

Rehabilitation of Access Road to Lopota Lake, Telavi Municipality

Sub-Project Environmental and Social Screening and Environmental Management Plan

**WORLD BANK FINANCED
REGIONAL DEVELOPMENT PROJECT
Public-Private Partnership (PPP)**

Sub-Project Description

The sub-project site, located in village Naphareuli, Telavi municipality, envisages rehabilitation of section of existing road with the total length of 2180 m, located nearby Lopota Lake. The subproject section runs through an unpopulated area over the plain relief. The existing road width varies within 6-7 m. The design section has no drainage system.

The main construction works include:

- Preparatory works;
- Rehabilitation of drainage system;
- Rehabilitation of road paving;
- Arrangement of road furniture, equipment, signs and marking.
- Rehabilitation of Sewage System (Installation of BIOTAL)

(A) IMPACT IDENTIFICATION

Does the subproject have a tangible impact on the environment?	The project has tangible positive social impact.
What are the significant beneficial and adverse environmental effects of the subproject?	<p>The subproject has a long-term positive impact on the environment through improving living and transportation conditions of the local population and guest of village Naphareuli. It will decrease existing negative impacts on community, such as dust, emissions, vibration and noise.</p> <p>The expected negative environmental and social 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>
Does the subproject have any significant potential impact on the local or affected communities?	<p>No new land take and resettlement are expected.</p> <p>The long-term positive social impact will be beneficial (improvement of local population living conditions and growth of tourist flow, Attraction of private sector investment in tourism infrastructure (hotels, bars, restaurants, shopping,</p>

	<p>entertainment, etc.).</p> <p>Employment of local citizens will increase:</p> <ul style="list-style-type: none"> • during project implementation works (temporary income generation); • after the project implementation for maintenance/repairs of the restored infrastructure (long term income -generation); • In tourism enterprises (hotels, bars, restaurants, shopping, entertainment, etc.); <p>Negative impacts are short term and limited to the construction site. They are related to the possible disturbance described above.</p>
<p>What impact has the subproject on the human health?</p>	<p>The long-term impact of the improved transportation conditions of the village Naphareuli will be beneficial for the residents and guests of village. Improved sanitary conditions of water supply at the will improve living and sanitary conditions in the twins' wine cellar;</p> <p>Minor negative impacts are related to dust, emissions, noise and vibration during construction period.</p>

(B) MITIGATION MEASURES

<p>What alternatives to the subproject design have been considered and what mitigation measures are proposed?</p>	<p>Given that the subproject envisages rehabilitation of the existing infrastructure, no alternatives have been considered.</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>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</p>

	Donor Organizations. Based on lessons learned from previous similar projects, design envisages not only rehabilitation of road pavement but also rehabilitation of storm water drainage network, sidewalks, curbs, pedestrian passes, lighting, road marking and other road furniture which increase traffic and pedestrians safety.
Have concerned communities been involved and have their interests and knowledge been adequately taken into consideration in subproject preparation?	N/A

(D) CATEGORIZATION AND CONCLUSION

Based on the screening outcomes,

Sub-project is classified as environmental Category

A

B

C

Conclusion of the environmental screening:

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

If accepted, and based on risk assessment, 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

Risk Assessment of Eligible Subprojects

Sensitive receptors of the Natural and Social Environment around a subproject site	Yes / No?	Significant potential impact / high risk (check)	Low potential impact / low risk (check)
Natural Habitats, fragile ecosystems	Yes	Forests; wetlands; nesting/breeding areas, rest areas for migratory birds, wildlife corridors connecting protected areas, steep slopes, alpine and sub-alpine zone, green-fields	Strongly transformed urban or rural landscapes, industrial sites, brown-fields
			✓
Surface water bodies	No	Major rivers and river floodplains, trans-boundary water bodies and their tributaries, lakes; smaller water bodies which have high value for local communities or biodiversity	Small rivers and streams, artificial reservoirs and ponds which are not indicated as having high value for local communities or biodiversity
		N/A	N/A
Groundwater sources	No	Deposits of the regional/national importance, mineral and/or thermal water sources, high groundwater table	Regular groundwater table
		N/A	N/A
Valuable landscapes	No	Protected landscapes, landscapes of outstanding aesthetic value, Green-fields, recreational areas	Strongly transformed urban or rural landscapes, industrial sites, brown-fields
		N/A	N/A
Physical cultural resources	No	Individual or general protection zones of cultural monuments, historical or traditional sites (religious, burial, ritual)	No cultural resources
		N/A	N/A

Human settlements	No	More than 20 affected households; physical relocation needed	Less than 20 affected households, no physical relocation needed, no land take required
		N/A	N/A
Geohazards: severe erosion, landslides, flooding	No	Recorded	Not recorded
		N/A	N/A
<p>If a subproject is expected to carry high risk based on any of the above criteria of assessment, it is considered a high risk subproject. An environmental review has to be carried out and an environmental management plan developed;</p> <p>If a subproject is not expected to carry high risk based on any of the above criteria of assessment, it is considered a low risk subproject and an Environmental Management Checklist for Small Construction and Rehabilitation Activities has to be completed.</p>			

Social Screening of Subprojects

Social safeguards screening information		Yes	No
1	Is the information related to the affiliation and ownership status of the subproject site available and verifiable? (The screening cannot be completed until this is available)	✓	
2	Will the project reduce other people's access to their economic resources, such as land, pasture, water, public services or other resources that they depend on?		✓
3	Will the project result in resettlement of individuals or families or require the acquisition of land (public or private, temporarily or permanently) for its development?		✓
4	Will the project result in the temporary or permanent loss of crops, fruit trees and Household infra-structure (such as granaries, outside toilets and kitchens, etc)?		✓
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 Resettlement Policy Framework			
Cultural resources safeguard screening information		Yes	No
5	Will the project require excavation near any historical, archaeological or cultural heritage site?		✓
If answer to question 5 is "Yes", then OP/BP 4.11 Physical Cultural Resources is applicable and possible chance finds must be handled in accordance with OP/BP and relevant procedures provided in the Environmental Management Framework .			

PART B: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMINISTRATIVE				
Country	Georgia			
Subproject title	Rehabilitation of Access Road for Lopota Lake			
Scope of subproject and activity	<p>The project site is located in Napareuli Village of Telavi Municipality. The design section with the total length of 2180 m is located nearby Lopota Lake. The design section runs through an unpopulated area over the plain relief. The design section is almost a ground road, and in some cases, it is presented with the gravel or with the old exhausted asphalt-concrete portion. The existing road width varies within 6-7 m.</p> <p>The road section has no drainage system.</p> <p>Some technical parameters of the existing road Carriageway width is 6-7 m.</p> <p>The main construction works include:</p> <ul style="list-style-type: none"> • Preparatory works • Rehabilitation of drainage; • Rehabilitation of road paving; • Arrangement of road furniture, equipment, signs and marking 			
Institutional arrangements (Name and contacts)	<p>WB (Project Team Leader) Ahmed Eiweida</p>	<p>Project Management MDF</p>	<p>Safeguard Supervision MDF Nino Patarishvili</p>	<p>Local Counterpart and/or Recipient Telavi Municipality</p>
Implementation arrangements (Name and contacts)	<p>Safeguard Supervision WB Darejan Kapanadze</p>	<p>Local Counterpart Supervision Technical Supervisor Joint Venture of STEGET srl (Italy), (Leading Partner) & ESTIA srl (Italy), (Partner) & SWS Engineering S.P.A. (Italy), (Sub-consultant) & GDP Consultants (Italy), (Sub-consultant) & Studio SANI (Italy), (Sub-consultant)</p>	<p>Local Inspectorate Supervision Temur Gogiashvili Head of infrastructure and architecture service under Telalavi municipality Gamageoba</p>	<p>Contractor Serpentine Ltd.</p>
SITE DESCRIPTION				

Name of site	Village Naphareuli
Describe site location	The subproject site is located in Eastern Georgia, Kakheti Region, in Telavi municipality. Access to the construction sites from Tbilisi is possible through Tbilisi- Telavi motorway and distance from Tbilisi is approximately 150 km.
Who owns the land?	State owned land
Description of geographic, physical, biological, geological, hydrographic and socio-economic context	<p>Village Napareuli is located in Telavi municipality of Kakheti Region, Eastern Georgia.</p> <p>It is the administrative center of Kakheti region and Telavi municipality. It is located in the bottom of the north-east side of Gombori Mountain, on Alazani valley, 550-800 m. above the sea level.</p> <p>There are many rivers on the Telavi municipality area. The main river is the river Alazani. Its left tributaries are Intsoba, Chelti, Duruji, Bursa, Shorokhevi and other rivers.</p> <p>One of the main resources of Telavi municipality is the ecologically pure potable water.</p> <p>In the bed of river Duruji there are unlimited resources of inactive materials that are characterized by the high degree of stickiness, from which it is possible to produce the unique construction materials and household equipment.</p>
Locations and distance for material sourcing, especially aggregates, water, stones?	<p>Average distance of transportation of local construction materials will be around 10 km.</p> <p>At the construction site water for construction activities will be provided through water tankers and potable water will be provided with plastic bottles.</p> <p>Some of excavated material will be backfilled and some additional material will be delivered from the licensed borrowing sites – estimated distance 5-10 km.</p> <p>Construction waste will be disposed at Telavi municipal landfill.</p>
LEGISLATION	
Identify national & local legislation & permits that apply to project activity	<p>The subproject has been classified as low risk Category B according to the WB policies and the EMF. Telavi municipal authority approved the subproject.</p> <p>Georgian legislation does not require any type of environmental review, approval, or permitting for the subproject. Though according to the national regulatory system,</p> <ul style="list-style-type: none"> (i) construction materials must be obtained from licensed providers, (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, (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. (iv) disposal of the construction waste into a landfill or permanent placement of access inert material generated in the course of earth works in a selected location must be approved by local (municipal) governing bodies in written. <p>The construction company LTD “Serpantini” has obtained the following:</p>

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| | <ol style="list-style-type: none">1. Permit for operating of asphalt plant;2. Copy of the license for extraction of inert Materials;3. Letter from Telavi Municipality about disposal of construction waste. |
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GOST and SNIP norms must be adhered.

Attachment	
Attachment 1. Letter from Telavi Municipality about disposal of construction waste Attachment 2. Copy of the license for extraction of inert Materials Attachment 3. Permit for operating of asphalt plant	

PART C: SAFEGUARDS INFORMATION

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

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
General Conditions	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.
General Rehabilitation and /or Construction Activities	Air Quality	(a) During interior demolition debris-chutes shall be used above the first floor (b) Demolition debris shall be kept in controlled area and sprayed with water mist to reduce debris dust (c) During pneumatic drilling/wall destruction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site (d) The surrounding environment (side walks, roads) shall be kept free of debris to minimize dust (e) There will be no open burning of construction / waste material at the site (f) There will be no excessive idling of construction vehicles at sites
	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
	Water Quality	(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.
	Waste management	(a) Waste collection and disposal pathways and sites will be identified for all major waste types expected from 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 the contractor will reuse and recycle appropriate and viable materials (except asbestos)
Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	(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 <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 ▪ Active traffic management by trained and visible staff at the site, if required for safe and convenient passage for the public. ▪ Ensuring safe and continuous access to office facilities, shops and residences during renovation activities, if the buildings stay open for the public.

PART E: Environmental 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?)
CONSTRUCTION PHASE						
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	Technical condition of vehicles and machinery Confinement and protection of truck loads with lining Respect of the established hours and routes of transportation	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
Earth works	Temporary storage of excavated material in the pre-defined and agreed upon locations; Backfilling of the excavated material and/or its disposal to the formally designated locations; 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.	Construction site	Inspection	In the course of earth works	Prevent pollution of the construction site and its surroundings with construction waste; Prevent damage and loss of physical cultural resources	MDF, Construction supervisor

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?)
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> <p>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.</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 river banks, water pollution with suspended particles and disruption of aquatic life.</p>	MDF, Construction supervisor
Generation of construction waste	<p>Temporary storage of construction waste in especially allocated areas;</p> <p>Timely disposal of waste to the formally designated locations</p>	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	<p>Installation of traffic limitation/diversion signage;</p> <p>Storage of construction materials and temporary placement of construction waste in a way preventing congestion of access roads</p>	At and around the construction site	Inspection	In the course of construction works	<p>Prevent traffic accidents;</p> <p>Limit nuisance to local residents</p>	MDF, Construction supervisor

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?)
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
OPERATION PHASE						
Maintenance of rehabilitated road	Installation of relevant 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	Telavi municipality
Disruption of traffic and pedestrian access during maintenance works	Scheduling of maintenance works in streets at less busy hours and proper signage of maintenance area	rehabilitated road and infrastructure	Inspection	Throughout operation of the site	Minimize nuisance to local residents	Telavi municipality

Attachment 1

Letter from Telavi Municipality about disposal of construction waste

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თელავის
მუნიციპალიტეტის
გამგებობა



GEORGIA
TELAVI MUNICIPALITY
ADMINISTRATION

№ 294

„12“ „04“ 2013 წ.

შ.პ.ს სსს კომპანია „სერპანტინი“-ს დირექტორს
ბატონ ზ. ფეიქრიშვილს

თქვენი მ/წ 28 მარტის N28/03-1 მომართვის პასუხად უფლება გეძლევათ
სამშენებლო ნარჩენები და ნაგავი განათავსოდ არსებულ ქ. თელავის ნაგავსაყრელზე მდ.
„თურდო“-ს აღმოსავლეთით სოფ. ვარდისუბნის ტერიტორიაზე.

პატივისცემით,

გამგებლის მოვალეობის

შემსრულებელი  ზურაბ ყურაშვილი

