- suspension from work;
- termination of employment;
- notification of relevant authorities where required.

Worker Declaration

I confirm that I have read, understood, and agree to comply with the Contractor’s Code of Conduct for the Project. I understand that failure to comply with the provisions of this Code may result in disciplinary action.

Worker Name: _____

Position: _____

Company (Contractor/Subcontractor): _____

Signature: _____

Date: _____