

**REPUBLIC OF ARMENIA
MINISTRY OF TRANSPORT, COMMUNICATION AND INFORMATION
TECHNOLOGIES
TRANSPORT PROJECTS IMPLEMENTATION ORGANIZATION SNCO**

**LIFELINE ROAD NETWORK IMPROVEMENT
PROJECT**

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN
FOR SMALL SCALE ROAD REHABILITATION**

**REHABILITATION OF THE SECTION AT KM 0+000 – KM 8+872, KM
0+000 – KM 1+580
OF THE ROAD M1-HAYRENYAC-TUFASHEN-H83 THE RA SHIRAK
MARZ**

July 2018

PART 1: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMINISTRATIVE			
Country	Armenia		
Project title	Rehabilitation of M1-Hayrenyac-Tufashen-H83 road section.		
Scope of project and activity	<p>The project envisages rehabilitation of the km 0+000 – km 8+872, km 0+000-km1+579 section of the M1-Hayrenyac-Tufashen-H83 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"> ➤ Subgrade width 9-11 m ➤ Carriageway width 6-8 m ➤ Width of shoulders 0.6-1.5 m ➤ Sidewalks length 5.181 km <p>The following works are designed on the basis of visual observation, topography and geological surveys, laboratory test result and environmental measures:</p> <ul style="list-style-type: none"> ➤ Reconstruction and repair of the road ➤ Earthworks ➤ Repair of artificial structures and installation of new ones ➤ Implementation of gabion and construction of retaining walls ➤ Installation of precast chutes ➤ Road safety improvement (installation of traffic signs and marking) ➤ Installation of metallic guardrails ➤ Construction of sidewalks ➤ Repair of bridges 		
Institutional arrangements (Name and contacts)	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center; vertical-align: top;"> <p>WB Nargis Ryskulova Task Team Leader</p> </td> <td style="text-align: center; vertical-align: top;"> <p>Project Management Transport Projects Implementation Organization SNCO Vazgen Petrosyan Director Sona Poghosyan Head of Social impact management service Gevorg Afyan Head of Environmental impact management service</p> </td> </tr> </table>	<p>WB Nargis Ryskulova Task Team Leader</p>	<p>Project Management Transport Projects Implementation Organization SNCO Vazgen Petrosyan Director Sona Poghosyan Head of Social impact management service Gevorg Afyan Head of Environmental impact management service</p>
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SITE DESCRIPTION			
Name of site	M1-Hayrenyac-Tufashen-H83 road section		
Describe site location	Shirak Marz Attachement 1: Site Map [x]Y [] N		
Who owns the land?	Community / State		

<p>Description of geographic, physical, biological, geological, hydrographic and socio-economic context</p>	<p><i>Project area is located in the Shirak marz of Armenia. The section begins from M1-Yerevan-Gyumri-Georgian border passing through Hayernyats, Tufashen, Haykasar communities and ends H83 road. The whole section of the site passes through the south-eastern part of the Ghars plateau and the western foothills of Aragats mountain.</i></p> <p><i>The relief is plateau, blurred and not so spotted. Absolute altitude marks vary between 1580-1750m.</i></p> <p><i>Genetic types of relief: volcano- tectonic and erosion-volcano represented by lava covers of plateaus (1100-2200m) spread on slightly fractured of folded structures.</i></p> <p><i>The relief is volcanic, represented by fold mountains and lava covers on fractured surfaces formed by faults.</i></p> <p><i>Among relief types there are widespread latest lava streams of debris. There are widespread cinder cones and eruption cones of middle and upper quaternary era (Q3-Q4).</i></p> <p><i>The flora is steppe one represented by gramineae steppes.</i></p> <p><i>The soils is steppe one represented by carbonate and typical black soil of moderately humid steppes. The section is located in the landscape-hydrological zone of Akhuryan-Hrazdan river. The average water flow is 2.5-5.0/sec. per 1 km². Along the whole length of the territory no mudflow occurs. Hydrological network is poor. Designed a/c section intersects with no river. Landslides and landslide prone areas are also missing. The site is distinguished by its temperate climate, long warm summers and cold winters.</i></p> <p><i>The construction site is located in 1706-III Climatic zone. Weather in summer is cool and weather in winter is severe cold. Annual average air temperature 6.1°C. Average temperature in the coldest month -7.4 °C. Average temperature in the warmest month 18.2 °C. Absolute maximum temperature in summer 37°C. Minimum temperature in winter -26°C. Annual average wind speed 2.5 m/sec. Annual precipitation 582 mm. Maximum depth of soil freezing 110 cm.</i></p> <p><i>Along the road to be rehabilitated are situated Hayernyats, Tufashen, Haykasar communities.</i></p> <p><i>From the beginning of the road till km 1+100 and from km 2+320 to km 5+795 there are arable lands on both sides of the road. There are no multistore buildings along the road. The private houses are mainly from one to two stores. In Hayrenyats community private houses are located along the project road at km 1+100- km 2+320 section. At km 1+620, km 1+720, km 1+850 there are culture house, rural municipality, shop and post office respectively. There are two access ramps in Hayrenyats community which are included in the rehabilitation works either. First is at km 1+230 with 132 m length to the school. The second access ramp is at km 1+690 with 400 m length to the same school. The Holy Mother of God church (19th century) of Hayrenyats community is located at km 1+650 of the project road. In Tufashen private houses are located at km 5+795- km 7+127. At km 6+250, km 6+320, km 6+390 there are shop, post office and school respectively. There are an access ramp with 172 m length to the rural municipality at km 6+220 in Tufashen community which are included in the rehabilitation works either.</i></p> <p><i>From the beginning of the road to Haykasar community there are arable lands till km 1+060. Private houses are located from km 1+060 till the end. At km 1+560 there are school and rural municipality.</i></p>
<p>Locations and distance for material sourcing, especially aggregates, water, stones</p>	<p><i>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.</i></p>
<p>LEGISLATION</p>	
<p>Identify national & local legislation & permits that apply to project activity</p>	<p><i>Environmental permits required for accomplishing the works envisaged by the project:</i></p> <ul style="list-style-type: none"> ➤ <i>Construction license to be possessed by Construction Contractor,</i> ➤ <i>Construction permit to be obtained by the Construction Contractor from rural municipality,</i> ➤ <i>Mining license to be possessed by Construction Contractor in case it</i>

	<p>operates a borrow pit,</p> <p>➤ Agreement for disposal of construction waste to be obtained by Construction Contractor from Head of Community.</p>
PUBLIC CONSULTATION	
Identify when / where the public consultation process took place	<p><i>Public Consultation was carried out in Hayrenyats community on July 10 2018. The aim of the consultation was to present Lifeline Roads Network Improvement Program (Additional Financing), draft design for the road to be rehabilitated in the community, road-related ESMPs as well as to answer the questions of the community residents related to the program. The total number of participants in public consultation meetings is 22, including 5 women. Besides community members, design consultant, TPIO Engineer and Environmental and Social Safeguards Specialist have attended the consultation.</i></p> <p><i>Five days prior to the Public Consultation draft ESMPs were uploaded to the TPIO site and PC participants were informed that they can refer to the ESMPs placed on the website. Local authorities have been informed about ESMPs available on the website. Information leaflets with the info on TPIO activities and description of LRNIP-AF were provided to the population and community administration during PCs (10-15 leaflets in each community).</i></p> <p><i>Minutes of the Public Consultations, signed by the Community head and representatives of the community, photos from the PCs and summary of the Question & Answer part are provided below in the Attachment 4. Questions on the most pressing issues raised by the community residents were included in the corresponding ESMP's monitoring plan for further follow up.</i></p>
INSTITUTIONAL CAPACITY BUILDING	
Will there be any capacity building?	<p><i>[] N or [x]Y General Orientation training on the ESMP implementation will be delivered to Contractor's staff after Contractor's mobilization prior to start of physical construction works commencement by TPIO with assistance of the supervision consultant. Attachment 2 includes the capacity building program.</i></p>

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 A below
	2. New construction of small traffic infrastructure	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section A below
	3. Impacts on surface drainage system	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section B below
	4. Historic building(s) and districts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section C below
	5. Acquisition of land ¹	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section D below
	6. Hazardous or toxic materials ²	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section E below
	7. Impacts on forests and/or protected areas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section F below
	8. Risk of unexploded ordinance (UXO)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section G below
	9. Traffic and Pedestrian Safety	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section H below
	10. Impacts on land property and use	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section H below
	11. Social risk	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section I below

¹ 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.

² 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"> (a) The local construction and environment inspectorates and communities have been notified of upcoming activities (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). (c) All legally required permits have been acquired for construction and/or rehabilitation. (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. (e) Workers' PPE will comply with international good practice (hardhats, as needed masks and safety glasses, ear plugs, harnesses and safety boots). (f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.
A. General Rehabilitation and /or Construction Activities	Air Quality	<ul style="list-style-type: none"> (g) During excavation works dust control measures shall be employed, e.g. by spraying and moistening the ground. (h) Demolition debris, excavated soil and aggregates shall be kept in controlled area and sprayed with water mist to reduce debris dust. (i) 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. (j) The surrounding environment (sidewalks, roads) shall be kept free of soil and debris to minimize dust. (k) There will be no open burning of construction / waste material at the site. (l) 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.
	Noise	<ul style="list-style-type: none"> (a) Construction noise will be limited to restricted times agreed to in the permit. (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.
	Water Quality	<ul style="list-style-type: none"> (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.

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
	Waste management	<ul style="list-style-type: none"> (a) Waste collection and disposal pathways and sites will be identified for all major waste types expected from excavation, demolition and construction activities. (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. (c) Construction waste will be collected and disposed properly by licensed collectors. (d) The records of waste disposal will be maintained as proof for proper management as designed. (e) Whenever feasible Contractor will reuse and recycle appropriate and viable materials (except when containing asbestos).
B. Impacts on surface drainage system	Water Quality	<ul style="list-style-type: none"> (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. (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. (c) There will be procedures for prevention of and response to accidental spills of fuels, lubricants and other toxic or noxious substances. (d) Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies.
C. Historic building(s)	Cultural Heritage	<ul style="list-style-type: none"> (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. (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.
D. Acquisition of land	Land Acquisition Plan/Framework	<ul style="list-style-type: none"> (a) Land acquisition is not expected along the road. (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.

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
E. Toxic materials	Asbestos management	<ul style="list-style-type: none"> (a) If asbestos is located on the project site, it shall be marked clearly as hazardous material. (b) When possible the asbestos will be appropriately contained and sealed to minimize exposure. (c) The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust (d) Asbestos will be handled and disposed by skilled & experienced professionals. (e) If asbestos material is 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. (f) The removed asbestos will not be reused.
	Toxic / hazardous waste management	<ul style="list-style-type: none"> (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. (b) The containers of hazardous substances shall be placed in a leak-proof container to prevent spillage. (c) The wastes shall be transported by specially licensed carriers and disposed in a licensed facility. (d) Paints with toxic ingredients or solvents or lead-based paints will not be used.
F. Affected forests, wetlands and/or protected areas	Ecosystem protection	<ul style="list-style-type: none"> (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. (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. (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. (d) There will be no unlicensed borrow pits, quarries or waste dumps in adjacent areas, especially not in protected areas.
G. Risk of unexploded ordinance (UXO)	Hazard to human health and safety	<ul style="list-style-type: none"> (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.

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
H 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"> ▪ Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards, ▪ 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, ▪ Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement, ▪ If required, active traffic management by trained and visible staff at the site for safe passage for the public, ▪ If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours ▪ Ensuring safe and continuous access to all adjacent office facilities, shops and residences during construction.
I. Social Risk Management	Public relationship management	<p>(a) The Contractor assign local liaison person who is in charge of communication with and receiving requests/ complaints from local population</p> <p>(b) Local communities should be consulted to identify and pro-proactively manage potential conflicts between an external workforce and local people</p> <p>(c) Inform the population about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, blasting and demolition, at least 3 days before construction works commencement.</p> <p>(d) 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>(e) At least five days in advance of any service interruption (including water, electricity, telephone, bus routes) the community must be advised through postings at the project site, at bus stops, and in affected homes/businesses. If the service is interrupted by chance, community should be immediately consulted, restoration plan has to be presented to the community, services restored as soon as possible.</p> <p>(f) The Employer establishes a Grievance Redress Mechanism accessible to local people in line</p>

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
		with the Project RPF and the Contractor address concerns raised through GRM within the designated timeline if they are liable
	Labor management	<ul style="list-style-type: none"> (a) To the extent possible, work camps should not be located in close proximity to local communities (b) Siting and operation of worker camps should be undertaken in consultation with neighboring communities (c) The Contractor recruit unskilled or semi-skilled workers from local communities to the extent possible. Where and when feasible, worker skills training, should be provided to enhance participation of local people. (d) The Contractor 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 (e) The Contractor 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

PART 4: MONITORING PLAN

What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
CONSTRUCTION PHASE						
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	TPIO through Construction Supervisor
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	TPIO through Construction Supervisor
Workers use PPE	at construction site	inspection	Monthly site visits during active construction works	to ensure safety of workers	included in project budget	TPIO through Construction Supervisor
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	TPIO through Construction Supervisor
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	TPIO through Construction Supervisor
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	TPIO through Construction Supervisor
Construction noise is limited to day-	at construction	inspection	Monthly site visits during active	to ensure minimal	included in project	TPIO through Construction

What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
time hours	site		construction works	generation of noise	budget	Supervisor
Waste temporary collection places are identified at the site	at construction site	inspection	Monthly site visits during active construction works	to ensure waste is collected at specially designated places	included in project budget	TPIO through Construction Supervisor
Construction waste is regularly collected and disposed at the agreed site	at construction site	inspection	Monthly site visits during active construction works	to ensure timely removal of waste from construction site	included in project budget	TPIO through Construction Supervisor
Construction vehicles and machinery are washed only in designated areas where runoff will not pollute natural surface water bodies	at construction site	inspection	Monthly site visits during active construction works, in case of vehicles/machinery washing	to ensure minimal water pollution	included in project budget	TPIO through Construction Supervisor
In case of chance finds the works are stopped and information is provided by Ministry of Culture	at construction site	inspection	in case of chance finds	to ensure minimal impact on artifacts	included in project budget	TPIO through Construction Supervisor
There are no unlicensed borrow pits, quarries or unapproved waste	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	TPIO through Construction Supervisor

What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
dumps used for the project						
Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards	at construction site	inspection	Monthly site visits during active construction works	to ensure safety of workers and inhabitants	included in project budget	TPIO through Construction Supervisor
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	TPIO through Construction Supervisor
Grievance log is available and used	at construction site	inspection	Monthly site visits during construction works	to ensure operation of the GRM	included in project budget	TPIO through Construction Supervisor
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	TPIO through Construction Supervisor
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	TPIO through Construction Supervisor

What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
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	TPIO through Construction Supervisor
OPERATION PHASE						
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	TPIO through Construction Supervisor
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	TPIO through Construction Supervisor

What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
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	TPIO through Construction Supervisor
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	TPIO through Construction Supervisor

Reporting

1. Regular reporting on the implementation of ESMP is mandatory.
 2. Contractor submits 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 Supervisor submits to TPIO SNCO 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 TPIO SNCO.
 5. In cases of accidents, (fire, explosion, oil spill and bitumen overflow, etc.), the Contractor must notify the supervisor 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 Road M1-Hayrenyac-Tufashen-H83 road
Section km 0+000 – km 8+872, km 0+000-km 1+579**



Attachment 2: Capacity Building Program

Lack of information on ESMP and environmental regulations applicable to the Project may lead to environmental degradation and social issues.

Contractor's personnel at all levels have a degree of responsibility in relation to environmental, social, archaeological, and occupational health and safety issues. Therefore, orientation training on the implementation of ESMP should be delivered to all staff of Contractor.

Capacity building of contractor's personnel will include the following topics:

- Environmental and Social Management Plan, main requirements and responsibilities
- General safety rules and regulations to be followed on the construction site and camps
- Construction activity-specific rules and regulations that may include working on heights, working in waterways, working on bridges, working with electrical equipment, excavation works, etc.
- Relations with nearby communities; receipt and handling of grievances
- Rights of workers and code of their conduct

Training will be delivered by TPIO with assistance of the supervision consultant before the commencement of construction works.

Attachment 3: Photos

Road with some spots of remaining asphalt and potholes in Hayrenyac



Road with deteriorated a/c pavement in Tufashen



Worn out a/c pavement



Deteriorated a/c pavement



Attachment 4: Public Consultation

MINUTES of the Public Consultation

« 11 » « 07 » 2018թ.

The Detail Design and Environmental and Social Management Plan of the M1-Hairenyats-Tufashen-H83 km 0+000-km 8+874 (v. Haykasar km0+000-km1+580) road rehabilitation has been prepared by the Local Company "Dorproject Institute" within the framework of the World Bank financed Lifeline Roads Network Improvement Project. The project road passes through the communities of Hairenyats, Tufashen, Pemzashen and Haykasar. During the survey and design the engineering team had closely worked with the head of communities to incorporate the public requests, suggestion and comments into the final Detail Design. The aim of this public consultation is to present and discuss the prepared Detail Design and Environmental and Social Management Plan, and to insure that the public concerns are incorporated in the project. Head of communities were informed in advance about the date, time and place of the public consultation.

The design provides for all works for pavement rehabilitation, sidewalk and drainage restoration, excavation and embankment, as well as there is presented an Environmental and Social Management Plan for the mentioned road section, which incorporates particular potential adverse environmental impacts during implementation of rehabilitation works and after their completion, measures to be taken to prevent, mitigate and minimize those impacts, and parties responsible for implementation. Also, main four sections of the Environmental and Social Management Plan developed are submitted in a checklist format. Taking into account that the designed works are rehabilitative in their nature and will be carried out on the existing road, one can conclude that potential adverse impacts on the environment will be low-level, short-term and entirely work-related, and there will be no need for right-of-way.

The Environmental and Social Management Plan was thoroughly discussed with the authorities and residents of the communities of Hairenyats, Tufashen, Pemzashen and Haykasar. During discussions, the design company presented designs for all repair sections, including earthworks, carriageway rehabilitation, sidewalk construction, repair of drainage system, repair of approach roads and access ramps, especially access ramps to the main public places.

During works for rehabilitation of the road section passing through the village, no land or other property issue will arise on the whole territory of the Hairenyats, Tufashen, Pemzashen and Haykasar communities. At the same time, design works include solutions for the necessary drainage and safety, as well as pavement rehabilitation problems. Places of agricultural crossings are agreed with heads of communities.

After the presentation the participants were welcomed to ask questions. The questions raised during the meeting and corresponding answers as well as photos made are attached to this minutes below. In the end of the Public consultation the participants were asked to sign the Minutes of the Public Consultation as an approval of the Detail Design and Environmental and Social Management Plan for the M1-Hairenyats-Tufashen-H83 road.

We hereby give our consent to the Detail Design and Environmental and Social Management Plan for the M1-Hairenyats-Tufashen-H83 road and confirm that our request and suggestions are incorporated.

Head of Hairenyats community: G. Martirosyan G. Martirosyan
 member of the community: [Signature]
 member of the community: [Signature]
 Head of Tufashen community: A. Egoryan A. Egoryan
 member of the community: [Signature]
 member of the community: [Signature]
 Head of Pemzashen community: A. Voskanyan A. Voskanyan
 member of the community: [Signature]
 member of the community: [Signature]
 Head of Haykasar community: H. Barseghyan H. Barseghyan
 member of the community: [Signature]
 member of the community: [Signature]
 Representative of "Transport PIO" SNCO: [Signature]
 Representative of "Dorproject Insitute" LLC: [Signature]



1. Question (Head of Hayrenyats community) – Whether the repair of roads to school, kindergarten and rural municipality are included in the project?
 - Answer (CPE M. Ghazaryan) – Yes, the roads to school, kindergarten and rural municipality are included in the project.
2. Question (Residents of Hayrenyats, Tufashen, Pemzashen and Haykasar communities) – When will the construction works start?
 - Answer (TPIO representative Sh. Kurkchiyan) – Construction works will start, in all probability, next spring.
3. Question (Head of Tufashen community) – Whether asphaltting of the central part of the village square included in the design?
 - Answer (CPE M. Ghazaryan) – Yes, it is included.
4. Question (Head of Haykasar community) – Is strengthening of torrent discharge ditch included in the project?
 - Answer (CPE M. Ghazaryan) – Yes, strengthening of bottom is done with stones and slopes with B-8 slab.

5. Question (Head of Pemzashen community) – Whether agricultural crossing is foreseen on the proposed section?

➤ Answer (CPE M. Ghazaryan) – Yes, it is foreseen.