

**REPUBLIC OF ARMENIA  
MINISTRY OF TERRITORIAL ADMINISTRATION AND INFRASTRUCTURE  
ROAD DEPARTMENT FOUND**

**LIFELINE ROAD NETWORK IMPROVEMENT  
PROJECT**

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN  
FOR BLACK SPOTS IMPROVEMENTS WORKS**

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**IMPROVEMENT OF THE SECTION AT KM 1+000-KM 10+000 OF**

**H-15 M5-ARMAVIR-ARGAVAND-MARGARA ROAD**

**THE RA ARMAVIR MARZ**

**January 2022**

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## PART 1: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMINISTRATIVE	
Country	Armenia
Project title	Improvement of H-15 M5-Armavir-Argavand-Margara
Scope of project and activity	<p>The project envisages black spots improvements works of the km 1+000-km 10+000 section of the H-15 M5-Armavir-Argavand-Margara road.</p> <p>Design work is done in accordance with acting norms and standard designs.</p> <p>The main technical parameters adopted in the design:</p> <ul style="list-style-type: none"> <li>➤ Subgrade width 10 m</li> <li>➤ Carriageway width 6-6.6 m</li> <li>➤ Width of shoulders 1.5-2 m</li> </ul> <p>The following works are designed on the basis of visual observation, geological surveys and environmental measures:</p> <ul style="list-style-type: none"> <li>➤ Road safety improvement <ul style="list-style-type: none"> <li>○ installation of traffic signs</li> <li>○ road marking</li> <li>○ installation of alert strips</li> </ul> </li> <li>➤ A/c pavement repair</li> <li>➤ Bridge repair works</li> </ul>
Institutional arrangements (World Bank)	<p style="text-align: center;"><b>WB</b> Elena Lungu Task Team Leader</p> <p style="text-align: center;"><b>Safeguard Specialists</b> Environmental-Hmayak Avagyan, Social- Sanjay Agarwal,</p>
Institutional arrangements (Borrower)	<p style="text-align: center;"><b>Implementing Entity</b> Road Department Fund Stepan Machyan General acting Director Shushan Kurkchiyan Environmental and Social Safeguards Specialist</p> <p style="text-align: center;"><b>Works Contractor</b> Construction Contractor (to be selected)</p>
SITE DESCRIPTION	
Name of site	H-15 M5-Armavir-Argavand-Margara
Describe site location	<p>Armavir Marz</p> <p>Attachment 1: Site Map [x]Y [ ] N</p>
Who owns the land?	<p>Community / State</p> <p>Black spots improvements works do not envisage widening of the road and all the works are contained within the natural boundaries. No additional land is required for any proposed new structure and there are no negative social impacts resulting from the construction of structures. Thus no land, structure or crops acquisition or resettlement will be required.</p>
Description of geographic, physical, biological, geological, hydrographic and socio-economic context	<p>Project area is located in the Armavir Marz of Armenia. The road section passes through the central part of the Araratian Valley, on the left bank of the Araks River. The terrain is plain. Altitude varies between 855 and 860m.</p> <p>The relief is accumulative one, represented by limno-alluvial deposits.</p> <p>The relief forms are represented by the old bed of the Araks river and buried terraces not explicit on the surface.</p> <p>The flora is desert and semi-desert one represented by yarrow desert and cultivated tree species.</p> <p>The soil is desert one, represented by alluvial meadow soil being irrigated since ancient times.</p> <p>The section belongs to landscape-hydrological zone of the Akhurian and Hrazdan rivers.</p> <p>The average water flow is 5 l/sec. per 1 km<sup>2</sup>. The section enters the most active mudflow basin (mudflows are repeated not less than once in 3 years).</p> <p>The construction site is located in 861-I Climatic zone. Weather in summer is</p>

	<p>hot and dry and in winter is cold windless. Annual average air temperature is 11.4°C. Average temperature in the coldest month is -4.7°C. Average temperature in the warmest month is 25.6°C. Absolute maximum temperature in summer is 41°C. Minimum temperature in winter is -31°C. Annual average wind speed is 1.1 m/sec. Annual precipitation is 251 mm. Maximum depth of soil freezing 70 cm.</p> <p>The project road section passes through Armavir community.</p> <p>Along the project road there are two black spot sections. The first section is intersection of H-15 republican road and Alashkert community where safety elements are missing. On both sides of this section are located agricultural lands, shops, non-residential buildings and car wash. The second is Haykavan village section, where two bridges on the road are in emergency condition.</p> <p>In the vicinity of the bridges are located 1-2 storey residential houses, car garages, non-residential buildings and filling stations.</p> <p>Prior to construction works the contractor will provide information on the location of construction camps. Camps should be managed in such a manner as to minimise potential direct and indirect adverse effects to nearby environment around that site.</p>
<p>Locations and distance for material sourcing, especially aggregates, water, stones</p>	<p>Water to be supplied for construction works will be delivered to construction sites in tanks or provided from a source for which the Water Use Permit is issued to allow water intake. Aggregates will be obtained from the licensed providers located within the project area. Contractor may also extract aggregates, in this case contractor must obtain an extraction license prior to commencement of extraction. Asphalt will be purchased from an official supplier.</p>
<b>LEGISLATION</b>	
<p>Identify national &amp; local legislation &amp; permits that apply to project activity</p>	<p><b>Law on Environmental Impact Assessment and Expertise (2014, No HO 110-N)</b></p> <p>The Law on Environmental Impact Assessment and Expertise, adopted in 2014, provides legal basis for implementation and introduction of state expertise of planned activities and concept frameworks as well as presents the standard steps of the Environmental Impact Assessment (EIA) process for various projects and activities in Armenia.</p> <p>According to this law, activities are classified into 3 categories: “A”, “B”, and “C”. The categories are defined on the basis of the volume of the activity, characteristics and the level of impact on environment. “A” category activities are large-scale and have a significant impact on the environment, “B” category includes practically the same types of activities, but on a smaller scale. “C” category includes the types of activities that have a certain insignificant impact on the environment but do not require conducting an EIA.</p> <p>✓ Works to be undertaken under LRNIP AF 2 will not include new construction and will be undertaken only in the existing alignments. Therefore, according to the Law of Armenia on the Environmental Impact Assessment and Expertise, environmental assessment and issuance of an expert conclusion is not required.</p> <p><b>Law on Atmospheric Air Protection (1994)</b></p> <p>The purpose of Law on Atmospheric Air Protection is to define the main principles of the RoA, directed to the provision of purity of atmospheric air and improvement of air quality, prevention, and mitigation of the chemical, physical, biological and other impacts on air quality and regulation of public relation. According to this law, the contractor shall undertake demolition and construction activities as well as transportation and temporary storage of wastes the way to minimize dust and other emissions to the air.</p> <p><b>Land Code (2001)</b></p> <p>The Land Code defines the main directives for management and use of the state land, including those allocated for various purposes, such as agriculture, urban construction, industry and mining, energy production, transmission and communication lines, transport and other purposes. The areas used for roads, bridges and tunnels, as well as their relevant alienation zone are considered as land allocated for transport objects. The Code defines the land under the</p>

especially protected areas as well as forested, watered and reserved land. It also establishes the measures aimed to the land protection, as well as the rights of state bodies, local authorities, and citizens towards the land.

- ✓ Disposal of excess material and construction waste under LRNIP AF 2 must follow the Land Code. This law shall be complied with also in case a small scale land take is required for the purposes of project implementation.

**Law on Wastes (2004)**

The law regulates legal and economic relations connected to the collection, transfer, maintenance, development, reduction of volumes, prevention of negative impact on human health and environment.

- ✓ Law on Wastes, along with the Land Code, will govern disposal of excess material and construction waste generated in the course of LRNIP implementation.

**Law on Environmental Oversight (2005)**

The Law regulates the issues of organization and enforcement of oversight over the implementation of environmental legislation of the RoA and defines the legal and economic basis underlying the specifics of oversight, the relevant procedures, conditions and relations, as well as environmental oversight in the RoA.

- ✓ Civil works to be implemented under the LRNIP AF 2 will be subject to oversight by the Nature Protection and Mineral Resources to ensure general compliance with the national environmental legislation.

**Law on Automobile Roads (2006)**

The Law regulates economic, legal and organizational basis for development and administration of a motor road network; designing, construction, repair and maintenance, classification and registration of roads in the RoA, as well as regulates legal relationships between bodies and organizations implementing those functions.

- ✓ The design, quality control and later maintenance of roads under the LRNIP AF 2 are subject to regulation by the Law on Automobile Roads.

**Law on the Alienation of the Private Property for Public and State Needs (2006)**

The law regulates procedural aspects of land acquisition and compensation rights of titled landowners and owners of immovable property in cases of alienation of their property for public purposes.

- ✓ This law will be applicable to small-scale land take under LRNIP AF if that is required for the purposes of the Project.

**Permitting**

Environmental permits required for accomplishing the works envisaged by the project:

- Construction license to be possessed by Construction Contractor,
- Construction permit to be obtained by the Construction Contractor from rural municipality,
- Mining license to be possessed by Construction Contractor in case it operates a borrow pit,
- Agreement for disposal of construction waste to be obtained by Construction Contractor from Head of Community.

**PUBLIC CONSULTATION**

Identify when / where the public consultation process took place

Public consultations will be held in the places accessible for all the beneficiaries before the commencement of construction works and will ensure participatory involvement of directly affected persons, as well as community representatives. Presentation of the designs, Grievance redress mechanism, and environmental and social issues that may arise on the different stages of the project will be covered during public consultations along with mitigation measures aimed at reducing those impacts. After the public consultations are conducted the minutes of the public consultation, photos, questions and answers will be

attached (See Attachment 4).

**ATTACHMENTS**

*Attachment 1: Site map, photos*

*Attachment 2: Construction permit (to be attached)*

*Attachment 3: Agreement for construction waste disposal*

*Attachment 4: Records of the public consultation on the draft ESMP (to be attached)*

## PART 2: SAFEGUARDS SCREENING AND TRIGGERS

ENVIRONMENTAL /SOCIAL SCREENING FOR SAFEGUARDS TRIGGERS			
	Activity/Issue	Status	Triggered Actions
Will the site activity include/involve any of the following?	1. Roads rehabilitation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", see Section <b>A</b> below
	2. New construction of small traffic infrastructure	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", see Section <b>A</b> below
	3. Impacts on surface drainage system	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", see Section <b>B</b> below
	4. Historic building(s) and districts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", see Section <b>C</b> below
	5. Acquisition of land <sup>1</sup>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", see Section <b>D</b> below
	6. Hazardous or toxic materials <sup>2</sup>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", see Section <b>E</b> below
	7. Impacts on forests and/or protected areas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", see Section <b>F</b> below
	8. Risk of unexploded ordinance (UXO)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", see Section <b>G</b> below
	9. Traffic and Pedestrian Safety	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", see Section <b>H</b> below
	10. Impacts on land property and use	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", see Section <b>H</b> below
	11. Social risk	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", see Section <b>I</b> below

<sup>1</sup> Land acquisitions includes displacement of people, change of livelihood encroachment on private property this is to land that is purchased/transferred and affects people who are living and/or squatters and/or operate a business (kiosks) on land that is being acquired.

<sup>2</sup> Toxic / hazardous material includes but is not limited to asbestos, toxic paints, noxious solvents, removal of lead paint, etc.

### PART 3: MITIGATION MEASURES

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
0. General Conditions	Notification and Worker Safety	<ul style="list-style-type: none"> <li>(a) The local construction and environment inspectorates and communities have been notified of upcoming activities</li> <li>(b) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works).</li> <li>(c) All legally required permits have been acquired for construction and/or rehabilitation.</li> <li>(d) The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment.</li> <li>(e) Workers' PPE will comply with international good practice (hardhats, as needed masks and safety glasses, ear plugs, harnesses and safety boots).</li> <li>(f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.</li> </ul>
A. General Rehabilitation and /or Construction Activities	Air Quality	<ul style="list-style-type: none"> <li>(a) During excavation works dust control measures shall be employed, e.g. by spraying and moistening the ground.</li> <li>(b) Demolition debris, excavated soil and aggregates shall be kept in controlled area and sprayed with water mist to reduce debris dust.</li> <li>(c) During pneumatic drilling or breaking of pavement and foundations dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site.</li> <li>(d) The surrounding environment (sidewalks, roads) shall be kept free of soil and debris to minimize dust.</li> <li>(e) There will be no open burning of construction / waste material at the site.</li> <li>(f) All machinery will comply with the national emission regulations, will be well maintained and serviced and there will be no excessive idling of construction vehicles at sites.</li> </ul>
	Noise	<ul style="list-style-type: none"> <li>(a) Construction noise will be limited to restricted times agreed to in the permit.</li> <li>(b) During operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible.</li> </ul>
	Water Quality	<ul style="list-style-type: none"> <li>(a) The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in canalization and nearby streams and rivers.</li> </ul>

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
	Waste management	<ul style="list-style-type: none"> <li>(a) Waste collection and disposal pathways and sites will be identified for all major waste types expected from excavation, demolition and construction activities.</li> <li>(b) Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers.</li> <li>(c) Construction waste will be collected and disposed properly by licensed collectors.</li> <li>(d) The records of waste disposal will be maintained as proof for proper management as designed.</li> <li>(e) Whenever feasible Contractor will reuse and recycle appropriate and viable materials (except when containing asbestos).</li> </ul>
<b>B.</b> Impacts on surface drainage system	Water Quality	<ul style="list-style-type: none"> <li>(a) There will be no unregulated extraction of groundwater, nor uncontrolled discharge of process waters, cement slurries, or any other contaminated waters into the ground or adjacent streams or rivers; the Contractor will obtain all necessary licenses and permits for water extraction and regulated discharge into the public wastewater system.</li> <li>(b) There will be proper storm water drainage systems installed and care taken not to silt, pollute, block or otherwise negatively impact natural streams, rivers, ponds and lakes by construction activities.</li> <li>(c) There will be procedures for prevention of and response to accidental spills of fuels, lubricants and other toxic or noxious substances.</li> <li>(d) Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies.</li> </ul>
<b>C.</b> Historic building(s)	Cultural Heritage	<ul style="list-style-type: none"> <li>(a) If construction works take place close to a designated historic structure, or are located in a designated historic district, notification shall be made and approvals/permits be obtained from RA government/local authorities and all construction activities planned and carried out in line with local and national legislation.</li> <li>(b) It shall be ensured that provisions are put in place so that artifacts or other possible “chance finds” encountered in excavation or construction are noted and registered, responsible officials contacted, and works activities delayed or modified to account for such finds.</li> </ul>
<b>D.</b> Acquisition of land	Land Acquisition Plan/Framework	<ul style="list-style-type: none"> <li>(a) Land acquisition is not expected along the road.</li> <li>(b) If expropriation of land was not expected but is required, or if loss of access to income of legal or illegal users of land was not expected but may occur, that the Bank’s Task Team Leader shall be immediately consulted.</li> </ul>

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
E. Toxic materials	Asbestos management	<ul style="list-style-type: none"> <li>(a) If asbestos is located on the project site, it shall be marked clearly as hazardous material.</li> <li>(b) When possible the asbestos will be appropriately contained and sealed to minimize exposure.</li> <li>(c) The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust</li> <li>(d) Asbestos will be handled and disposed by skilled &amp; experienced professionals.</li> <li>(e) If asbestos material is be stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately. Security measures will be taken against unauthorized removal from the site.</li> <li>(f) The removed asbestos will not be reused.</li> </ul>
	Toxic / hazardous waste management	<ul style="list-style-type: none"> <li>(a) Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties and handling information.</li> <li>(b) The containers of hazardous substances shall be placed in a leak-proof container to prevent spillage.</li> <li>(c) The wastes shall be transported by specially licensed carriers and disposed in a licensed facility.</li> <li>(d) Paints with toxic ingredients or solvents or lead-based paints will not be used.</li> </ul>
F. Affected forests, wetlands and/or protected areas	Ecosystem protection	<ul style="list-style-type: none"> <li>(a) All recognized natural habitats, wetlands and protected areas in the immediate vicinity of the activity will not be damaged or exploited, all staff will be strictly prohibited from hunting, foraging, logging or other damaging activities.</li> <li>(b) A survey and an inventory shall be made of large trees in the vicinity of the construction activity, large trees shall be marked and cordoned off with fencing, their root system protected, and any damage to the trees avoided.</li> <li>(c) Adjacent wetlands and streams shall be protected from construction site run-off with appropriate erosion and sediment control feature to include by not limited to hay bales and silt fences.</li> <li>(d) There will be no unlicensed borrow pits, quarries or waste dumps in adjacent areas, especially not in protected areas.</li> </ul>
G. Risk of unexploded ordinance (UXO)	Hazard to human health and safety	<ul style="list-style-type: none"> <li>(a) Before start of any excavation works the Contractor will verify that the construction area has been checked and cleared regarding UXO by the appropriate authorities.</li> </ul>

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
<b>H</b> Traffic and pedestrian safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	<p>(a) In compliance with national regulations the Contractor will insure that the construction site is properly secured and construction related traffic regulated. This includes but is not limited to:</p> <ul style="list-style-type: none"> <li>▪ Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards,</li> <li>▪ Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes,</li> <li>▪ Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement,</li> <li>▪ If required, active traffic management by trained and visible staff at the site for safe passage for the public,</li> <li>▪ Ensuring safe and continuous access to all adjacent office facilities, shops and residences during construction.</li> </ul>
<b>I.</b> Social Risk Management	Public relationship management	<p>(a) Assign local liaison person within Contractor's team to be in charge of communication with and receiving requests/ complaints from local population</p> <p>(b) Consult local communities to identify and proactively manage potential conflicts between an external workforce and local people</p> <p>(c) Raise local community awareness about sexually transmitted disease risks associated with the presence of an external workforce and include local communities in awareness activities.</p> <p>(d) Inform the population about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, blasting and demolition, as appropriate.</p> <p>(e) Limit construction activities at night. When necessary ensure that night work is carefully scheduled, and the community is properly informed, so they can take necessary measures.</p> <p>(f) At least five days in advance of any service interruption (including water, electricity, telephone, bus routes), advice community through postings at the work site, at bus stops, and in affected homes/businesses.</p> <p>(g) Address concerns raised through Grievance Redress Mechanism established by the Employer within the designated timeline within the scope of Contractor's liability</p> <p>(h) To the extent possible, work camps should not be located in close proximity to local communities</p> <p>(i) Siting and operation of worker camps should be undertaken in consultation with neighboring communities</p>
	Labor management	(a) Recruit unskilled or semi-skilled workers from local communities to the extent possible. Where

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
		<p>and when feasible, worker skills training, should be provided to enhance participation of local people.</p> <p>(b) Provide adequate lavatory facilities (toilets and washing areas) in the work site with adequate supplies of hot and cold running water, soap, and hand drying devices. A temporary septic tank system should be established for any residential labor camp and without causing pollution of nearby watercourses</p> <p>(c) Raise awareness of workers on overall relationship management with local population, establish the code of conduct in line with international practice and strictly enforce them, including the dismissal of workers and financial penalties of adequate scale</p>

## PART 4: MONITORING PLAN

<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Cost</b> (if not included in project budget)	<b>Who</b> (Is responsible for monitoring?)
<b>CONSTRUCTION PHASE</b>						
The community is notified of upcoming activities	at community leader's office	discussion/ observation	visit before construction works	to ensure awareness on the project works	included in project budget	Construction Supervisor under RD FUND monitoring
All required permits are obtained	at community leader's office and construction contractor	review of documents	visit before construction works	to ensure availability of all required permits and agreements	included in project budget	Construction Supervisor under RD FUND monitoring
Workers use PPE	at construction site	inspection	Monthly site visits during active construction works	to ensure safety of workers	included in project budget	Construction Supervisor under RD FUND monitoring
Strict compliance with the rules of construction equipment operation and usage of PPE	at construction site	inspection	Monthly site visits during active construction works	to ensure safety of workers	included in project budget	Construction Supervisor under RD FUND monitoring
Presence of fire extinguishing and medical aid kits at	at construction site	inspection	Monthly site visits during active construction works	to ensure safety of workers	included in project budget	Construction Supervisor under RD FUND

<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Cost</b> (if not included in project budget)	<b>Who</b> (Is responsible for monitoring?)
work site						monitoring
The dust is suppressed at site	at construction site	inspection	Monthly site visits during active construction works	to ensure minimal generation of dust	included in project budget	Construction Supervisor under RD FUND monitoring
There is no open burning of construction / waste material at the site	at construction site	inspection	Monthly site visits during active construction works	to ensure minimal air pollution	included in project budget	Construction Supervisor under RD FUND monitoring
There is no excessive idling of construction vehicles at site	at construction site	inspection	Monthly site visits during active construction works	to ensure minimal air pollution	included in project budget	Construction Supervisor under RD FUND monitoring
Construction noise is limited to day-time hours	at construction site	Inspection  Instrumental measurement of noise levels (in case of complaints)	Monthly site visits during active construction works  Upon receiving a complaint	to ensure minimal generation of noise	included in project budget	Construction Supervisor under RD FUND monitoring
Waste temporary collection places are identified at the site	at construction site	inspection	Monthly site visits during active construction works	to avoid accidents at the construction site due to scattered fragments of construction materials and debris;	included in project budget	Construction Supervisor under RD FUND monitoring

<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Cost</b> (if not included in project budget)	<b>Who</b> (Is responsible for monitoring?)
				to retain esthetic appearance of the construction site and its surroundings		
Construction waste is regularly collected and disposed at the agreed site	at construction site	inspection	Monthly site visits during active construction works	to prevent pollution of soil, surface water and ground water	included in project budget	Construction Supervisor under RD FUND monitoring
Placement of domestic waste collection containers at the construction site	at construction site	visual observation	Monthly site visits during active construction works	to prevent pollution of soil and water with domestic waste	included in project budget	Construction Supervisor under RD FUND monitoring
Technical condition of vehicles and machinery	at construction site	inspection	Monthly site visits during active construction works	to ensure minimal pollution of soil and air from emissions  to limit nuisance to local communities from noise and vibration	included in project budget	Construction Supervisor under RD FUND monitoring
Confinement and protection of	at construction site	inspection	Monthly site visits during active construction works	to limit pollution of soil and air from	included in project budget	Construction Supervisor under RD

<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Cost</b> (if not included in project budget)	<b>Who</b> (Is responsible for monitoring?)
truckloads with lining	Routes of transportation of construction materials and wastes			emissions		FUND monitoring  Traffic Police
Respect of the established hours and routes of transportation	at construction site  Routes of transportation of construction materials and wastes	inspection	Monthly site visits during active construction works	to minimize traffic disruption	included in project budget	Construction Supervisor under RD FUND monitoring
Refueling or lubrication of construction equipment outside the construction site or at the predetermined confined area	at construction site	inspection	Monthly site visits during active construction works in case of refueling or lubrication of construction equipment	to avoid pollution of water and soil with oil products and decrease expected damage in case of fire	included in project budget	Construction Supervisor under RD FUND monitoring
Construction vehicles and machinery are washed only in designated areas where runoff will not pollute natural surface	at construction site	inspection	Monthly site visits during active construction works, in case of vehicles/machinery washing	to avoid pollution of water and soil with oil products	included in project budget	Construction Supervisor under RD FUND monitoring

<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Cost</b> (if not included in project budget)	<b>Who</b> (Is responsible for monitoring?)
water bodies						
In case of chance finds the works are stopped and Ministry of Education, Science, Culture and Sport is notified in writing. Construction works to be continued after the instruction is provided by the ministry.	at construction site	- Inspection of site; - Inspection of filed documentation	Period between first encounter of chance finds and resumption of works on site	to prevent loss of artifacts	included in project budget	Construction Supervisor under RD FUND monitoring
There are no unlicensed borrow pits, quarries or unapproved waste dumps used for the project	at construction contractor's office, at construction site	review of documents, inspection	Monthly site visits during active construction works	to ensure minimal impact on environment	included in project budget	Construction Supervisor under RD FUND monitoring  Inspectorate for Nature Protection and Mineral Resources
Signposting, warning signs, barriers and traffic diversions: site will be clearly visible, and the public	at construction site	inspection	Monthly site visits during active construction works	to reduce probability of accidents to constructors and local population	included in project budget	Construction Supervisor under RD FUND monitoring

<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Cost</b> (if not included in project budget)	<b>Who</b> (Is responsible for monitoring?)
warned of all potential hazards						
Construction site demarcated/fenced, and all construction activities confined to the site	at construction site	inspection	Monthly site visits during active construction works	to ensure safety of workers and inhabitants	included in project budget	Construction Supervisor under RD FUND monitoring
No construction materials and waste piled up or scattered outside the construction site	at construction site	inspection	Monthly site visits during active construction works	to ensure safety of workers and inhabitants	included in project budget	Construction Supervisor under RD FUND monitoring
Provision of safe passages and crossings for pedestrians where construction traffic interferes	at construction site	inspection	Monthly site visits during active construction works	to ensure safety of workers and inhabitants	included in project budget	Construction Supervisor under RD FUND monitoring
Final cleaning of the construction site	at construction site	inspection	During final stage of construction works  After construction works	to ensure safety of traffic, favorable conditions for pedestrians and aesthetic appearance of the road corridor	included in project budget	Construction Supervisor under RD FUND monitoring
Grievance log is	at construction	inspection	Monthly site visits during construction	to ensure	included in project	Construction Supervisor

<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Cost</b> (if not included in project budget)	<b>Who</b> (Is responsible for monitoring?)
available and used	site		works	operation of the GRM	budget	under RD FUND monitoring
Grievance under consideration and resolved	at construction site	inspection	Monthly site visits during construction works	to ensure operation of the GRM	included in project budget	Construction Supervisor under RD FUND monitoring
Local liaison person from contractor's side is assigned and trained	at construction site	inspection	Monthly site visits during construction works	to ensure operation of the GRM	included in project budget	Construction Supervisor under RD FUND monitoring
Unskilled or semi-skilled workers from local communities are trained and recruited	at construction site	inspection	Monthly site visits during construction works	to ensure benefits for the community	included in project budget	Construction Supervisor under RD FUND monitoring
<b>OPERATION PHASE</b>						
Cleaning road surface and shoulders from litter deposited out of moving vehicles and from bodies of animals accidentally overrun by vehicles	carriageway and shoulders of the road section	inspection	regular, to be determined by local municipality	to ensure safety of traffic and aesthetic appearance of the road corridor	to be included in the local municipal budget	Metsamor rural municipality

<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Cost</b> (if not included in project budget)	<b>Who</b> (Is responsible for monitoring?)
Keeping road drainage system operational	carriageway and shoulders of the road section	inspection	regular, to be determined by local municipality	to ensure safety of traffic and decrease frequency and costs of road rehabilitation	to be included in the local municipal budget	Metsamor rural municipality
Timely confinement, deactivation, and removal of liquid or powder spills of cargo in case of road accidents	carriageway and shoulders of the road section	inspection	as required in response to an accident	to ensure safety of traffic and prevent environmental pollution	to be included in the local municipal budget	Metsamor rural municipality
Collection and timely disposal of waste from road maintenance works to a designated landfill	carriageway and shoulders of the road section	inspection	as required in response to an accident	to ensure safety of traffic and prevent environmental pollution	to be included in the local municipal budget	Metsamor rural municipality

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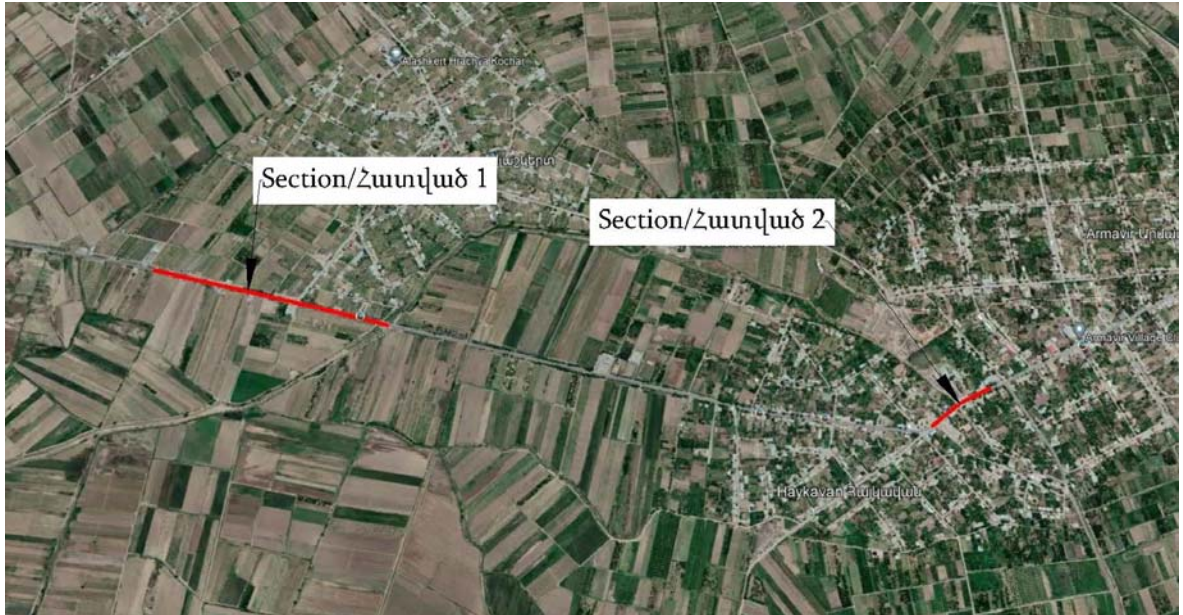
## **Reporting**

1. The Project's ESMP implementation actions shall be regularly reported.
  2. Contractor should submit to the Construction Supervision Monthly Progress Report with summary on ESMP implementation as part of the Contractor's Monthly Progress Report. Monthly reports shall be analytical and provide explanations for anomalies, non-compliance and problems encountered.
  3. The Construction Supervision submits to RD Fund as well as WB monthly monitoring reports on environmental and social safeguards as part of the Monthly Progress report and annual reports as well as end of phase reports.
  4. The Reports shall comprehensively include all relevant aspects in implementing the mitigation measures of the ESMP (e.g., what type of mitigation, purpose and object(s), site/location, materials and activities involved, public communication and grievances, others specify) compliance to any environmental regulations and requirements such as training/orientation, permits, license, etc. undertaken during the period covered by the report. The outline of the reports will be agreed with the Construction Supervision and RD Fund.
  5. In cases of accidents, (fire, explosion, oil spill and bitumen overflow, etc.), the Contractor must notify the Engineer immediately. Initial notification may be verbal and shall be followed by a written report within 24 hours when the incident or accident happened.
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**Attachment 1: Site Map/Photos**

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**Site map H-15 M5-Armavir-Argavand-Margara road  
Section km 1+000-km 10+000**



# Photos

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## Black spot sections



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**Attachment 3: Construction permit (to be attached)**

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Will be given by the head of appropriate community prior to construction works.

**Attachment 4: Agreement for construction waste disposal (to be attached)**

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<< 14 >> <<հունվար>> 2022թ.

Նախատեսվում է կազմել Հ-15, Մ5-Արմավիր-Արգավանդ-Մարգարա կմ1+000-  
կմ10+000 հատվածի անվտանգության բարելավման նախագիծը, որն անցնում է  
Մեծամոր համայնքով: Նախագծով նախատեսված շինարարական աղբի համար  
որպես լցակույտ նախատեսվում է Ալաշկերտի խաչմերուկին հարող դաշտամիջյան  
ճանապարհին իսկ Հայկական -Արմավիրի համար Հայկական-Բամբակաշատ  
ճանապարհին կից միջինում 1կմ հեռավորությամբվայրում:  
Լիցք կատարելու համար պահուստային բնահողը գտնվում է 3 կմ  
հեռավորության վրա:

Մեծամոր համայնքի ղեկավար՝



Ս. Խաչատրյան

## **Attachment 5: Public Consultation**

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Will be held before the construction works.