



**Rehabilitation and safety Measures of Access road to Village Gogasheni in  
Akhalkalaki Municipality**

**Sub-Project Environmental and Social Screening and  
Environmental Management Plan**

**WORLD BANK FINANCED  
THIRD REGIONAL DEVELOPMENT PROJECT**

## **Sub-Project description**

The sub-project (SP) envisages rehabilitation and safety measures of village Gogasheni access road t, located in Akhalkalaki Municipality, approximately in 40 km distance from town Akhalkalaki at South-east..

The road to be rehabilitated branches out of the Khertvisi-Vardzia-Mirashkhani highway in 15 km from its starting point at 15 kilometers of motor road (1300m above sea level) and follows the eastern slope of Javakheti upland to the entrance of village Apnia (1750m above the sea level). The road has an importance of local interest. The length of road section to be rehabilitated is 7037m and the width is 5-6m. The road does not cross the populated area. At the beginning of the road (from the side of Vardzia) fragmental sections of amortized asphalt-concrete cover are still preserved along 500 meter longitudinal, whereas the rest of the above-mentioned road (about 6537 meter) is entirely constitutes ground. Small ravines repeatedly cross the whole length of the road. The ditches practically do not exist. The existing steel culverts fail to let through the water runoff and the water is spontaneously flows across the carriageway, therefore the roadbed is heavily grooved. There hairpins and 16 lacets observed along the road. The slope is eroded in numerous locations, what narrows carriageway. The narrowing of the carriageway is also caused by rockslide from the slope, which has been accumulating during a long period of time as a result of road bed cleaning works.

In certain sections of the existing road, the roadbed is widened at the extent of fence-stone. The fence-stone is locally extracted. The walling is well preserved, except for several sections the walling is properly conserved and is suitable for future utilization. The damaged fence-stone walls will be dismantled and the stones will be reused for arrangement of the designed gabions.

### **SP envisages the following works:**

- Arrangement of asphalt-concrete cover at the end (the side of Vardzia) of the road along 500m.
- Arrangement of gravel cover in 7 sections of the road (total length -545m)
- Leveling the cover on the rest part of the road.
- Cleaning of the existing culverts from the sedimentary soil.
- Demolition of the existing rubbles.
- Construction of gabion walls (609 m) to protect the road from rockslip from steep unstable slopes upslope and downslope of the alignment;
- Cleaning of the existing drainage steel pipes (d-0,530m)
- Installation of new steel pipes (d-0,720m)
- Construction of reinforced-concrete drain ditches. (1168m)
- Cutting the existing shrubbery along the road.
- Installation of steel guardrails, road signs, concrete parapet of special profile and indicating posts.

## Environmental Screening and Classification of SP

### (A) IMPACT IDENTIFICATION

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| <p>Does the subproject have a tangible impact on the environment?</p>                           | <p>The SP is expected to have a modest negative environmental impact and it is expected to have tangible long-term positive impact on the social environment.</p>   |
| <p>What are the significant beneficial and adverse environmental effects of the subproject?</p> | <p>Rehabilitated road starts from the territory of Akhalkalaki region, village Apnia and passes through the unpopulated area.</p> <p>The territory is mountainous and performs the function of grazing land. The influence on the natural and social environment will be short-term, what is characterizing for rehabilitative works of medium-scale. In the modified environment: noise, dust, vibration, exhaust; generated construction waste, traffic and pedestrian access violation.</p> <p>As the result of construction works approximately 9800m<sup>3</sup> inert and organic (after cutting the shrubbery) waste will be formed.</p> <p>The intense traffic movement of construction vehicles will be nuisance factor for both local population and tourists as well.</p> <p>Implementation of the SP requires 1600 m<sup>3</sup> sand-gravel and 700 tone asphalt. Transportation of the mentioned materials, from Akhaltsikhe and Aspindza regions also, will cause disturbances for local population and tourists as well.</p> <p>Rehabilitated works require usage about 3 tone of liquid bitumen, which should not be placed on the construction site territory. In case of necessity, bitumen will be supplied by specific techniques and it will be instantly utilized.</p> <p>Rehabilitation of the mentioned road expects the increase of tourists' interests, as the marvelous view is spread from all sections of the road to the direction of Vardzia Unique Historical Monument.</p> <p>Implementation of the SP will create the chance for local inhabitants (Apnia, Gogasheni and etc.) to travel via the</p> |

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|   | <p>shortest highway to the direction of Aspindza-Akhaltzikhe and Tbilisi.</p> <p>After implementation of the SP, expenditures for road operation and care-maintenance will be decreased. Safety of traffic will be increased. Emission of health-harmful exhaust and fuel consumption will be also decreased.</p>             |
| <p>May the subproject have any significant impact on the local communities and other affected people?</p> | <p>Implementation of the SP does not require land acquisition.</p> <p>There will be long-term positive social impact, such as growth of tourist flow, attraction of private sector investment in tourism infrastructure comfort and safe relocation, fuel and time economy, road permeability any time of a year and etc.</p> |

**(B) MITIGATION MEASURES**

|   |   |
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| <p>Were there any alternatives to the sub-project design considered?</p>                                  | <p>Due to the fact that the SP envisages rehabilitation of existing road, alternatives were not considered.</p>   |
| <p>What types of mitigation measures are proposed?</p>  | <p>The expected negative impacts of the construction phase can be easily mitigated by demarcation of the construction site, traffic management, good maintenance of the construction machinery, observance of the established working hours, and well-organized disposal of waste to the formally agreed sites.</p> <p>In case chance find is encountered in the course of earthworks, the contractor must immediately stop any physical activity on site and informs the MDF. The MDF promptly notifies the Ministry of Culture and Monument Protection, which takes over responsibility for the following course of action. Works may resume only upon receipt of written permission from the Ministry of Culture and Monument Protection.</p> <p>Nut trees, located along the road (are the species included in the red list of Georgia) will be guard railed and preserved by random impair or cut.</p> <p>In operation phase proper management of generated solid waste and waste water should be ensured to reduce impact on the environment.</p> |
| <p>What lessons from the previous similar subprojects have been incorporated into the project design?</p> | <p>MDF have wide experience of implementation of medium and large scale road and streets rehabilitation subprojects financed by various donor organizations. Based on the lessons learned from previous similar projects, design envisages not only rehabilitation of road pavement but also installation of storm water ditches which will backing further maintenance of the street cover.</p>  |

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| Have concerned communities been involved? And have their interests and knowledge been adequately taken into consideration in subproject preparation? | Draft EMP for the SP was made available for population of the village Gogasheni and an announcement on the public consultation meeting was placed on public information board in the building of public school, located in village Gogasheni. The consultation meeting was held on November 27, 2015. |
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**(C) CATEGORIZATION AND CONCLUSION**

Conclusion of the environmental screening:

- 1. Subproject is declined
- 2. Subproject is accepted

Subproject preparation requires:

- 1. Completion of the Environmental Management Checklist For Small Construction and Rehabilitation Activities
- 2. Environmental Review, including development of Environmental Management Plan

## Social Screening and Cultural Resource Screening of SP

| <b>Social safeguards screening information</b>   |   | <b>Yes</b> | <b>No</b> |
|--|---|------------|-----------|
| 1  | Is the information related to the affiliation, ownership and land use status of the sub-project site available and verifiable? (The screening cannot be completed until this is available)                  | <b>X</b>   |           |
| 2  | Will the sub-project reduce people’s access to their economic resources, such as land, pasture, water, public services, sites of common public use or other resources that they depend on?                  |            | <b>X</b>  |
| 3  | Will the sub-project result in resettlement of individuals or families or require the acquisition of land (public or private, temporarily or permanently) for its development?                              |            | <b>X</b>  |
| 4  | Will the project result in the temporary or permanent loss of crops, fruit trees and household infra-structure (such as ancillary facilities, fence, canal, granaries, outside toilets and kitchens, etc.)? |            | <b>X</b>  |
| If answer to any above question (except question 1) is “Yes”, then OP/BP 4.12 Involuntary Resettlement is applicable and mitigation measures should follow this OP/BP 4.12 and the <b>resettlement Policy Framework</b>  |   |            |           |
| <b>Cultural resources safeguard screening information</b>  |   | <b>Yes</b> | <b>No</b> |
| 5  | Will the project require excavation near any historical, archaeological or cultural heritage site?  |            | <b>X</b>  |
| If answer to question 5 is “Yes”, then <b>OP/BP 4.11 Physical Cultural Resources</b> is applicable and possible chance finds must be handled in accordance with OP/BP and relevant procedures provided in the <b>Environmental and Social Management Framework</b> . |   |            |           |

## Environmental Management Plan

### PART A: GENERAL PROJECT AND SITE INFORMATION

| INSTITUTIONAL AND ADMINISTRATIVE |  |
|----------------------------------|--|
| Country                          | <b>Georgia</b>   |
| Project title                    | <b>Third Regional Development Project (RDP 3)</b>  |
| Sub-Project title                | <b>Rehabilitation and safety Measures of Access road to Village Gogasheni in Akhalkalaki Municipality</b>  |
| Scope of site-specific activity  | <p>The sub-project (SP) envisages rehabilitation and safety measures of village Gogasheni access road located in Akhalkalaki Municipality, approximately in 40 km distance from town Akhalkalaki at South-east.</p> <p>The road to be rehabilitated branches out of the Khertvisi-Vardzia-Mirashkhani highway in 15 km from its starting point at 15 kilometers of motor road (1300m above sea level) and follows the eastern slope of Javakheti upland to the entrance of village Apnia (1750m above the sea level). The road has an importance of local interest. The length of road section to be rehabilitated is 7037m and the width is 5-6m. The road does not cross the populated area. At the beginning of the road (from the side of Vardzia) fragmental sections of amortized asphalt-concrete cover are still preserved along 500 meter longitudinal, whereas the rest of the above-mentioned road (about 6537 meter) is entirely constitutes ground. Small ravines repeatedly cross the whole length of the road. The ditches practically do not exist. The existing steel culverts fail to let through the water runoff and the water is spontaneously flows across the carriageway, therefore the roadbed is heavily grooved. There hairpins and 16 lacets observed along the road. The slope is eroded in numerous locations, what narrows carriageway. Narrowing of the carriageway is also caused by rockslide from the slope, which has been accumulating during a long period of time as a result of road bed cleaning works.</p> <p>In certain sections of the existing road, the roadbed is widened at the extent of fence-stone. The fence-stone is locally extracted. The walling is well preserved, except for several sections the walling is properly conserved and is suitable for future utilization. The damaged fence-stone walls will be dismantled and the stones will be reused for arrangement of the designed gabions.</p> <p><b>SP envisages the following works:</b></p> <ul style="list-style-type: none"> <li>- Arrangement of asphalt-concrete cover at the end (the side of Vardzia) of the road along 500m.</li> <li>- Arrangement of gravel cover in 7 sections of the road (total length -545m)</li> </ul> |



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|   | <ul style="list-style-type: none"> <li>- Leveling the cover on the rest part of the road.</li> <li>- Cleaning of the existing culverts from the sedimentary soil.</li> <li>- Demolition of the existing rubbles.</li> <li>- Construction of gabion walls (609 m) to protect the road from rockslip from steep unstable slopes upslope and downslope of the alignment;</li> <li>- Cleaning of the existing drainage steel pipes (d-0,530m)</li> <li>- Installation of new steel pipes (d-0,720m)</li> <li>- Construction of reinforced-concrete drain ditches. (1168m)</li> <li>- Cutting the existing shrubbery along the road.</li> <li>- Installation of steel guardrails, road signs, concrete parapet of special profile and indicating posts.</li> </ul> <p>Arrangement of sidewalks is not envisaged under the SP due to the narrowness of the road. Water removal from the road is performed through ditches and culverts. Drainage waters will be discharged in the existing natural ravines, it will not lead furrowing of slopes and creation of new ravines along the existing area.</p> |  |  |
| Institutional arrangements (WB)   | <p>Task Team Leader:<br/>Rosanna Nitti</p> <p>Co-Task Team Leader:<br/>Zaruhi Tokhmakhian</p>   |  | <p>Safeguards Specialist:<br/>Darejan Kapanadze,<br/>environment</p> <p>Davit Jijelava,<br/>social</p> |
| Implementation arrangements (Borrower)  | <p>Implementing entity:<br/>Municipal Development Fund of Georgia</p>   | <p>Works supervisor:<br/>"Soosung Enginnering Co.Ltd." (Korea),<br/>"Voyants Solutions Pvt. Ltd." (India) SAMAN Corporation" (Korea) and<br/>"GZAMSHENPROJECT LTD" (Georgia)</p> | <p>Works contractor:<br/>LTD "Astoria"</p>   |
| <b>SITE DESCRIPTION</b>   |   |  |  |
| Name of institution whose premises are to be rehabilitated                      | <p>Motorway-Access road to Village Gogasheni (from the side of Vardzia) belongs to highway of locally importance, which is ruled by Akhalkalaki Municipality.</p>   |  |  |
| Address and site location of institution whose premises are to be rehabilitated | <p>11, Charentsiani str.<br/>0700, Akhalkalaki, Georgia</p>   |  |  |
| Who owns the land? Who uses the land (formal/informal)?                         | <p>Municipal property</p>   |  |  |
| Description of physical and natural environment around the site                 | <p>The road to be rehabilitated branches out of the Khertvisi-Vardzia-Mirashkhani motor road in 15 km from its starting</p>   |  |  |

point (1300 m above the sea level) and it follows the eastern slope of Javakheti upland to the entrance of village Apnia (1750m above the sea level).

The whole road passes through mountainous, unpopulated area, and performs the function of pasturelands.

The first section of the road runs through sparse forest-covered slopes of the shrubbery (hornbeam, blackberries, hawthorn, and dog rose).

The second section of the road runs along the shrubbery and herbaceous vegetation-covered slopes. Pine artificial plantation is cultivated on the slopes along the road.

Nut trees are planted (included species in the red list of Georgia) on the slope near from the carriageway and in some cases, they are separately on the shoulders.

As the slopes locating along the road section are furrowed with natural ravines, the small areas are allocated for grazing.

The large amount of the municipality territory constitutes Akhalkalaki mountainous upland. Its surface is relatively homogeneous shape; the height fluctuates between 1600m above sea level (in north-west) and 2100m above sea level (in south-west).

Rocks within the rehabilitated section are constituted by the sand-stones on the clay and limestone-cement and breccias of volcanic origin and sand-stones.

According to current regulatory document P.N. 01.01.09 - „Seismic Construction” of Georgia the SP area belongs to 8-balley seismic zone.

Average annual temperature is 9.4<sup>0</sup>C, Average temperature in July is 20,0<sup>0</sup>C, and Average temperature in January is -2,2<sup>0</sup>C. Average annual precipitation is 520mm.

Villages, Apnia and Gogasheni are located in 1700=1742 m above sea level. The population of Apnia is 111 people, and population of Gogasheni is 349 people. Village Gogasheni is about 40 kilometers distance from

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|   | Akhalkalaki. Village has excellent views of the castle-city of Vardzia.   |
| Locations and distance for material sourcing, especially aggregates, water, stones? | Distance from design zone to the nearest landfill is 15 km. Distance to the nearest licensed asphalt plant is approximately 55-60 km (Akhaltzikhe region).  |
| <b>LEGISLATION</b>  |   |
| National and local legislation and permits that apply to project activity           | <p>According to the World Bank policies and the ESMF, the SP has been classified as an Environmental Category “B” and requires preparation of Social and Environmental Management Plan.</p> <p>Georgian legislation does not require any type of environmental review, approval or permitting for the SP.</p> <p>Though according to the national regulatory system:</p> <ol style="list-style-type: none"> <li>I. construction materials must be obtained from licensed providers;</li> <li>II. if contractor wishes to open quarries or extract material from river bed (rather than purchasing these materials from other providers), then the contractor must obtain licenses for extraction;</li> <li>III. if contractor wishes to operate own asphalt or concrete plant (rather than purchasing these materials from other providers), then the contractor must obtain an environmental permit with an established ceiling of pollutant concentrations in emissions and technical report on inventory of atmospheric air pollution stationary source agreed with Ministry of Environment and Natural Resources Protection.</li> <li>IV. Permanent placement of the inert material (cut ground and sedimentary soil) generated in the course of earth works in a selected location must be approved by local (municipal) governing bodies in written;</li> </ol> <p>The construction company LTD “Astoria” has obtained the following:</p> <ol style="list-style-type: none"> <li>1. Environmental permit with an established ceiling of pollutant concentrations in emissions and technical report on inventory of atmospheric air pollution stationary source agreed with Ministry of Environment and Natural Resources Protection;</li> </ol> |

|   |   |
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|   | <ol style="list-style-type: none"> <li>2. Copy of the license for extraction of inert Materilas;</li> <li>3. Copy of the contract for disposal of waste material;</li> <li>4. Agreement between Akhalkalaki Municipality and the construction company for disposal of construction waste and excess inert materials.</li> </ol> <p>GOST and SNIP norms must be adhered.</p> |
| <b>PUBLIC CONSULTATION</b>  |   |
| When / where the public consultation process will take /took place  | Draft EMP was disclosed on the web page of MDF. Announcement on the public consultation meeting was placed on public information board in the public school, in village Gogasheni. Public consultation meeting of the draft EMP was conducted in the public school of village Gogasheni on November 27, 2015.   |
| <b>ATTACHMENTS</b>  |   |
| <p>Attachment 1: Site map and pictures</p> <p>Attachment 2: Minutes of public consultation meeting</p> <p>Attachment 3: Agreement on the disposal of construction waste and excess material</p> <p>Attachment 4: Agreement on the disposal of household waste</p> <p>Attachment 5: Approved emission thresholds</p> <p>Attachment 6: License for extraction of construction materials</p> |   |

**PART B: SAFEGUARDS INFORMATION**

| <b>ENVIRONMENTAL /SOCIAL SCREENING</b>                       |  |  |                            |
|--|--|--|----------------------------|
|  | <b>Activity/Issue</b>                        | <b>Status</b>                                  | <b>Triggered Actions</b>   |
| Will the site activity include/involve any of the following? | A. Building rehabilitation                   | <input checked="" type="checkbox"/> Yes [ ] No | See Section <b>A</b> below |
|  | B. New construction                          | [ ] Yes <input checked="" type="checkbox"/> No | See Section <b>A</b> below |
|  | C. Individual wastewater treatment system    | [ ] Yes <input checked="" type="checkbox"/> No | See Section <b>B</b> below |
|  | D. Historic building(s) and districts        | [ ] Yes <input checked="" type="checkbox"/> No | See Section <b>C</b> below |
|  | E. Acquisition of land <sup>1</sup>          | [ ] Yes <input checked="" type="checkbox"/> No | See Section <b>D</b> below |
|  | F. Hazardous or toxic materials <sup>2</sup> | [ ] Yes <input checked="" type="checkbox"/> No | See Section <b>E</b> below |
|  | G. Impacts on forests and/or protected areas | [ ] Yes <input checked="" type="checkbox"/> No | See Section <b>F</b> below |
|  | H. Handling / management of medical waste    | [ ] Yes <input checked="" type="checkbox"/> No | See Section <b>G</b> below |
|  | I. Traffic and Pedestrian Safety             | <input checked="" type="checkbox"/> Yes [ ] No | See Section <b>H</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 C: MITIGATION MEASURES**

| ACTIVITY   | PARAMETER                      | MITIGATION MEASURES CHECKLIST  |
|--|--------------------------------|--|
| <b>0.</b> 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 (always hardhats, as needed masks and safety glasses, harnesses and safety boots)</li> <li>(f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.</li> </ul> |
| <b>A.</b> General Rehabilitation and /or Construction Activities | Air Quality                    | <ul style="list-style-type: none"> <li>(a) The surrounding environment (sidewalks, roads) shall be kept free of debris to minimize dust</li> <li>(b) There will be no open burning of construction / waste material at the site</li> <li>(c) 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 nearby streams and rivers.</li> </ul>   |
|  | Waste management               | <ul style="list-style-type: none"> <li>(a) 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>(b) Construction waste will be collected and disposed on the nearest municipal landfill.</li> <li>(c) The records of waste disposal will be maintained as proof for proper management as designed.</li> <li>(d) Whenever feasible the contractor will reuse and recycle appropriate and viable materials (except asbestos)</li> </ul>   |

| ACTIVITY                                | PARAMETER   | MITIGATION MEASURES CHECKLIST  |
|---|---|--|
|   | Protection of trees along the roads   | <p>(a) Trees (especially walnuts) along the road must be protected from cutting or unintentional damage; Large trees shall be marked and cordoned off with fencing and their root system protected;</p> <p>(b) Movement of vehicles will strictly limit within traffic lane; Pockets for turning of vehicles should be arranged.</p> <p>(c) All workers will be strictly prohibited from, foraging, waste dump or other damaging activities to adjacent landscapes.</p> <p>(d) Any tree that is damaged or dies as a consequence of the construction shall be replaced by a suitably sized transplant at least 1:3 ratio to the approval of the MDF and National Forest Agency.</p>  |
| <b>H. Traffic and Pedestrian Safety</b> | 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>▪ Active traffic management by trained and visible staff at the site, if required for safe and convenient passage for the public.</li> <li>▪ Ensuring safe and continuous access to office facilities, shops and residences during renovation activities, if the buildings stay open for the public.</li> </ul> |

**PART D: MONITORING PLAN**

| Activity   | What<br>(Is the parameter to be monitored?)   | Where<br>(Is the parameter to be monitored?)                                      | How<br>(Is the parameter to be monitored?) | When<br>(Define the frequency / or continuous?)      | Why<br>(Is the parameter being monitored?)   | Who<br>(Is responsible for monitoring?)      |
|--|---|---|--|--|--|--|
| <b>CONSTRUCTION PHASE</b>  |   |   |  |  |  |  |
| Supply with construction materials   | Purchase of construction materials from the officially registered suppliers   | In the supplier's office or warehouse   | Verification of documents                  | During conclusion of the supply contracts            | To ensure technical reliability and safety of infrastructure   | MDF, Construction supervisor                 |
| Transportation of construction materials and waste<br><br>Movement of construction machinery | Technical condition of vehicles and machinery;<br><br>Confinement and protection of truck loads with lining;<br>Respect of the established hours and routes of transportation | Construction site<br><br>Along transportation route<br><br>Near settlement areas. | Inspection                                 | Unannounced inspections during work hours and beyond | Limit pollution of soil and air from emissions;<br>Limit nuisance to local communities from noise and vibration;<br>Minimize traffic disruption. | MDF, Construction supervisor, Traffic Police |
| EarthWorks   | Temporary storage of excavated material in the pre-defined and agreed upon locations;<br><br>Backfilling of the excavated material and/or its disposal to                     | Construction site   | Inspection                                 | In the course of earth works                         | Prevent pollution of the construction site and its surroundings with construction waste;<br>Prevent damage and loss of                           | MDF, Construction supervisor                 |



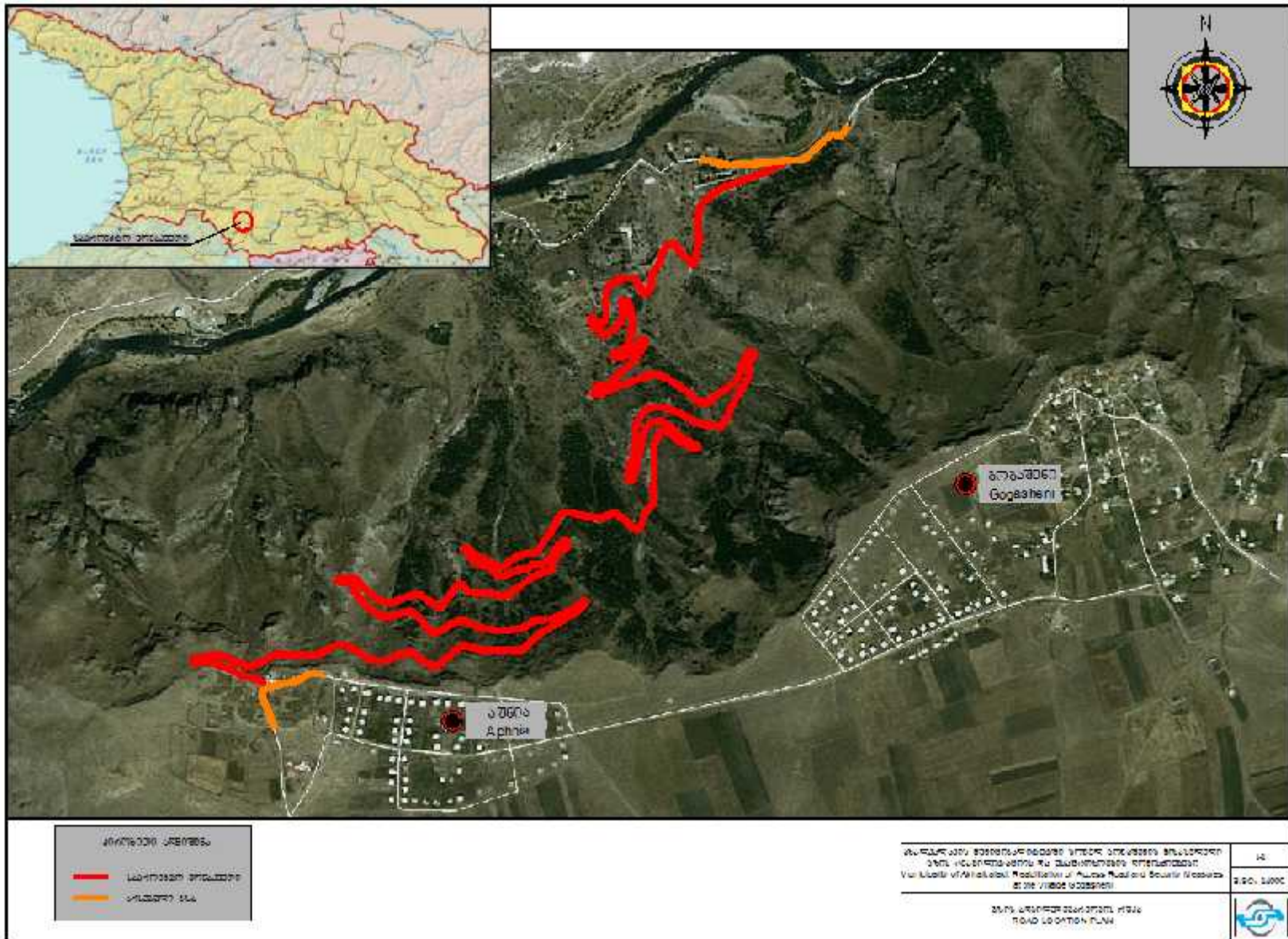
| Activity                   | What<br>(Is the parameter to be monitored?)   | Where<br>(Is the parameter to be monitored?) | How<br>(Is the parameter to be monitored?)                | When<br>(Define the frequency / or continuous?) | Why<br>(Is the parameter being monitored?)  | Who<br>(Is responsible for monitoring?) |
|----------------------------|---|--|---|---|---|---|
|                            | <p>the formally designated locations;</p> <p>In case of chance finds immediate suspension of works, notification of the Ministry of Culture and Monument Protection, and resumption of works exclusively upon formal consent of the Ministry.</p>   |  |   |   | physical cultural resources   |   |
| Sourcing of inert material | <p>Purchase of material from the existing suppliers if feasible;</p> <p>Obtaining of extraction license by the works contract and strict compliance with the license conditions;</p> <p>Terracing of the borrow area, backfilling to the exploited areas of the borrow site, and landscape harmonization;</p> | Borrowing areas                              | <p>Inspection of documents</p> <p>Inspection of works</p> | In the course of material extraction            | <p>Limiting erosion of slopes and degradation of ecosystems and landscapes;</p> <p>Limiting erosion of riverbanks, water pollution with suspended particles and disruption of aquatic life.</p> | MDF, Construction supervisor            |

| Activity   | What<br>(Is the parameter to be monitored?)   | Where<br>(Is the parameter to be monitored?)                                     | How<br>(Is the parameter to be monitored?) | When<br>(Define the frequency / or continuous?)      | Why<br>(Is the parameter being monitored?)                                  | Who<br>(Is responsible for monitoring?) |
|--|---|--|--|--|---|---|
|  | Excavation of river gravel and sand from outside of the water stream, arrangement of protective barriers of gravel between excavation area and the water stream, and no entry of machinery into the water stream. |  |  |  |   |   |
| Generation of construction waste                       | Temporary storage of construction waste in especially allocated areas;<br><br>Timely disposal of waste to the formally designated locations   | Construction site;<br>Waste disposal site  | Inspection                                 | Periodically during construction and upon complaints | Prevent pollution of the construction site and nearby area with solid waste | MDF,<br>Construction supervisor         |
| Traffic disruption and limitation of pedestrian access | Installation of traffic limitation/diversion signage;<br><br>Storage of construction materials and temporary placement of construction waste in a way preventing congestion of access roads                       | Along construction route.<br><br>Along materials and waste transportation route. | Inspection                                 | In the course of construction works                  | Prevent traffic accidents;<br><br>Limit nuisance to local residents         | MDF,<br>Construction supervisor         |

| Activity                   | What<br>(Is the parameter to be monitored?)   | Where<br>(Is the parameter to be monitored?) | How<br>(Is the parameter to be monitored?) | When<br>(Define the frequency / or continuous?) | Why<br>(Is the parameter being monitored?)   | Who<br>(Is responsible for monitoring?) |
|----------------------------|---|--|--|---|--|---|
| Workers' health and safety | <p>Provision of uniforms and safety gear to workers;</p> <p>Informing of workers and personnel on the personal safety rules and instructions for operating machinery/equipment, and strict compliance with these rules / instructions.</p>  | Construction site                            | Inspection                                 | Unannounced inspections in the course of work   | Limit occurrence of on-the-job accidents and emergencies                           | MDF, Construction supervisor            |
| Completion of construction | <p>Rake or loosen all compacted ground surfaces</p> <p>Ensure that waste and surplus materials are removed from site, or otherwise dealt with according to the wishes of landowners or local residents</p> <p>Excavate any contaminated soil from fuel depots / workshops, remove and reshape the area.</p> | All construction and camp sites              | Inspection                                 | After completion of construction                | Prevent pollution of the construction site and nearby area after SP implementation | MDF, Construction supervisor            |

| <b>Activity</b>                   | <b>What<br/>(Is the parameter to be monitored?)</b>  | <b>Where<br/>(Is the parameter to be monitored?)</b> | <b>How<br/>(Is the parameter to be monitored?)</b> | <b>When<br/>(Define the frequency / or continuous?)</b> | <b>Why<br/>(Is the parameter being monitored?)</b>              | <b>Who<br/>(Is responsible for monitoring?)</b> |
|-----------------------------------|--|--|--|---|---|---|
| <b>OPERATION PHASE</b>            |  |  |  |   |   |   |
| Maintenance of rehabilitated road | <p>Conduct regular monitoring and inventory of risks for erosion and drainage problems</p> <p>Conduct routine maintenance like grading, drain clearing, pothole patching and shoulder repairs.</p> | Entire road section                                  | Inspection   | During rehabilitation works                             | Prevent road accidents and disruption of traffic                | Akhalkalaki Municipality                        |
| Pedestrian safety                 | <p>Promote off-road let down stops;</p> <p>Enhance improvements in road signage and pavement markings.</p>   | Entire road section                                  | Inspection   | Recurrent   | To enhance pedestrians safety following increased vehicle speed | Akhalkalaki Municipality                        |

Attachment 1: Site Map and pictures











## **Attachment 2: Minutes of public consultation meeting**

**November 28, 2015**

**Village Gogasheni, Akhalkalaki Municipality, Georgia**

**Minutes**

**of Public Consultation Meeting on Social and Environmental Management Plan**

**Rehabilitation and safety Measures of Access road to Village Gogasheni in Akhalkalaki Municipality**

In order to discuss environmental documentation (Social and Environmental Management Plan) prepared for the sub-project-“*Rehabilitation and safety Measures of Access road to Village Gogasheni in Akhalkalaki Municipality, on November 27, 2015* a public consultation meeting was conducted in the building of public school of village Gogasheni.

The meeting aimed at keeping local population abreast of sub-project related planned activities, the expected positive and negative impacts on the natural and social environment and the ways and means of preventing expected negative impacts.

Those present at the meeting:

**Akhalkalaki municipality governor’s Representative in village Gogasheni:** Zaza Natenadze

**Locals:** Ilarion gokhadze, Zurab Natenadze, Lasha Natenadze, mantasho Kozhoridze, Vepkhvia Kozhoridze, Soso Natenadze, Zurab Natenadze, Kakha Kozhoridze, Gela Kozhoridze, George Natenadze, Neli Zedgenidze, Maya Shavadze, Revaz Abuselidze.

**Representatives of the Municipal Development Fund of Georgia:**

Nino Patarashvili - Environmental Safety Specialist

Niniko Isakadze- Contracted Specialist

Nino Patarashvili, Environmental Safety Specialist, opened the meeting, she informed the attendees about the purpose of the meeting, main goals of the sub-project, the planned works envisaged under the SP and MDF’s role in SP planning and implementation. In the process of the meeting, she conducted presentation of the Social and Environmental screening and Social and Environmental Management Plan prepared for the sub-project. She shortly explained to the public about the social and environmental screening procedures applied for the WB and environmental and social requirements of the presented SP. There were discussed also the mitigation measures in order to avoid or minimize the potential negative impacts which may arise during the SP implementation process. N. Patarashvili mentioned that according to the Georgian law on Environmental Impact Permit the SP does not require any kind of permits and agreements with the Ministry of Environment and Natural Resources protection and/or obtaining of Environmental

Impact Permit. Due to the above-mentioned fact, and to ensure environmental and social safety of the SP, MDF is responsible for implementation of all environmental and social procedures in accordance with the WB safeguard policies.

N. Patarashvili discussed the structure and content of Social and Environmental Management Plan. She noted that EMP forms an integral part of the contract made with the civil works contractor. The last one is obliged thoroughly implementation of the measures specified in the EMP to protect social and natural environment. She also discussed the environmental monitoring criteria, responsible parties for the environmental supervision and reporting procedures during the sub-project implementation.

N. Patarashvili informed the participants about the contact persons for communication, in case of existence of any complaints concerning environmental or social issues.

After the presentation, the audience was given a possibility to express their opinions and/or participate in Q&A session concerning presented issues, they posed the following question:

| <b>Questions and remarks</b>  | <b>Answers and comments</b>  |
|---|--|
| How many km is a length of the rehabilitative road section and what kind of road pavement will be arranged? | Access road starts on the left side of Khertvisi-Vardzia-Mirashkhani highway in 15 km from its starting point and it follows the eastern slope of Javakheti upland to the entrance of Apnia village . The length of rehabilitative road section is about 7km (7037m). The presented SP envisages arrangement of Asphalt-concrete cover at the end (the side of Vardzia) of the road along 500m and gravel cover in 7 sections of the road. Additionally, the SP envisages road safety measures.  |
| When will the rehabilitation works of the road be launched?   | At this stage it is impossible to set a start date of civil works. Currently the tender and design documentation of the SP is submitted to WB and MDF is waiting no-objection from WB to announce the tender for selection of a construction company. The procedures related to the tender will last approximately in 3 months. Additionally upcoming winter season might interfere the starting of civil works before spring. Supposedly, road rehabilitation works envisaged under the presented SP will be launched in spring after completion of the tender. |

|  |   |
|--|---|
| Will the local population have the employment opportunities? | The civil works contractors usually prefer to employ the specialists from the company, having the requisite knowledge and experience working with the construction machinery, as for the rest of the labor force – the priority for employment will be given to locals. |
|--|---|

At the end of the meeting the audience expressed their positive attitude towards the project and dissatisfaction with the fact that the SP does not envisage arrangement of asphalt-concrete or reinforced-concrete pavement on the whole section of the road. They hope that their living and economic conditions will be improved as a result of the sub-project implementation.

Photo materials and copy of meeting participants’ registration list are hereby enclosed.

Minutes was prepared by Niniko Isakadze

November 28, 2015

Photo Materials:



List of Participants:


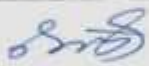




რეგიონული განვითარების მესამე პროექტი

ახალქალაქის მუნიციპალიტეტში სოფელ გოგაშენში მისასვლელი გზის რეაბილიტაციისა და  
უსაფრთხოების ღონისძიებების ქვე-პროექტი

გარემოსდაცვითი და სოციალური სკრინინგის დოკუმენტისა და გარემოს დაცვის მართვის გეგმის საჯარო განხილვა

27 ნოემბერი 2015 წელი

შეხვედრაზე დამსწრეთა რეგისტრაციის ფურცელი

|    | სახელი, გვარი    | ორგანიზაცია  | საკონტაქტო ინფორმაცია | ხელმოწერა   |
|----|------------------|--------------|-----------------------|---|
| 1. | გიორგი კოსტე     | აგრომომხიზი  | 551-08-46-19          |    |
| 2. | ზორაბ ნათუნაძე   | სპეცოპ გროვი | 551-08-43-30          |    |
| 3. | ლევან ნათუნაძე   | აგრომომხიზი  | 574-15-14-60          |    |
| 4. | მანთია კოეოიძე   | აგრომომხიზი  | 551 60-39-95          |    |
| 5. | ვენიკია ჯოქინიძე | აგრომომხიზი  | 579 023-111           |   |
| 6. | ლევან ნათუნაძე   | აგრომომხიზი  | 555-312 253           |  |

|     |                |             |              |         |
|-----|----------------|-------------|--------------|---------|
| 7.  | Երկու ծ Երանան | սեղանակա    | 591394317    | Երան    |
| 8.  | Նա չարոհոյ     | սրբորոմեացի | 555 73-94.76 | Ս. Մ. / |
| 9.  | Զրու չարոհոյ   | սրբորոմեացի | 595 196123   | Զ. Մ. / |
| 10. | Երան Երան      | սրբորոմեացի | 551 084625   | Երան    |
| 11. | Երան Երան      | սրբորոմեացի | 5510846 24   | Ե. Մ. / |
| 12. | Զոս Զոս        | սրբորոմեացի | 5510846.30   | Զ. Մ. / |
| 13. | Զոս Զոս        | սրբորոմեացի | 577 6095 81  | Զ. Մ. / |
| 14. | Երան Երան      |             |              | Զ. Մ. / |
| 15. |                |             |              |         |
| 16. |                |             |              |         |
| 17. |                |             |              |         |

**Attachment 3 Agreement between Akhalkalaki Municipality and LTD "Astoria" for disposal of construction waste and excess material**

აქტი


5648  
08.12.15


17.08.2016


ქ. მანჯარაძე

ჩვენ ქვემოთ ხელის მოწმენი შპს „მეტოხა  
 კონსტრუქციის დ. შანვალაძე-ს, მანჯარაძის მუნიციპალიტეტის  
 ტერიტორიის სანაგვე ნაღებების რეაქციის სარეაქციო და  
 მოგაჭრის ადგილისთვის სპეციალური უზრუნველყოფის  
 რ. მანჯარაძე და მანჯარაძის მუნიციპალიტეტის ტერიტორიის  
 მოგაჭრის სპეციალური მოგაჭრის ადგილისთვის  
 უზრუნველყოფის მ. ნაგადაძე ვადასტურებ, რომ ვადასტურებ  
 მოგაჭრის მოსახლეობის მხარდაჭერას სანაგვე ნაღებების  
 სანაგვე ნაღებების, მოგაჭრის ადგილისთვის შპს „მეტოხა  
 კონსტრუქციის მოგაჭრის უზრუნველყოფის სარეაქციო  
 სარეაქციო მოგაჭრის უზრუნველყოფის სარეაქციო  
 მოგაჭრის უზრუნველყოფის სარეაქციო მოგაჭრის უზრუნველყოფის  
 სარეაქციო მოგაჭრის უზრუნველყოფის სარეაქციო მოგაჭრის  
 უზრუნველყოფის სარეაქციო მოგაჭრის უზრუნველყოფის  
 სარეაქციო მოგაჭრის უზრუნველყოფის სარეაქციო მოგაჭრის  
 უზრუნველყოფის სარეაქციო მოგაჭრის უზრუნველყოფის  
 სარეაქციო მოგაჭრის უზრუნველყოფის სარეაქციო მოგაჭრის  
 უზრუნველყოფის სარეაქციო მოგაჭრის უზრუნველყოფის

შპს „მეტოხა“-ს  
 კონსტრუქციის  
 მანჯარაძის სანაგვე  
 ნაღებების სარეაქციო  
 მანჯარაძის მუნიციპალიტეტის  
 მოგაჭრის სპეციალური  
 სარეაქციო მოგაჭრის  
 უზრუნველყოფის

 | დ. შანვალაძე

 | რ. მანჯარაძე

 | მ. ნაგადაძე

### ხელშეკრულება

დასაბინძა

„01“ სექტემბერი 2016 წ.

(დასახლებული პუნქტი)

ერთის მხრივ-- შ.პ.ს „ასტორია“ ს/კ 224067530

(ფრთხილი ან იურიდიული პირის დასახლება და მისამართი)

რომელსაც წარმოადგენს ----- დირექტორი- მ მანჯელიძევილი

შემდგომში „შემკვეთად“ წოდებული

მეორეს მხრივ --- შპს ასპიძის კეთილმოწყობის სამსახური ს/კ 423098016

(ფრთხილი ან იურიდიული პირის დასახლება)

რომელსაც წარმოადგენს ----- დირექტორი: ნელიზბარაშვილი

სახელი, გვარი, თანამდებობა

შემდგომში „შემსრულებლად“ წოდებული, დადეს ეს ხელშეკრულება შემდეგზე:

#### 1.3 ხელშეკრულების საგანი

1.1. მისაკრებელი დასახლებული ტერიტორიის დასუფთავებისათვის იპირების, საწარმოების სორგანიზაციებისა და დაწესებულებებისათვის.

საყოფაცხოვრებო სახის ნარჩენების გატანასთან დაკავშირებული მომსახურება

(ჩამოთვლილი მომსახურების სასიობები)

1.2. შემსრულებელი ვალდებულია შემკვეთის დაეალებით გასწიოს ამ ხელშეკრულების 3.1.1-ში მოითითებული მომსახურება, ხოლო შემკვეთი ვალდებულია ააწარმოოს ეს მომსახურება.

( შემდგომში „მომსახურება“ )

1. სამუშაოთა შესრულების ვადაა „01 სექტემბერი 2016წ“ -იდან

31 დეკემბერი 2016წ -ამდე



**Attachment 5.** Thresholds of pollutant concentrations in the emissions from asphalt, concrete, and stone crushing units agreed with Ministry of Environment and Natural Resources Protection



