



# **Rehabilitation of Bakuriani-Andeziti-Tsikhisjvari Connecting Road, Borjomi Municipality**

## **Environmental and Social Screening and Environmental Management Plan**

**WORLD BANK FINANCED  
Third Regional Development Project**

## **Sub-project Description**

Under the presented sub-project (SP), it is planned to rehabilitate Bakuriani-Andeziti-Tsikhisjvari connecting road (total length- 7700 m, width -7-8 m) in Borjomi Municipality. Village Tsikhisjvari represents a climatic – balneology resort and is famous for a church and a fortress - Tiskhisjvari of Middle Ages.

Along to the road, there are the following linear constructions: gas pipelines registered as property of LTD “Sakkorgazi” and BP pipelines. In order to prevent any damage and suspension of the linear construction operation, the providers have already been informed in written about the planned activities.

SP envisages implementation of the following works:

- Arrangement of the road shoulder with sand-gravel material;
- Cleaning of the existing culverts from sediment;
- Arrangement of the asphalt/concert layer on the existing little bridges constructed over Borjomula, Oshora and Kumisa rivers;
- Arrangement of the road pavement with asphalt/concrete layer (7.7 km);
- Arrangement of cuvettes along the road;
- Replacement of asbestos containing pipes (length- 60 m);
- Arrangement of junctions and driveways;
- Placing of permanent traffic signs, including warning, prohibitory and indication signs;
- Removal of shrubbery along the road.

Borjomi municipality will be responsible for maintenance of the road based on the “Investment Financing Agreement between Municipal Development Fund of Georgia and Self-governing Body of Borjomi Municipality”.

## Environmental screening

### (A) IMPACT IDENTIFICATION

<p><b>Does the sub-project have tangible impact on the environment?</b></p>	<p>The SP will have a modest negative environmental impact and it is expected to have tangible long-term positive impact by providing comfortable environment for the local population and tourists.</p> <p>The main impact will be during the construction phase, which includes works for arrangement of the roadbed, pavement and ditches, movement and operation of heavy vehicles, supply of materials. The road to be rehabilitated is located within an area with strongly modified environment. Therefore, the impact is transitory and insignificant (noise, emissions, construction waste, temporary disturbance of traffic and access).</p>
<p><b>What are the significant beneficial and adverse environmental effects of sub-project?</b></p>	<p>The main impact will be during the construction phase, which includes works for rehabilitation of Bakuriani-Andeziti-Tsikhisjvari connecting road.</p> <p>The expected negative environmental impacts are likely to be short term and typical for small to medium scale rehabilitation works in urban landscape: noise, dust, vibration, and emissions from the operation of construction machinery; generation of construction waste; disruption of traffic and pedestrian access.</p> <p>After implementation of the SP, expenditures for road operation and care-maintenance, emission of health-harmful exhaust and fuel consumption will be decreased. Safety of traffic and tourist flows will be increased. The increased tourist flows will have positive social impact through improvement of employment opportunities. SP implementation will create opportunity for new jobs for local population and increase their incomes.</p> <p>Approximately 400 m<sup>3</sup> excess material (cut soil) will be produced, as a result of arrangement of drainage system and site preparatory works.</p> <p>The nearest landfill is located in village Tagveti, Khashuri Municipality.</p> <p>To minimize road crossing ponding and flooding risk, works for cleaning of the existing storm water ditches along the road is planned within the SP. Asbestos containing waste will be generated through demolition of the existing damaged drain asbestos pipes at the accessions of the courtyards.</p>

	Transportation of the inert materials and generated waste will slightly increase a road congestion, will cause disturbance of population / visitors and traffic interruption as well.
<b>May the sub-project have any significant impact on the local communities and other affected people?</b>	<p>The SP will have a long-term positive social impact through improving living and transportation conditions of the local population. It will decrease existing negative impacts on community such as dust, emissions and noise. No land take and relocation are expected. Due to narrow road corridor (about 7-8 m) that lies between private properties (residential yards), arrangement of sidewalks is impossible without involuntary resettlement, which is justifiable neither from financial, nor from social standpoint. Warning signs will be arranged to increase pedestrian safety. The long-term social impact will be positive, temporary jobs will be created during construction and hence, income of the part of local population will be increased. Implementation of the presented SP will improve touristic attraction and supporting the development of tourism-based economy and cultural heritage circuits in the Samtskhe -Javakheti region.</p> <p>Significant social impact of rehabilitation activities, like change of local demographic structure, , secondary development, and increase of AIDS risks is not expected to occur.</p>

## **(B) MITIGATION MEASURES**

<b>Were there any alternatives to the sub-project design considered?</b>	As the SP envisages rehabilitation of the existing road, alternatives regarding to the SP design were not considered.
<b>What types of mitigation measures are proposed?</b>	<p>The expected negative impacts of the construction phase can be easily mitigated. The contractor will be responsible for the waste disposal at the permitted location, use the quarry materials from the licensed quarries only, prevent water and soil from pollution (fuel spills due to equipment failure, raw asphalt/concrete spills), avoid disturbance of population (noise, dust, emissions) through proper work/supplies scheduling, traffic management, good maintenance of the construction machinery.</p> <p>In the process of the implementation period of rehabilitation works, it is necessary to manage traffic movement.</p>

	<p>Asbestos pipes will be demolished allying conventional safety rules and disposed on nearest municipal landfill in accordance with Rules and Norms for Governmental Decree # 145, March 29, 2016).</p> <p>In order to prevent any damage and suspension of the linear construction operating, prior to the construction works the providers have already been informed in written about the planned activities.</p> <p>Arrangement of warning road signs is envisaged to increase pedestrian safety.</p>
<b>What lessons from the previous similar projects have been incorporated into the sub-project design?</b>	MDF have wide experience of implementation of medium and large scale road and streets rehabilitation sub-projects financed by various donor organizations. Based on lessons learned from previous similar projects, design envisages not only rehabilitation of road pavement but also rehabilitation of storm water ditches which will backing further maintenance of the road cover.
<b>Have concerned communities been involved and have their interests and knowledge been adequately taken into consideration in sub-project preparation?</b>	A consultation meeting was held on August 18, 2016 in the office of Borjomi Municipality Governor Representative in bakuriani. Announcement on the public consultation meeting was placed on public information board in the building of Borjomi Municipality Governor Representative in bakuriani. Minutes of the public consultation meeting is attached with EMP.

### (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

Social safeguards screening information		Yes	No
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)	X	
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?		X
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?		X
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)?		X
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>			
Cultural resources safeguard screening information		Yes	No
5	Will the project require excavation near any historical, archaeological or cultural heritage site?		X
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 & ADMINISTRATIVE		
<b>Country</b>	Georgia	
<b>Project title</b>	Regional Development Project 3	
<b>Sub-Project title</b>	Rehabilitation of Bakuriani-Andeziti-Tsikhisjvari Connecting Road (Borjomi Municipality)	
<b>Scope of site-specific activity</b>	<p>Under the presented sub-project (SP), it is planned to rehabilitate Bakuriani-Andeziti-Tsikhisjvari connecting road (total length- 7700 m, width -7-8 m) in Borjomi Municipality. Village Tsikhisjvari represents a climatic –balneology resort and is famous for a church and a fortress- Tiskhisjvari.</p> <p>Along to the road, there are the following linear constructions: gas pipelines registered as property of LTD “Sakkorgazi” and BP pipelines. In order to prevent any damage and suspension of the linear construction operation, the providers have already been informed in written about the planned activities.</p> <p>The SP envisages implementation of the following works:</p> <ul style="list-style-type: none"> <li>- Arrangement of the road shoulder with sand-gravel material;</li> <li>- Cleaning of the existing culverts from sediment;</li> <li>- Arrangement of the asphalt/concert layer on the existing little bridges;</li> <li>- Arrangement of the road pavement with asphalt/concrete layer (7.7 km);</li> <li>- Arrangement of cuvettes along the road;</li> <li>- Demolition of asbestos containing pipes (length- 60 m);</li> <li>- Placing of warning signs;</li> <li>- Removal of shrubbery along the road.</li> </ul> <p>Borjomi municipality will be responsible for maintenance of the road based on the “Investment Financing Agreement between Municipal Development Fund of Georgia and Self-governing Body of Borjomi Municipality”.</p>	
<b>Institutional arrangements (WB)</b>	<p><b>Task Team Leader:</b></p> <p>Rosanna Nitti</p>	<p><b>Safeguards Specialists:</b></p> <p>Darejan Kapanadze - Environment</p> <p>Davit Jijelava - Social</p>

<b>Implementation arrangements (Borrower)</b>	<b>Implementing entity:</b> Municipal Development Fund of Georgia	<b>Works supervisor:</b> JV of "Soosung Engineering Co.Ltd." (Korea), "Voyants Solutions Pvt. Ltd." (India) SAMAN Corporation" (Korea) and "GZAMSHENPROJECT LTD" (Georgia)	Works contractor: Hedep Georgia
<b>SITE DESCRIPTION</b>			
<b>Name of institution whose premises are to be rehabilitated</b>	Borjomi Municipality		
<b>Address and site location of institution whose premises are to be rehabilitated</b>	Borjomi, Meskheti st. # 5 Phone: (0367) 222416224499		
<b>Who owns the land? Who uses the land (formal/informal)?</b>	Borjomi Municipality		
<b>Description of physical and natural environment around the site</b>	<p>The SP envisages rehabilitation of Bakuriani-Andeziti-Tsikhisjvari connecting road, in Borjomi municipality. Bakuriani is one of the most important skiing resorts in Georgia and located in the Borjomi district, on the northern slope of the Traileti Range, at an elevation of 1700 meters above sea level. The distance between Tbilisi and Bakuriani is 180 km and between Borjomi and Bakuriani it is just 30 km distance.</p> <p>The climate is transitional from humid maritime to relatively humid continental. The climate of Bakuriani is transitional from humid maritime to relatively humid continental. Average annual temperature of the town is 4.3°C. The average temperature in January is -7.3°C while the average August temperature is 15°C. The annual precipitation is 734 mm (28.9 in). The depth of snow from December to March is 64 cm (25.2 in).</p> <p>Village Tsikhisjvari represents a climatic –balneology resort and is famous for a church and a fortress - Tiskhisjvari of Middle Ages.</p> <p>The road to be rehabilitated passes through populated as well as unpopulated areas. The existing motor road has gravel pavement, which is much damaged. Curves nor grades meet engineering-technical requirements for motor roads. The drainage system is broken down, and water is flowing on the road pavement. The pavement is considerably eroded. Majority of the existing culverts is damaged and unserviceable.</p>		
<b>Locations and distance for material sourcing, especially aggregates, water, stones?</b>	<p>The nearest landfill located in village Tagveti, Khashuri municipality. . The distance to the nearest licensed sand-gravel pit is about 22 km.</p> <p>During the work, execution on the site the water was supplied from the local central water supply system.</p>		
<b>LEGISLATION</b>			



<p><b>National &amp; local legislation &amp; permits that apply to project activity</b></p>	<p>The SP has been classified as low risk Category B according to the World Bank policies and the ESMF.</p> <p>Georgian legislation does not require any type of environmental review, approval, or permitting for the SP. Though according to the national regulatory system:</p> <ul 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 Cement-concrete mixing 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> <li>v. If over 200 tons of non hazardous waste or over 1000 tons of inert materials or more than 120 kg of hazardous waste is generated annually (calculation apply to a calendar year) as a result of contractor’s general activities, they shall prepare and cause the Ministry of Environment and Natural Resources of Georgia to approve the inventarisation of Waste and Waste Management Plan for the Company, appoint an environmental manager, and submit an information on his/her identity to the Ministry of Environment and Natural Resources Protection of Georgia in accordance with requirements of the Waste Code of Georgia.</li> <li>vi. Asbestos pipes will be demolished allying conventional safety rules and disposed on nearest municipal landfill in accordance with Rules and Norms for Governmental Decree # 145, March 29, 2016).</li> </ul> <p>The contractor “Hedep Georgia ”obtained the following documentation:</p> <ul style="list-style-type: none"> <li>- Agreement for disposal of construction waste;</li> <li>- Agreement for purchasing Asphalt and inert materials;</li> <li>- Agreement for disposal of asbestos containing material with Solid Waste Management Company of Georgia.</li> </ul> <p>GOST and SNIP norms must be adhered.</p>
<p><b>PUBLIC CONSULTATION</b></p>	
<p><b>When / where the public consultation process will take /took place</b></p>	<p>A consultation meeting was held on August 18, 2016 in the office of Borjomi Municipality Governor Representative in bakuriani. Announcement on the public consultation meeting was placed on public information board in the building of Borjomi Municipality Governor Representative in bakuriani. Minutes of the public consultation meeting is attached with EMP.</p>
<p><b>ATTACHMENTS</b></p>	
<p><b>Attachment 1:</b> Site maps of the SP implementation places, orthophoto and pictures;</p>	

**Attachment 2.** Agreement on waste disposal (to be provided), Copies of extraction licenses (if applicable), permits for operating asphalt/concrete plants (if applicable),  
**Attachment 3:** Record on public consultation (to be provided)

**PART B: SAFEGUARDS INFORMATION**

<b>ENVIRONMENTAL /SOCIAL SCREENING</b>			
	Activity/Issue	Activity/Issue	Activity/Issue
Will the site activity include/involve any of the following?	A. road rehabilitation	<input checked="" type="checkbox"/> Yes [ ] No	See Section A below
	B. New construction	[ ] Yes [ ] No	See Section A below
	C. Individual wastewater treatment system	[ ] Yes <input checked="" type="checkbox"/> No	See Section B below
	D. Historic building(s) and districts	[ ] Yes <input checked="" type="checkbox"/> No	See Section C below
	E. Acquisition of land <sup>1</sup>	[ ] Yes <input checked="" type="checkbox"/> No	See Section D below
	F. Hazardous or toxic materials <sup>2</sup>	<input checked="" type="checkbox"/> Yes [ ] No	See Section E below
	G. Impacts on forests and/or protected areas	[ ] Yes <input checked="" type="checkbox"/> No	See Section F below
	H. Handling / management of medical waste	[ ] Yes <input checked="" type="checkbox"/> No	See Section G below
	I. Traffic and Pedestrian Safety	<input checked="" type="checkbox"/> Yes [ ] No	See Section H 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. General Conditions</b>	Notification and Worker Safety	(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 (always hardhats, as needed masks and safety glasses, harnesses and safety boots) (f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.
<b>A. General Rehabilitation and /or Construction Activities</b>	Air Quality	(a) The surrounding environment (sidewalks, roads) shall be kept free of debris to minimize dust (b) There will be no open burning of construction / waste material at the site (c) There will be no excessive idling of construction vehicles at sites (d) Truck loads should be confinement and protected with lining.
	Noise	(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 (c) The machinery should move only along the preliminarily agreed route; (d) The maximum allowed speed should be restricted; (e) Proper technical control and maintenance practices of the machinery should be applied; (f) No-load operations of the vehicles and heavy machinery are not allowed. Proper mufflers will be used on machinery.
	Water Quality	(a) Contractor will be required to organize and cover material storage areas. The material storage sites should be protected from washing out during heavy rain falls and flooding through covering by impermeable materials. Appropriate erosion and sediment control measures will be established 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; (b) Contractor will plan all excavations, topsoil and subsoil storage so as to reduce to a minimum any runoff; (c) Revision of vehicles will be required to ensure that there is no leakage of fuel and lubricating materials. All machinery will be maintained and operated such that all leaks and spills of materials will be minimised. Daily plant

		<p>checks (Vehicle Maintenance Procedure) will be undertaken to ensure no leaks or other problems are apparent. Vehicle maintenance, cleaning, degreasing etc. will be undertaken in designated areas, of hard-standing, not over made ground. Maintenance points will not be located within 50m of any watercourse;</p> <p>(d) Lubricants, fuel and solvents should be stored and used for servicing machinery exclusively in the designated sites, with adequate lining of the ground and confinement of possible operation and emergency spills. Spill containment materials (sorbents, sand, sawing, chips etc.) should be available on construction site;</p> <p>(e) Wet cement and/or concrete will not be allowed to enter any watercourse, pond or ditch.</p> <p>(f) Works on the bridges. Contractor shall ensure proper handling of paints materials, oil and lubricants to avoid any spillage of them into the water. It is not advised to paint the metal railings with the sprayer. Storage of potentially polluting materials within 50 m of watercourses is prohibited. Dumping of waste in the rivers/watercourses is prohibited.</p>
	Waste management	<p>(a) Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities.</p> <p>(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.</p> <p>(c) The records of waste disposal will be maintained as proof for proper management as designed.</p> <p>(d) Whenever feasible the contractor will reuse and recycle appropriate and viable materials.</p>
	Material supply	<p>a) Use existing plants, quarries or borrow pits that have appropriate official approval or valid operating license.</p> <p>b) Obtain licenses for any new quarries and/or borrowing areas if their operation is required;</p> <p>c) Reinstate used sections of quarries and/or borrowing areas as extraction proceeds on or properly close quarries if extraction completed and license expired;</p> <p>d) Haul materials in off peak traffic hours;</p> <p>e) Place speed regulating, diverting, and warning signs for traffic as appropriate.</p>
E. Toxic Materials	Asbestos management	<p>(a) asbestos located on the SP site shall be marked clearly as hazardous material;</p> <p>(b) asbestos will be appropriately contained and sealed to minimize exposure;</p> <p>(c) The asbestos prior to removal will be treated with a wetting agent to minimize asbestos dust;</p> <p>(d) Asbestos will be handled and disposed by skilled &amp; experienced professionals equipped with special PPE;</p> <p>(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.</p> <p>(f) The removed asbestos will not be reused;</p> <p>(g) The asbestos will finally disposed on the nearest official landfill in accordance with Rules and Norms for Governmental Decree # 145, March 29, 2016).</p>

	Toxic / hazardous substances management	<p>(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</p> <p>(b) The containers of hazardous substances shall be placed in a leak-proof container to prevent spillage and leaching</p> <p>(c) The wastes shall be transported by specially licensed carriers and disposed in a licensed facility.</p> <p>(h) Paints with toxic ingredients or solvents or lead-based paints will not be used.</p>
<b>H Traffic and Pedestrian Safety</b>	Direct or indirect hazards to public traffic and pedestrians by construction activities	<p>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>- To arrange speed bumps to reduce vehicle speed and appropriate signs (road narrows/mind pedestrians) in agreement with local traffic police.</li> </ul>

**PART D: MONITORING PLAN**

Activity	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?)	Who (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 Movement of construction machinery	Vehicles and machinery are kept in standard technical condition;  Truck loads are confined and protected with lining;  Established hours and routes of transportation are respected	Construction site	Inspection	Unannounced inspections during work hours and beyond	Limit pollution of soil and air from emissions; Limit nuisance to local communities from noise and vibration; Minimize traffic disruption.	MDF, Construction supervisor, Traffic Police
Sourcing of inert material	Purchase of material from the existing suppliers if feasible;  Obtaining of extraction license by the works contract and strict compliance with the license conditions;  Terracing of the borrow area, backfilling to the exploited areas of the borrow site, and landscape harmonization;	Borrowing areas	Inspection of documents Inspection of works	In the course of material extraction	Limiting erosion of slopes and degradation of ecosystems and landscapes; Limiting erosion of river banks, water pollution with suspended particles and disruption of aquatic life.	MDF, Construction supervisor

	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;  Timely disposal of waste to the formally designated locations	Construction site; Waste disposal site	Inspection	Periodically during construction and upon complaints	Prevent pollution of the construction site and nearby area with solid waste	MDF,  Construction supervisor
Traffic disruption and limitation of pedestrian access	Installation of traffic limitation/diversion signage;  Storage of construction materials and temporary placement of construction waste in a way preventing congestion of access roads	At and around the construction site	Inspection	In the course of construction works	Prevent traffic accidents; Limit nuisance to local residents	MDF, Construction supervisor
Asbestos management	Asbestos located on the SP site is appropriately contained and marked clearly as hazardous material;  Asbestos-containing materials are sprinkled with water while handling;  Staff handling asbestos-containing materials wear full uniforms, protective masks and goggles;	At construction site	Inspection of documents Inspection of works	In the course of demolition works	Prevent pollution by toxic materials To protect workers' health	MDF, Construction supervisor

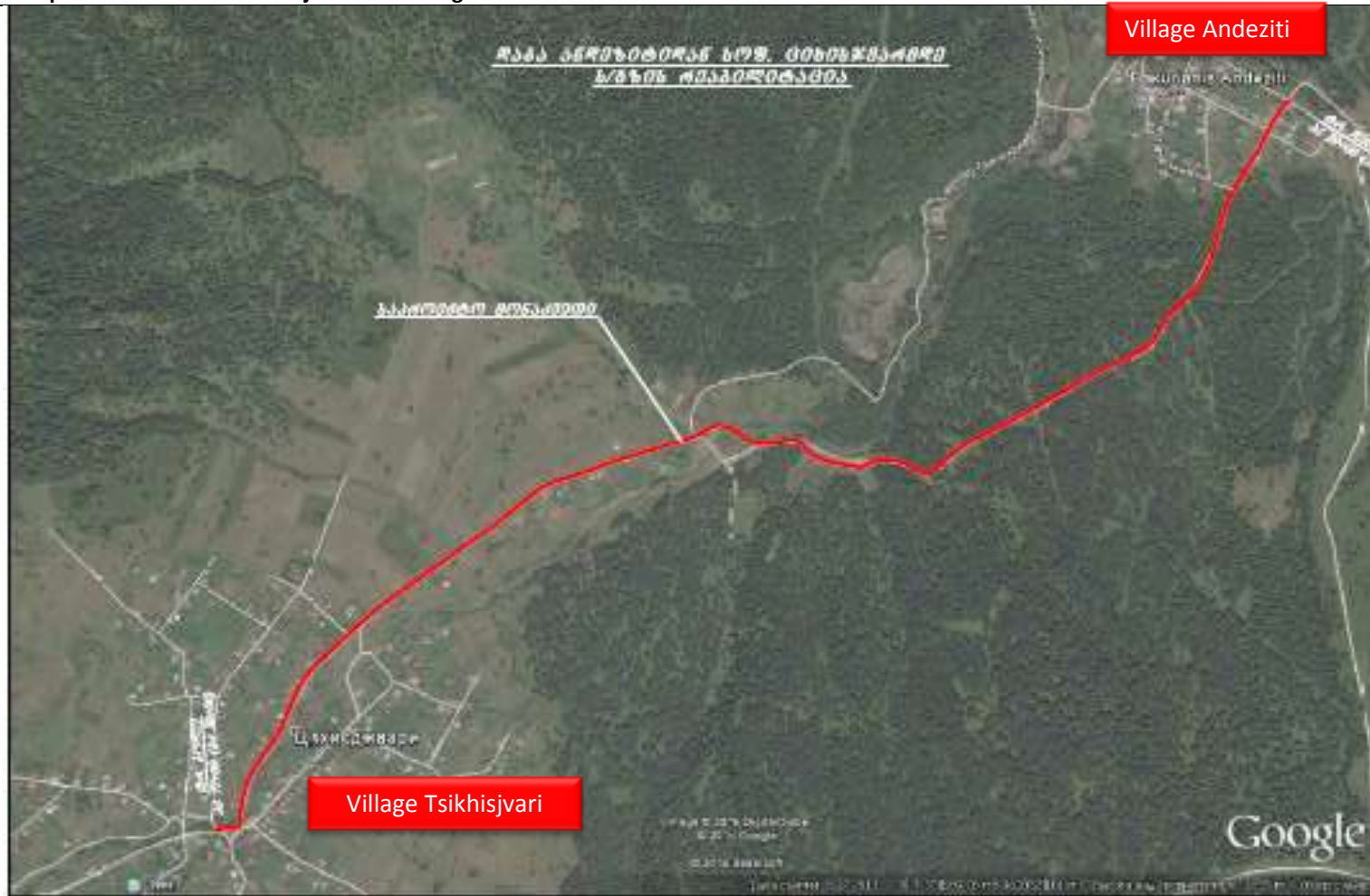


	Security measures are taken against unauthorized removal of asbestos-containing material from the site: wate is contained and marked clearly as hazardous material; dismantled asbestos-containing pipes are immediitly disposed on the nearest landfill - in village Tagveti, Khashuri Municipality under supervision of representatives of supervisory company.					
Workers' health and safety	Provision of uniforms and safety gear to workers;  Informing of workers and personnel on the personal safety rules and instructions for operating machinery/equipment, and strict compliance with these rules/instructions	Construction site	Inspection	Unannounced inspections in the course of work	Limit occurrence of on-the-job accidents and emergencies	MDF, Construction supervisor
<b>OPERATION PHASE</b>						
Maintenance of rehabilitated trail	Maintenance of relevant road signage for traffic safety;  Demarcation of the sections of streets under repair;  Disposal of asphalt and or other waste from the repair works to the designated landfill.	Rehabilitated sections of roads	Inspection	During maintenance works	Prevent road accidents and disruption of traffic	Borjomi municipality

Attachment I. Site maps of sub-project implementation places, pictures

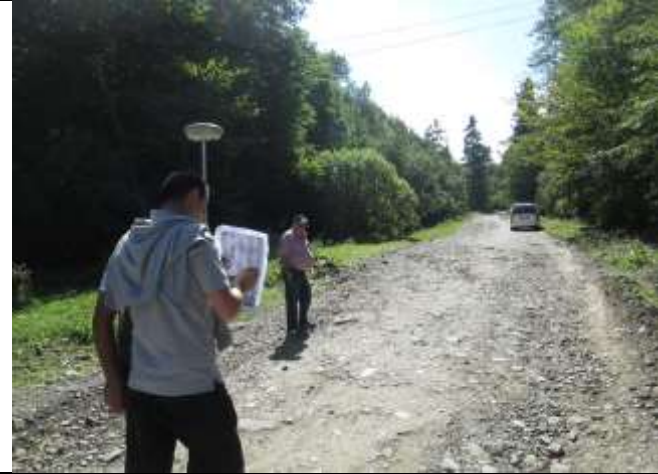


Ortophoto of Andeziti- Tsikhisjvari connecting road



Photomaterials





## Attachment II. Minutes of public consultation meeting

18 August 2017

Borjomi Municipality

### Minutes

#### Rehabilitation of Bakuriani-Andeziti-Tsikhisjvari connecting road

#### Public Consultation on the Draft Environmental and Social Management Plan

In order to discuss environmental documentation (Social and Environmental Management Plan) prepared for the sub-project- "*Rehabilitation of Bakuriani-Andeziti-Tsikhisjvari connecting road*", on August 18, a public consultation meeting was conducted in the administration building of Borjomi Municipality Government Representative in Bakuriani.

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

Those present at the meeting:

**Locals:** Zoia Tigishvili, Alex Mukhinashvili, Gela Bibiluradze, Tristan Mukhinashvili, Kakhaber Gurgeniidze, Giorgi Serofiani, Nikoloz Pavlovi, Zurab Bliadze, Tedore Ilievi, Khatuna Pavlova, Giorgi Ivanovi, Archil Khutsishvili, Tamaz Khutsishvili, Vasil Pavlovi.

**Borjomi Municipality Government Representative in Bakuriani:** Gocha Gobronidze

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

Niniko Isakadze- Environmental Safeguard Specialist

Nutsa Gumberidze- beneficiary relations Specialist

Niniko Isakadze, Environmental Safeguard Specialist, opened the meeting, she informed the attendees about the MDF, purpose of the meeting, main goals of the sub-project and the planned works envisaged under the SP. In the process of the meeting, she conducted presentation of the 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 minimize the potential negative impacts which

may arise during the SP implementation process. N. Isakadze 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. Isakadze 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 document 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. Isakadze 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>
When will the tender be announced?	In the nearest future tender will be announced, contractor will be mobilized, and construction works will be launched.
How long do the construction works last?	The construction will last for 7 months.

At the end of the meeting the audience expressed their positive attitude towards the project and the mitigation measures proposed in the environmental documentation

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

The minutes was prepared by Niniko Isakadze

August 18, 2017

List of attendees

რეგიონული განვითარების მესამე პროექტი  
 ბორჯომის მუნიციპალიტეტში ბაკურიანი-ანდეზიტი-ციხისჯვარის დამაკავშირებელი გზის  
 რეაბილიტაცია

ქვე-პროექტის გარემოზე ზემოქმედების მართვის გეგმის საჯარო განხილვა

18 ივლისი, 2017

შეხვედრაზე დამსწრეთა რეგისტრაციის ფურცელი

	სახელი, გვარი	ორგანიზაცია	საკონტაქტო ინფორმაცია	ხელმოწერა
1.	ვილსი ბიძიაშვილი	სადავო	595 70 90 22	
2.	გიორგი თევზაძე	სოფ. ანდეზიტი	599 26 90 95	
3.	გიორგი ბიძიაშვილი	სოფ. ანდეზიტი	599 25 99 49	
4.	გიორგი ბიძიაშვილი	სოფ. ანდეზიტი	599 10 60 32	



5.	ՋԵՆԵՐ ԳՂԿՅՆԻԺ	Լույ. ՏԳՂՅՈՒՄ	595 887552	Ն
6.	ԳՐԱԿՆԻ ԵՂՈՂՆԻ	Լույ. ՏԳՂՅՈՒՄ	595 9425 95	Ժ.Գ.ԿԵՂԿ
7.				ՅՈՒՅՆՆԵՐ
8.	ՅՏՂՈՒՄՆԵՐ ԲՆԱԿԱՆԻ	Ե. ՄԻՆԵՐՅԱՆ	599 507 502	ԳՂԿՅՆԻԺ
9.	ԵՐԱԿՆԻ ԶՅՈՒՆ	Ե. ՄԻՆԵՐՅԱՆ	599 48 89 74	ԶԵՆԻՆ
10.	ԱԳՂՅՈՒՄՆԵՐ	Ե. ՄԻՆԵՐՅԱՆ	599 56 12 50	ԳՂԿՅՆԻԺ
11.				

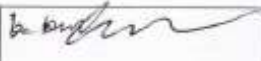



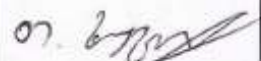



	Հնչքառ Նառայեմ	Ե. Երեմեյան	599 41 4849	
12.	Որոնի զոհող	Ե. Երեմեյան	599 20 2222	
13.	Քան Նառայ	Ե. Երեմեյան	599 988 808	
14.	Ս. Երեմեյան	Երեմեյան Երեմեյան	593 93 6464	
15.	Մ. Երեմեյան	Երեմեյան Երեմեյան	599 93 7380	
16.	Յան Նառայ	Երեմեյան	599 322 355	
17.				

Photo materials



**Attachment 3. Documentation obtained by the contractor "Sagzao Samsheneblo Sammartvelo #1"**

**Agreement on waste disposal**

<p style="text-align: center;"><b>ხელშეკრულება</b></p> <p style="text-align: center;">საშენი რეკონსტრუქციის სამუშაოები <span style="float: right;">16 მაისი 2018 წ.</span></p> <p>მშ. კლასი-2017 (ს/კ 40114816) წარმოადგენს მისი დარღვევის შეთანხმების საბაზისად, ვინაის მიზნად და მშ. „საგზაო ჯოხი“ (ს/კ 40030442) მოხდეს წარმოადგენს დარღვევის დანიშნულად, მუშის მიზნად დადეს ეს ხელშეკრულება შემდეგ:</p> <p style="text-align: center;"><b>1. ხელშეკრულების საგანი</b></p> <p>1.1. მშ. კლასი-2017 განთავსებს მის კუთვნილ ტერიტორიაზე (საშენის რაიონი, სოფ. რბილეთი, ს/კ 01.05.02.01) არასასაფრთხო სასაფრთხო-შენი, საგზაო მშ. „საგზაო ჯოხი“-ს მიერ საკუთარი ადგილობრივების საფუძვლიანი გზის სარემონტო-კეთი სამუშაოების დროს დაზიანებული გზის ნაწილის სრულ რეკონსტრუქციას.</p> <p style="text-align: center;"><b>2. მარცხის პასუხისმგებლობა</b></p> <p>2.1. მარცხის მარცხის წარმოშობის უპასუხებლობა, რაც არ არის მიწვეული ამ ხელშეკრულება, გადამდის მარცხის კომპეტენციის შესაბამისად.</p> <p style="text-align: center;"><b>3. ხელშეკრულების მოქმედების ვადა</b></p> <p>3.1. ხელშეკრულების მოქმედების ვადა იწყება 16.05.2018 - დან და მთავრდება 31.12.2018 - მდე.</p> <p style="text-align: center;"><b>4. დაცვის პირობების წესი</b></p> <p>4.1. ამ ხელშეკრულების შესრულება დროს წარმოშობის დაცვის და უპასუხებლობა გადამდის მარცხის მარცხის მოვალეობების გზით წინადადება შესრულება მარცხის მარცხის შესაბამისად.</p> <p style="text-align: center;"><b>5. დანართი დანართები</b></p> <p>5.1. ეს ხელშეკრულება შეიძლება გადამდის მარცხის უსაფრთხო მოვალეობის საფუძველზე, მუშის მარცხის შედეგების გასაგებად.</p> <p>5.2. ამ ხელშეკრულების შესრულება ეკლავება და დასაგებად მარცხის მოვალეობის შესაბამისად, თუ ის შესრულებულია წესიერად უსაფრთხო და ხელშეკრულება მარცხის მიერ, ამ ხელშეკრულების დანართი მის განუყოფელ-საქმის შეადგენს.</p>	<p>1.1. ეს ხელშეკრულება შეიძლება არ დაზიანდეს იმდენად, რამდენადაც დადეს მარცხის მარცხის ხელშეკრულების კომპეტენციის.</p> <p style="text-align: center;"><b>6. მარცხის პასუხისმგებლობის პასუხისმგებლობა და ხელშეკრულება</b></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b>სამუშაო</b></p> <p>მშ. კლასი-2017 ს/კ 40114816 დარღვევის შენი კომპეტენციის</p> </td> <td style="width: 50%; vertical-align: top;"> <p><b>მარცხი</b></p> <p>მშ. „საგზაო ჯოხი“ ს/კ 40030442 დარღვევის დასა რეკონსტრუქციის</p> </td> </tr> </table> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>	<p><b>სამუშაო</b></p> <p>მშ. კლასი-2017 ს/კ 40114816 დარღვევის შენი კომპეტენციის</p>	<p><b>მარცხი</b></p> <p>მშ. „საგზაო ჯოხი“ ს/კ 40030442 დარღვევის დასა რეკონსტრუქციის</p>
<p><b>სამუშაო</b></p> <p>მშ. კლასი-2017 ს/კ 40114816 დარღვევის შენი კომპეტენციის</p>	<p><b>მარცხი</b></p> <p>მშ. „საგზაო ჯოხი“ ს/კ 40030442 დარღვევის დასა რეკონსტრუქციის</p>		

Agreement on asbestos containing waste disposal

ՀԱՅԱՍՏԱՆԻ ԲԱՐՔ  
ԿՐԹԱԿԱՆ ԿՈՄԻՏԵ ԶԳՈՒՆ  
ՀԱՅԱՍՏԱՆԻ ԿՐԹԱԿԱՆ ԿՈՄԻՏԵ  
ՀԱՅԱՍՏԱՆԻ ԿՐԹԱԿԱՆ ԿՈՄԻՏԵ

Այս համաձայնագրի նպատակն է կարգավորել...

Մասնագրված է...  
Ստորագրող կողմերը...

Կարգավորվող...	Կաշի (Մետր)	Մնացորդ կաշի (Մետր)	Գն (Հազար ՀՀԴր)
Կաշի քանակությունը...	1,400	35	49.0

Ընդամենը: 49.0

Ստորագրող կողմերը...

Համաձայնագրի պայմանները...

Ստորագրող կողմերը...

Համաձայնագրի պայմանները...