

**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 1+940
OF THE ROAD T-25-30-NORASHEN-DVIN-H9
THE RA ARARAT MARZ**

July 2018

PART 1: GENERAL PROJECT AND SITE INFORMATION

| INSTITUTIONAL & ADMINISTRATIVE | | | |
|--|--|--|---|
| Country | Armenia | | |
| Project title | Rehabilitation of T-25-30-Norashen-Dvin-H9 road section. | | |
| Scope of project and activity | <p>The project envisages rehabilitation of the km 0+000 – km 1+940 section of the T-25-30-Norashen-Dvin-H9 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 7.5-11 m ➤ Carriageway width 6-8 m ➤ Width of shoulders 1-3 m ➤ Sidewalks length 1.535 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 ➤ Installation of precast chutes ➤ Road safety improvement (installation of traffic signs and marking) ➤ Installation of metallic guardrails ➤ Relocation of utilities ➤ Repair of bridges ➤ Construction of sidewalks | | |
| 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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| Implementation arrangements (Name and contacts) | <table border="0" style="width: 100%;"> <tr> <td style="text-align: center; vertical-align: top;"> <p>Safeguard Supervision Darejan Kapanadze, and Raymond Von Culin, Environment Sanjay Agarwal, Social</p> </td> <td style="text-align: center; vertical-align: top;"> <p>Contact Construction Contractor (to be selected)</p> </td> </tr> </table> | <p>Safeguard Supervision Darejan Kapanadze, and Raymond Von Culin, Environment Sanjay Agarwal, Social</p> | <p>Contact Construction Contractor (to be selected)</p> |
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| SITE DESCRIPTION | | | |
| Name of site | T-25-30-Norashen-Dvin-H9 road section | | |
| Describe site location | Ararat 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 Ararat marz of Armenia. The section begins from Norashen road passing through Norashen, Dvin communities and ends at the end of Dvin community. It passes through the southern slopes of Geghama mountains. The relief of the designed road is foothills. Altitude marks varies between 850m and 920m.</i></p> <p><i>The relief is erosion-bare, represented by diagonal erosion mountains of upper Neogene (N23-Q3) Medium Quaternary era.</i></p> <p><i>Among relief types, there are widespread badlands.</i></p> <p><i>The flora is desert and semi-desert, represented by wormwood semi-desert.</i></p> <p><i>Soils are mountainous- steppe ones represented by mountainous-brown dry steppe soils.</i></p> <p><i>The section is located in the landscape-hydrological zone of Azat-Arpa river. The average water flow is 2.5-5.0/sec. per 1 km².</i></p> <p><i>The construction site is located in 829-I Climatic zone. Weather in summer is hot and dry and weather in winter is cold windless. Annual average air temperature 11.7°C. Average temperature in the coldest month -4 °C. Average temperature in the warmest month 25.5 °C. Absolute maximum temperature in summer 43°C. Minimum temperature in winter -29°C. Annual average wind speed 0.8 m/sec. Annual precipitation 238 mm. Maximum depth of soil freezing 41 cm.</i></p> <p><i>Along the road to be rehabilitated are situated Dvin, Norashen communities.</i></p> <p><i>From 0+320 till km 1+260 there are lands on both sides of the road. Private houses are located along the project road within Dvian and Norashen communities at km 0+000-0+320, km 1+260-km 1+940 sections. There are no multistoried buildings along the road. The private houses are mainly from one to two stores. Shop are located at km 0+812. There is an access ramps at km 0+189 on the project road with 268 m length to the school, kindergarten, medical center which are included in the rehabilitation works either. In Dvin Holy Harutyun church is situated at km 1+040 of the project road.</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 operates a borrow pit,</i> ➤ <i>Agreement for disposal of construction waste to be obtained by Construction Contractor from Head of Community.</i> |
| <p>PUBLIC CONSULTATION</p> | |
| <p>Identify when / where the public consultation process took place</p> | <p><i>Public Consultation was carried out in Norashen and Dvin communities 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 10, including 2 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</i></p> |

administration during PCs (10-15 leaflets in each community).

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.

INSTITUTIONAL CAPACITY BUILDING

Will there be any capacity building?

[] 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.

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 | (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 | (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 | (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 | (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 |
| Cleaning of an existing irrigation water pipe | at construction site | inspection | Monthly site visits during active 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 |

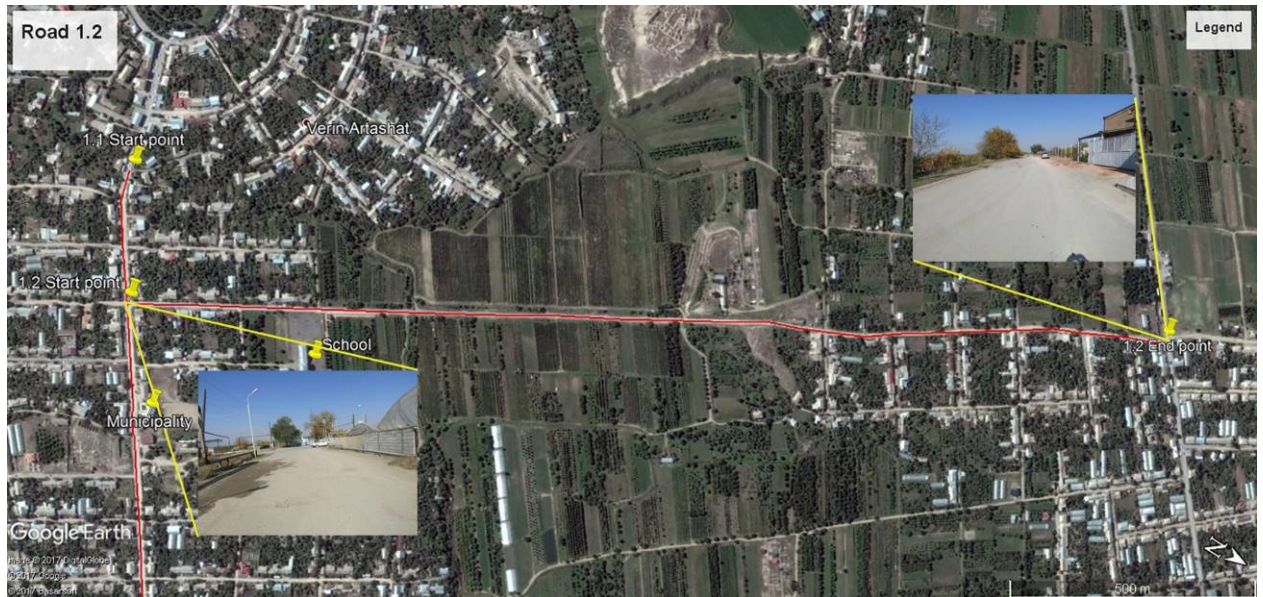
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|---|---|---|--|---|--|--|
| Timely confinement, deactivation, and removal of liquid or powder spills of cargo in case of road accidents | carriageway and shoulders of the road section | inspection | as required in response to an accident | to ensure 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 T-25-30-Norashen-Dvin-H9
Section km 0+000 – km 1+940**



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

Worn out a/c pavement



Deteriorated a/c pavement



Worn out a/c pavement with cracks



Deteriorated a/c pavement with potholes



Attachment 4: Public Consultation

MINUTES

Public Consultation

« 10 » « 07 » 2018թ.

The Detail Design and Environmental and Social Management Plan of the T-2-30-Norashen-Dvin-H9 km 0+000-km 1+940 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 Norashen and Dvin. 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 informad prior about the date, time and place of the public consultation.

The design provides for all works for pavement rehabilitation, sidewalk and drainage restoration, and excavation and embankment, as well as there are presented an Environmental and Social ManagmentPlan for the mentioned road section, in 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, there have been submitted the main four sections of the Environmental and Social Management Plan developed in a checklist format. Taking into account that the designed works are rehabilitation 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 arise no need for right-of-way.

The Environmental and Social Management Plan was thoroughly discussed with the authorities and residents of the communities Norashen and Dvin. During discussions, the designers presented works designed 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 Norashen and Dvin 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 statement below. In the end of the Public consultation the participants were asked to sign the statement of the Public Consultation as an approval of the Detail Design and Environmental and Social Management Plan for the T-2-30-Norashen-Dvin-H9 road .

We hereby give our consent to the Detail Design and Environmental and Social Management Plan for the T-2-30-Norashen-Dvin-H9 road and confirm that our request and suggestions are incorporated.

Head of Norashen community: N. Grigoryan

member of the community: [Signature]

member of the community: [Signature]

member of the community: [Signature]

Head of Dvin community: A. Abrahamyan

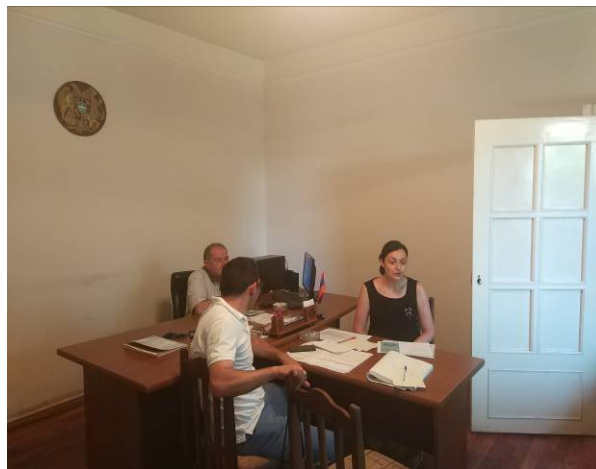
member of the community: [Signature]

member of the community: [Signature]

member of the community: [Signature]

Representative of "Transport PIO" SNCO: Armen Kocharyan

Representative of "Dorproject Insitute" LLC: Lilit Laderosyan



1. Question (Residents of Dvin community) – What is the solution for the removal of surface water from the church territory?
 - Answer (CPE L. Tadevosyan) – It is foreseen 30x34 r/c chutes on the right hand.
2. Question (Residents of Dvin community) - What is the solution for drinking water pipeline to Hnaberd?
 - Answer (CPE L. Tadevosyan) – Since the current state of the drinking water pipeline is unknown and no damages have been detected, it is foreseen to install an existing pipe in the case.
3. Question (Residents of Dvin community) – A metal pipe passes along the bridge, which provides irrigation water for three land areas, whether the damaged pipe has been substituted.
 - Answer (CPE L. Tadevosyan) – Yes, the metal pipe 325mm, which crosses the road, has been substituted with new one, and it is foreseen cleaning for the pipe along the bridge.