

# Arrangement of the Retaining wall and Rehabilitation of the Access Road to Gelati Monastery

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

WORLD BANK FINANCED
SECOND REGIONAL DEVELOPMENT PROJECT (RDP II)

# **Environmental Screening**

This sub-project (SP) site is located adjacent to Gelati Monastery, on the mountain plain on the outskirts of the village Gelati, approximately 12 km from Kutaisi, in western Georgia, Imereti Region.

In accordance with the design, agreed with the National Agency of Cultural Heritage Preservation of Georgia (NACHP), SP envisages arrangement of retaining wall (length – 103,4 m, width – 0.40-0.80 cm, height – 1.5 - 3 m) and rehabilitation of the access road (length -100m) to Gelati Monastery (see attachment 1). The road and territory intended for the retaining wall represent the State property. User rights for the land are with the NACHP. Currently, no one is using the land and there are no structure and assets on it. National Agency for Cultural Heritage Preservation of Georgia will be responsible for maintenance of the arranged facilities.

SP envisages implementation of the following works:

- Manual excavation of earth under the supervision of archeologists;
- Drilling wells for reinforced concrete piles;
- Arrangement of reinforced concrete wall with drainage pipes;
- Arrangement of a tunnel behind the wall, for maintenance of David's Spring (see attachment 1);
- Arrangement of asphalt layer for access road to the monastery;
- Landscaping surrounding area: arrangement of handrails, outdoor lightning (26 pics), greening the wall with ivy (to minimize negative aesthetic impact) and arrangement of a sidewalk.

Under the Second Regional Development Project, MDF implemented several SPs in Gelati Monastery (integrated revitalization of cultural heritage site in Gelati, restoration and conservation measures for Gelati Monastery Cultural Heritage Site, including the construction of visitor center for the mentioned CH monument). A wall had been provided to retain the access road to the monastery, however, in 2016, it was ruined by a landslide. A temporary retention wall was constructed as an emergency response, without having a detailed design prepared, to secure the site and prevent its further deterioration.

Present SP aims to construct a new retention wall. Although no geological activity is observed at the site according to the supervision company "Eptisa", arrangement of a carefully designed retention wall is required to secure the access road to Gelati Monastery in a long term.

Failure of the previously existing wall and consequently undertaken earth works revealed archeological artifacts: remains of clay water pipes, sewage wells and fragments of a pavement. In accordance with the letter from NACHP, the planned works do not have any impact on the archeological site. Moreover, the retaining wall is intended to avoid further damage of the site. As there is a chance of new archeological findings, the works will be implemented under the

supervision of the NACHP archeologist - Roland Isakadze and, for this purpose, excavation works will be implemented manually. As the SP is to be implemented on a CH site, there is higher than average likelihood of encountering chance-finds during excavation works.

In case of chance findings during the earthworks, the contractor will immediately stop any kind of physical work at the area and inform MDF. MDF will in turn inform the NACHP that takes the responsibility for future actions. Work resuming may be provided only based on the written permission from the NACHP.

## (A) IMPACT IDENTIFICATION

Has sub-project a tangible impact on the	The SP is expected to have a modest short-term negative
environment?	environmental impact while its long-term impact is
	expected to be positive due to the improvement
	transportation conditions towards Gelati monastery, and
	reduction of negative environmental impacts such as dust,
	emissions, vibration and noise from cars' movement.
What are the significant beneficial and adverse environmental effects of subproject?	The SP is expected to have positive long-term environmental and social impacts from improving living and transportation conditions of visitors and priests. It will decrease existing negative impacts on community and neighboring environment.
	The main environmental impacts will be related to the construction phase, including on-site management and final disposal of the construction waste.
	The SP will be implemented in the urban area, with strongly
	transformed environment through the past anthropogenic
	impact. Therefore, the impacts like noise, emissions,
	generation of construction waste, temporary disturbance of
	traffic and road access related to the activities during
	construction phase are transitory and insignificant will be
	easily mitigated through implementation of relevant
	mitigation measures included in the EMP.
May the sub-project have any	The long-term social impact will be beneficial
significant impact on the local	(improvement of conditions, ensuring safety and
communities and other affected	increasing tourist flow). SP implementation will benefit the whole Municipality, all social groups of neighboring
people?	municipalities and all the interested people willing to visit
	Gelati monastery. SP will also lead to the reduction of
	fuel consumption and minimize expenses. The project will
	positively affect health status of the population,
	(minimization of dust, emissions, vibration and noise), as conveyance will become safe, and car maintenance cost

will decrease as well. It will also promote tourism and small business development and create temporary employment opportunities and revenues.

No land take or other type of resettlement is expected. The SP is expected to have a modest short-term negative environmental impact while its long-term impact is expected to be positive, related the improvement transportation conditions and reduction of negative environmental impacts such as dust, emissions, vibration and noise from cars' movement, ensuring safety.

Negative impacts, related to the possible disturbance described above, are short term and limited to the construction site. Installation of relevant signage for traffic safety will be beneficial for locals as well as other users of the road.

#### (B) MITIGATION MEASURES

Were there any alternatives to the sub-project design considered?	Consideration of alternatives was irrelevant for this SP.
What types of mitigation measures are proposed?	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.  The mentioned natural process revealed archeological artifacts: remains of clay water pipes, sewage wells, limestones and pavement. In accordance with the letter from NACHP, the planned works do not have any impact on the archeological sites, moreover retaining wall is intended to avoid further damage of the site. As there is a chance of new archeological findings, the works will be implemented under the supervision of the NACHP archeologist- Roland Isakadze and for this purpose, excavation works will be implemented manually.
	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 etc.), ban dumping of any waste into the river during works on the bridges, avoid disturbance of population (noise, dust, emissions)

	through proper work/supplies scheduling, traffic management, good maintenance of the construction machinery, etc.
	As the SP is to be implemented on a CH site, there is higher than average likelihood of encountering chance-finds during excavation works.  In case of chance findings during the earthworks, the contractor should immediately stop any kind of physical work at the area and should inform MDF. MDF will in turn inform the NACHP that takes the responsibility for future actions. Work resuming may be provided only based on the written permission from the NACHP.  Contractor will be responsible for demarcation and fencing of the archeological site and strictly following the instructions and directions of the archeologist, who will daily supervise the civil works.
What lessons from the previous similar projects have been	MDF has wide experience of implementation of mediumand large-scale road and streets rehabilitation,
incorporated into the sub-project	arrangement of retaining wall SPs financed by various
design?	donor organizations. Based on lessons learned from
	previous similar projects, design envisages not only
	rehabilitation of road pavement, arrangement of
	outdoor lightning and in order to minimize aesthetic impact, plant vegetation.
Have concerned communities been	impact, piant vegetation.
involved and have their interests and knowledge been adequately taken into consideration in subproject preparation?	On March 4, 2015 in the public school building of Kursebi Community (Tkibuli Municipality), a public consultation meeting was held on the draft Environmental and Social Management Plan (ESMP) prepared for the SP for Integrated Revitalization of Cultural Heritage Site of Gelati Monastery, which included the construction of the visitor center and a temporary retention wall.
	Present draft ESMP prepared for the SP was made available for any stakeholder and disclosed on the web site of MDF on the 22th of July, 2019. Delivery period of any comments and remarks to the MDF is determined two weeks since the disclosure of the document.

# (C) RANKING

The project has been classified as environmental Category B according to the World Bank safeguards (OP 4.01) and requires Completion of the Environmental Management Checklist for Small Construction and Rehabilitation Activities.

# **Social Screening**

	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)	<	
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>√</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>√</b>
4	Will the sub-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>√</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 **Resettlement Policy Framework** 

# **Environmental Management Plan**

## PART A: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMII	NISTRATIVE
Country	Georgia
Project title	Second Regional Development Project
Sub-Project title	Arrangement of the Retaining wall and Rehabilitation of the Access Road to Gelati Monastery
Scope of site-specific activity	This sub-project (SP) site is located adjacent to Gelati Monastery, on the mountain plain on the outskirts of the village Gelati, approximately 12 km from Kutaisi, in western Georgia, Imereti Region.  In accordance with the design, agreed with the National Agency of Cultural Heritage Preservation of Georgia (NACHP), SP envisages arrangement of retaining wall (length – 103,4 m, width – 0.40-0.80 cm, height – 1.5 - 3 m) and rehabilitation of the access road (length -100m) to Gelati monastery (see annex 1). The road and territory intended for the retaining wall represent the State property. User rights for the land are with the NACHP. Currently, no one is using the land and there are no structure and assets on it. NACHP will be responsible for maintenance of the arranged facilities.  SP envisages implementation of the following works:  - Manual excavation of earth under the supervision of archeologists; - Drilling wells for reinforced concrete piles; - Arrangement of reinforced concrete wall with drainage pipes; - Arrangement of a tunnel behind the wall, for maintenance of David's Spring (see attachment 1); - Arrangement of asphalt layer for access road to the monastery; - Landscaping surrounding area: arrangement of handrails, outdoor lightning (26 pics), greening the wall with ivy (to minimize negative aesthetic impact) and arrangement of a sidewalk.
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visitor center for the mentioned CH monument). A wall had been provided to retain the access road to the monastery, however, in 2016, it was ruined by a landslide. A temporary retention wall was constructed as an emergency response, without having a detailed design prepared, to secure the site and prevent its further deterioration.

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Institutional arrangements	Task Team Leader:		Safeguards Specialists:	
(WB)	Joana Mclean Mas	sic	Darejan Kapanadze, Sophia	
				Georgieva
Implementation	Implementing entity:	Works	supervisor:	Works contractor:
arrangements (Borrower)	Municipal	Con	sulting	(tbd)
	Development Fund of	compa	any Eptisa	
	Georgia	Serv	icios de	
		Ingen	iieria S.L.	
		S	pain	
SITE DESCRIPTION				
Name of institution whose	National Agency of Cultural Heritage Preservation of Georgia			
premises are to be				
rehabilitated				

Address and site location	Georgia 0105, Tbilisi, Krtsanisi street #58
of institution whose	
premises are to be	Phone: 995 591006962; +995591614007
rehabilitated	
Who owns the land?	The road and territory intended for the retaining wall represent the
Who uses the land	State property. User rights for the land are with the NACHP. Currently,
(formal/informal)?	no one is using the land and there are no structure and assets on it
Description of physical and	Gelati monastery is located in the Tkibuli municipality, in Kvemo
natural environment	Imereti. North-eastern part of the Municipality borders on Ambrolauri
around the site	Municipality, Southern part – on Terjola Municipality, Eastern part –
	on Chiatura Municipality, Western part – on Tskaltubo Municipality.
	Total area of the Municipality is 470 km <sup>2</sup> . It is located at 264 km
	distance from Tbilisi. Distance from Tkibuli to Kutaisi is 42 km. Tkibuli
	municipality is located at 600-800 m altitude above sea level. Relief is
	hilly. Municipality is characterized with quite humid sea climate with
	mild, comparatively warm winter and hot summer. Average
	temperature in January is 5.30C and in August - 23.30C. The total
	annual average precipitations is within 1380 mm (based on the nearest
	meteorological station (Kutaisi airport).
	In the district area there is diversity of soils: on lowlands – there is
	occurrence of subtropical podsolic soils of various types in vast areas
	(in particular – mighty and lightly podsolic, as well as crushed rock and
	podsolic-combined soils). Along Rioni River there is a non-carbonate
	alluvial soil, subtropical podsolic soil is prevailing in large area in the
	elevated part of the lowland; in the foothills – there are yellow soils; in
	the mountainous part, northwards, there is prevalence of humus-
	carbonate of average and minor thickness as well as forest soils of
	small thickness. The district area is a mixture of the types of humid sub-
	tropic plains and foothills as well as mountain forest landscape types
	of humid climate. Area around the SP site is covered by mixed
	broadleaf forest. The forest consists of: hornbeam, beech, oak,
	hawthorn, in certain sections: beech, lime-tree, elms, chestnut, box-
	tree, cherry-laurel. Chestnut and box tree are included in the Red List
	of Georgia (2006). There are four walnut trees in the vicinity of the
	Monastery fence as well. Areas without forests throughout the whole
	district are occupied with the meadows that are used for mowing-
	pasturing.
	Village Gelati, which is located in the vicinity of Gelati Monastery,
	belongs to Kursebi Community. The village is located in the Okriba
	depression, on the left riverside of the river Tskaltsitela, at 400 m
	altitude above sea level. As per the year 2012 census, there are some
	861 inhabitants living in the village. There is a dispensary and public
	school in the village, as well as the railway station of Rioni- Tkibuli line.
	Gelati Monastery is the adornment of Tkibuli Municipality, which is
	included in the UNESCO LIST OF WORLD CULTURAL HERITAGE. There is
	a Motsameta Monastery complex nearby. There are also a Mukhura

Waterfall and Tsutskvati Cave Natural Monuments located in the Municipality area. The site is connected to the Kutaisi by the asphalted road. The site is acting Monastery open for visitors. Gelati Monastery is widely visited by local and international tourists. The ensemble of Gelati Monastery was established by King David the Builder in 1106, with launching of the construction of the Main Church dedicated to the Nativity of the Virgin. The site consists of a group of well-preserved historical monuments dating from the early 12th and 13th centuries. These are three churches: Church of the Nativity of the Virgin, Church of St. George, and Church of St. Nicholas, as well as a bell tower and the Academy. The site is surrounded by a low stone wall with two porches, one in the east that is the current entrance, and another in the south that used to be the original main entrance.

Locations and distance for material sourcing, especially aggregates, water, stones?

Water will be available at the construction site from the Monastery. The nearest landfill is located in Kutaisi, 14 km distance from the SP site.

#### **LEGISLATION**

National & local legislation & permits that apply to project activity The SP has been classified as low risk Category B, according to the WB policies and the ESMF.

The SP proposal has been officially presented to the MDF by local municipality for financing and represents the need and priority of the Municipal Government, according to common demands.

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Georgian legislation does not require any type of environmental review, approval, or permitting for the SP. Though according to the national regulatory system:

- 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 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.
- 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;
- 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.

Copies of extraction licenses, as well as agreement for the supply of natural construction materials and concrete mix from licensed suppliers and agreements on waste disposal shall be submitted to the MDF and will be attached to this EMP.

GOST and SNIP norms must be adhered.

#### **GRIEVANCE REDRESS MECHANISM**

Appropriate grievance redress mechanism was established to solve grievances of Project-Affected People, as required. NACHP has assigned a responsible person –Roland Isakadze, the head of historical, architectural museum reserve of NACHP, to receive, review and react to the APs grievances (Tel: 577 278 017). A contact person from the MDF is Nutsa Gumberidze (Tel: +995 598 88 20 19, feedback@mdf.org.ge, 150 Davit Aghmashenebeli ave., 3rd floor, 0112 Tbilisi, Georgia.)

If the grievance will not be unsolved at the local level, it will be lodged to the MDF. As for grievance monitoring MDF registers all received compliances, comments and how the compliance was addressed.

#### **PUBLIC CONSULTATION**

When / where the public consultation process will take /took place

On March 4, 2015 in the public school building of Kursebi Community (Tkibuli Municipality), a public consultation meeting was held on the draft Environmental and Social Management Plan (ESMP) prepared for the SP for Integrated Revitalization of Cultural Heritage Site of Gelati Monastery, which included the construction of the visitor center and a temporary retention wall.

Present draft ESMP prepared for the SP was made available for any stakeholder and disclosed on the web site of MDF on the 22th of July, 2019. Delivery period of any comments and remarks to the MDF is determined two weeks since the disclosure of the document.

### **ATTACHMENTS**

Attachment 1: Site plan, photos

Attachment 2: Letter from NACHP on archaeological supervision of works

Attachment 3: Cadastral documentation on the land plot Agreements, permits, licenses (to be provided as required)

ENVIRONMENTAL /SOCIAL SCREENING				
	Activity/Issue	Status	Triggered Actions	
	1. Rehabilitation	Yes [] No	See Section A below	
	2. New construction	[] Yes No	See Section A below	
\A/:   + :+ -	3. Individual wastewater treatment system	[] Yes No	See Section <b>B</b> below	
Will the site activity	4. Historic building(s) and districts	[] Yes No	See Section <b>C</b> below	
include/involve	5. Acquisition of land <sup>1</sup>	[] Yes No	See Section <b>D</b> below	
any of the following?	6. Hazardous or toxic materials	[] Yes No	See Section <b>E</b> below	
ronowing.	7. Impacts on forests and/or protected areas	[] Yes No	See Section <b>F</b> below	
	8. Handling / management of medical waste	[] Yes No	See Section <b>G</b> below	
	9. Traffic and pedestrian safety	Yes [] No	See Section <b>H</b> below	
	10. Social risk management	[]Yes No	See Section I below	

<sup>&</sup>lt;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.

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
<b>0</b> . General Conditions	Notification and Worker Safety	<ul> <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>
A. General Rehabilitation and /or Construction Activities	Air Quality	<ul> <li>(a) Demolition debris shall be kept in controlled area and sprayed with water mist to reduce debris dust;</li> <li>(b) During pneumatic drilling/wall destruction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site</li> <li>(c) The surrounding environment (sidewalks, roads) shall be kept free of debris to minimize dust</li> <li>(d) There will be no open burning of construction / waste material at the site</li> <li>(e) There will be no excessive idling of construction vehicles at sites</li> <li>(f) Truck loads should be confinement and protected with lining.</li> </ul>
	Noise	<ul> <li>(a) Limit activities to daylight working hours;</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> <li>(c) The machinery should move only along the preliminarily agreed route;</li> <li>(d) The maximum allowed speed should be restricted;</li> <li>(e) Proper technical control and maintenance practices of the machinery should be applied;</li> <li>(f) No-load operations of the vehicles and heavy machinery is not allowed. Proper mufflers will be used on machinery.</li> </ul>

	١.,	
Water Quality	(a)	Contractor will be required to organize and cover material storage areas and to isolate wash down
		areas from watercourses by selecting areas that are not free draining into any watercourse. The
		material storage sites should be protected from washing out during heavy rain falls and flooding
		through covering by impermeable materials.
	(b)	Contractor will plan all excavations, topsoil and subsoil storage so as to reduce to a minimum any
		runoff.
	(c)	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.
	(d)	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 minimized. Daily plant 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.
	(e)	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.
	(f)	Wet cement and/or concrete will not be allowed to enter any watercourse, pond or ditch.
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 on the agreed location.
	(d)	The records of waste disposal will be maintained as proof for proper management as designed.
	(e)	Burning of waste on the SP site is forbidden.
	(f)	Whenever feasible the contractor will reuse and recycle appropriate and viable materials (except
		asbestos)
Material supply	a)	Use existing plants, quarries or borrow pits that have appropriate official approval or valid operating
		license.
	b)	Obtain licenses for any new quarries and/or borrowing areas if their operation is required;
	c)	Reinstate used sections of quarries and/or borrowing areas as extraction proceeds on or properly
		close quarries if extraction completed and license expired;
	d)	Obtain wood materials only from licensed suppliers.
	e)	Contractor will be required to submit to the MDF copies of the licenses, permits, written agreements,
		certificates, etc. to prove that all materials are obtained from licensed providers.
	f)	Haul materials in of peak traffic hours;
	g)	Place speed regulating, diverting, and warning signs for traffic as appropriate.
•		

	Farthworks	a) Tongoil should be stripped before starting of earthworks:
	Earthworks	<ul> <li>a) Topsoil should be stripped before starting of earthworks;</li> <li>b) Proper topsoil storage practice should be applied to ensure to maintain physio-chemical and biological activity of the soil; Temporary protective silt fencing should be erected to avoid erosion (wash down);</li> <li>c) Stored topsoil should be used for reinstatement and landscaping.</li> <li>d) Topsoil from the sites, which will not be reinstated to the initial conditions will be distributed carefully on the surrounding area.</li> <li>e) Topsoil will be reinstated separately from subsoil, with care taken to avoid mixing of the materials. The topsoil reinstatement will be sufficient to restore the fertile depth to the initial conditions as judged by the topsoil strip during visual observation and comparison of the reinstated site and adjacent land. When replacing the topsoil Contractor will program the works such that the areas furthest away from the stockpiles are reinstated first with reinstatement getting progressively closer to the stockpiles, thus reducing the number of vehicle movements over the reinstated topsoil. The</li> </ul>
		reinstated topsoil will then be harrowed, where practical, to protect the stability and promote vegetative growth.  f) As the SP is to be implemented on a CH site, there is higher than average likelihood of encountering chance-finds during excavation works. In case of chance findings during the earthworks, the contractor should immediately stop any kind of physical work at the area and should inform MDF. MDF will in turn inform the NACHP that takes the responsibility for future actions. Work resuming may be provided only based on the written permission from the NACHP.  g) Contractor is responsible for demarcation and fencing of the archeological site, disposing the appropriate signage and strictly following the instructions and directions of the archeologist, who will daily supervise the civil works.
H. Traffic and	Direct or indirect	(a) In compliance with national regulations the contractor will insure that the construction site is properly
Pedestrian Safety	hazards to public traffic and pedestrians by construction activities	<ul> <li>secured, and construction related traffic regulated. This includes but is not limited to:</li> <li>Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards</li> <li>Construction site should be fenced and properly secured to prevent unauthorized access (especially of children);</li> <li>Appropriate lighting and well-defined safety signs should be provided;</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> </ul>
<ul> <li>I. Social Risk</li> <li>Management</li> </ul>	<ul><li>Public relationship management</li></ul>	<ul> <li>Assign local liaison person who is in charge of communication with and receiving requests/ complaints from local population.</li> <li>Consulted local communities to identify and pro-proactively manage potential conflicts between an external workforce and local people.</li> <li>Rise local community awareness about sexually disease risks associated with the presence of an external workforce and include local communities in awareness activities.</li> </ul>

	<ul> <li>Inform population about construction and work schedules, interruption of the services, traffic detour routes and provisional bus routes, blasting and demolition, as appropriate.</li> <li>Limit construction activities at night. When necessary, carefully schedule night-time works and inform affected community so they can take necessary measures.</li> <li>At least five days in advance of any service interruption (including water, electricity, telephone, bus routes), advise affected community through postings at the project site, at bus stops, and in affected homes/businesses.</li> </ul>
■ Labor management	<ul> <li>To the extent possible, locate work camps away from local communities.</li> <li>Undertake sitting and operation of worker camps in consultation with neighboring communities.</li> <li>Recruit unskilled or semi-skilled workers from local communities to the extent possible. Where and when feasible, provide worker skills training to enhance participation of local people.</li> <li>Provide adequate lavatory facilities (toilets and washing areas) in the work site with adequate supplies of hot and cold running water, soap, and hand drying devices. Establish temporary septic tanks for any residential labor camp and without causing pollution of nearby watercourses.</li> <li>Raise awareness of workers on overall relationship management with local population, establish the code of conduct in line with international practice and strictly enforce them, including the dismissal of workers and financial penalties of adequate scale.</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?)	
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	Construction site	Inspection	Unannounced inspections during work hours and beyond	Limit pollution of soil and air from emissions; Limit nuisance to local communities	MDF, Construction supervisor, Traffic Police	
Earthworks	hours and routes of transportation				from noise and vibration;  Minimize traffic disruption.		

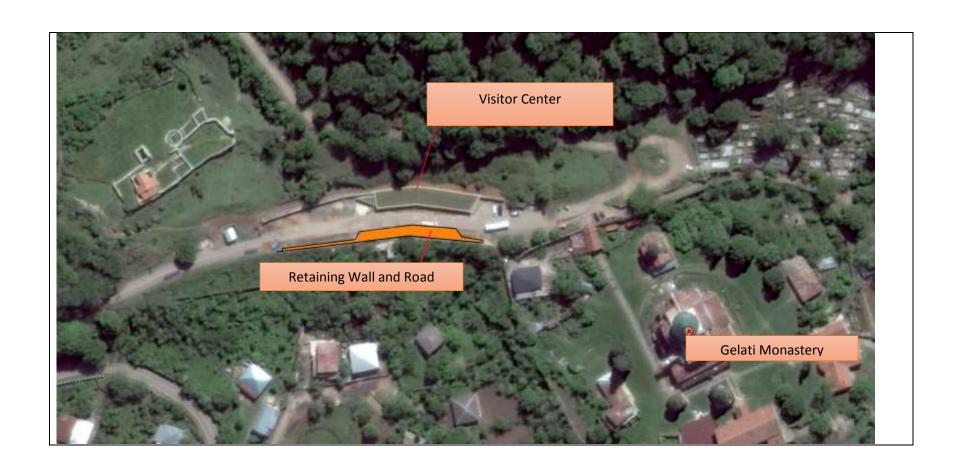
	Temporary storage of excavated material in the pre-defined and agreed upon locations;  Backfilling of the excavated material and/or its disposal to the formally designated locations;  In case of chance finds immediate suspension of works, notification of the NACHP, and resumption of works exclusively upon formal consent of the Agency.  No underground utilities are effected/damaged Topsoil is striped before starting of the earthworks;	Construction site	Inspection	In the course of earth works  Construction period: starting from topsoil stripping and ending with reinstatement	Prevent pollution of the construction site and its surroundings with construction waste;  Prevent damage and loss of physical cultural resources;  Prevent topsoil losses.	MDF, Construction supervisor
Sourcing of natural construction 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

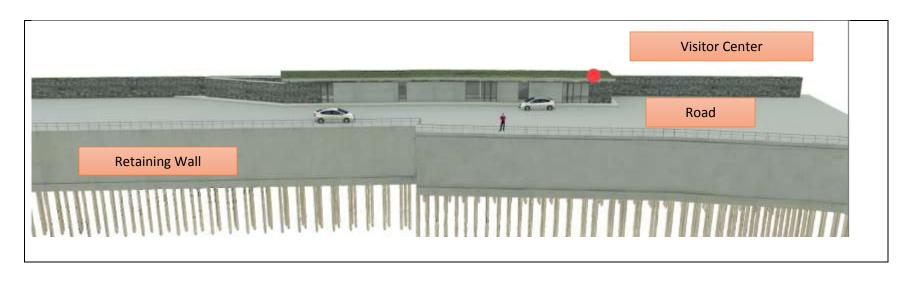
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Generation of construction waste	Excavation of river gravel and sand from outside of the water stream, arrangement of protective barriers of gravel between excavation area and the water stream, and no entry of machinery into the water stream.  Temporary storage of construction waste in especially allocated areas;  Timely disposal of waste to	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 Tkibuli Municipality
	the formally designated locations					
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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
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
Information sharing and Grievance redress	Local population (especially owners of land adjacent to construction site) are informed	Construction site and/or nearby	In person, by mail, phone or	Prior to beginning of construction	Minimize nuisance to local population, give opportunity	Contractor (monitored by MDF)

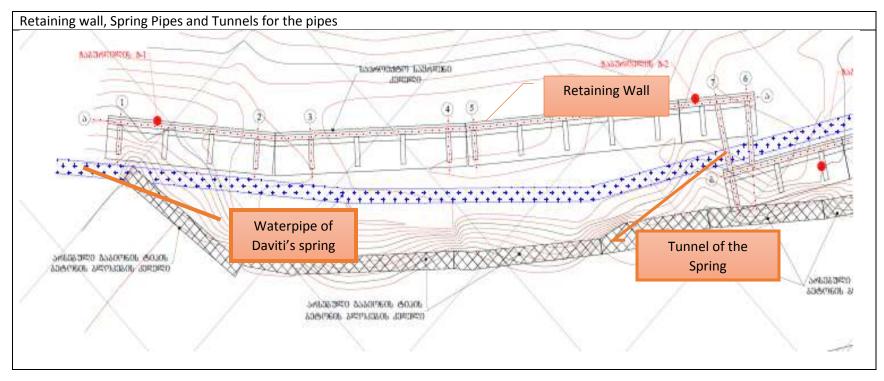
	about the start of construction works.	settlement and buildings	other means (with records)	works (min 2 weeks)	for questions and feedback		
	Grievance redress contact information is announced; Grievance log is maintained	Construction site  Nearby settlement and buildings	Evidence of GRM information available on accessible place Evidence of grievance log and timely response/resolu tion of feedback and complaints	Throughout the duration of the sub-project	Ensure that questions and grievances are addressed in a timely manner	MDF (with help by local authorities, contractor, as applicable)	
Restoration and compensation for accidental damage	Owners who experience loss or damage of crops, structures, or other assets as a result of construction are duly compensated or their damages restored	Construction site	MDF ascertains presence of damages and evidence of compensation/r estoration via Supervisor reports and site visits	Throughout the duration of the sub-project	Assets and livelihoods of population in the project area are improved, or at minimum restored to pre-project level.	Contractor (under monitoring from MDF and Supervision Consultant)	
OPERATION PHASE							
Maintenance of rehabilitated facilities	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 And arranged facilities	Inspection	During maintenance works	Prevent accidents and disruption of traffic	NACHP	

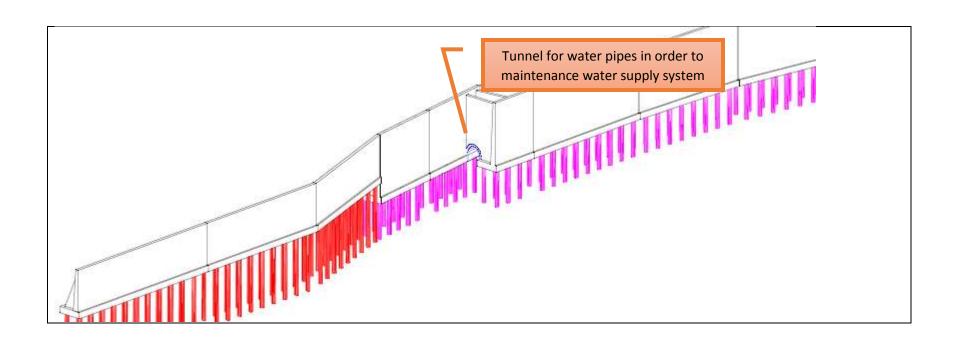
Attachment 1: SP Site map and photos











# Attachment 2. NACHP letter on the supervision of civil works



საქართველოს კულტურული მემკვიდრეობის დაცვის ეროვნული სააგენტო Georgian National Agency for Cultural Heritage Preservation



№14/2879

17 / ივლისი / 2019 წ.

საქართველოს მუნიციპალური განვითარების ფონდის აღმასრულებულ დირექტორს ბატონ გიორგი შენგულიას მის. ქ. თბილისი, აღმაშენებლის გამნ. N150

ბატონო გიორგი,

როგორც თქვენთვის ცნობილია, დაგეგშილია გელათის სამონაბტრო კომპლექსში მისასვლელი გნისა და საყრდენი კედლის რუაბილიტაცია.

დავითის წყაროს რეაბილიტაციის სამუშაოებისას, ჩამოშლილი ტერიტორიის ქვედა ნიშნულზე გამოვლინდა კულტურული და არქეოლოგიური ფენები, რის გამოვ, გელათის სამონასტრო კომპლექსთან მისახვლელი გნის და საყრდენი კედლის მოწყობის პროექტი დაიგეგმა ისე, რომ არ ყოფილიყო შემსებლობაში არქეოლოგიურ ფენებთან, თუმვა არსებობს შესაძლებლობა, რომ მინის სამუშაოების დროს კვლავ გამოვლინდეს სხვა კულტურიული და არქეოლოგიური ფენები.

აღნიშნულიდან გამომდინარე აუცილებლად მიგვაჩნია, გელათის ხამონასტრო კომპლექსში მისასვლელი გმისა და საცრდენი კედლის რეაბილიტაციის დროს, მინის სამუშაოების მიმდინარეობისას განხორციელდეს არქეოლოგიური ზედამხედველობა, რომელსაც უზრუნველყოფს ქუთაისის ისტორიულარქიტექტურული შუზეუმ-ნაკრძალის მმართველი როლანდ ისაკაძე.

პატივისცეშით,

გენერალური დირექტორი



ნიკოლოზ ანთიძვ

