

Zugdidi Botanical Garden (Zugdidi Municipality) Rehabilitation Sub-Project

Environmental and Social Screening and Environmental Management Plan

WORLD BANK FINANCED
SECOND REGIONAL AND MUNICIPAL INFRASTRUCTURE DEVELOPMENT PROJECT

Environmental Screening

Zugdidi Botanical garden is a decorative garden located next to the palace of former Noblemen of Samegrelo - Dadiani family. The garden with the area of 26 ha is located in the central part of Zugdidi City and is bordered by city streets from four sides, which makes the garden easily accessible.

The garden was initiated in 1840 by Davit Dadiani's (Head of Samegrelo region) spouse Ekaterina Chavchavadze-Dadiani. In 1970, the garden was transferred to the Central Botanical Garden of the Academy of Sciences of Georgia. Nowadays the garden area is registered as the property of Zugdidi Municipality according to the Ordinance N1794 of 07.09.2016 of the Government of Georgia.

There were no rehabilitation or maintenance works held in the botanical garden for a long while causing significant degradation of its floristic collection. Some wild shrubs and grass weeds are gradually overtaking the area.

Furthermore, buildings dating from various periods of time that are located within the botanical garden are in poor condition and much need for reconstruction/rehabilitation. Electricity, water supply and sewage systems are out of order. Besides, some architectural shapes and details such as artificial water turbines, decorative pools, open water channels, small boats, stone chairs need to be rehabilitated.

The rehabilitation design is prepared by the Non-commercial Legal Entity - Georgian Museums Association and LEPL National Agency for Cultural Heritage Preservation of Georgia. By the Decree N264 of the Government of Georgia of June 11, 2015, the Dadiani Gardens and Palace complex were granted a category of cultural heritage of national importance.

Present sub-project (SP) is for the reconstruction and rehabilitation of the buildings located in the botanical garden area. Dilapidated and historically non-valuable buildings will be dismantled. Water and electricity supply as well as sewage systems, outdoor lightning, irrigation system will be arranged. Works for botanical garden landscaping and rehabilitation of tracks, fences and gates will be undertaken.

The SP includes the following activities:

1. Rehabilitation of the Administrative building:

- Dismantling of the concrete tiles and rearrangement with the similar materials;
- Dismantling destroyed columns and rearrangement with the similar materials;

- Dismantling of the roof, wood constructions and galvanized sheet metal cover and rearranging;
- Dismantling wall surfaces inside and outside of the building;
- Arranging aluminum doors and windows;
- Arranging ceramic tiles on the first floor of the building;
- Arranging laminate parquet on the second floor of the building.

On the first floor of the building, exhibition and conference halls will be arranged, as well as exposition storage room, guard room and toilets. The second floor will be for botanical garden's administration office, scientific study, herbarium exhibition space, training room for students, toilets.

- **2. Gardener's house** was built around 30-ies and represents a square-shaped one-store building. Originally, the building had a sole room but later it was separated into several smaller rooms. The rehabilitation includes:
 - Dismantling of the concrete tiles and rearrangement with the similar materials;
 - Concrete works for external stairs and covering with ceramic tiles;
 - Arranging aluminum doors and windows;
 - Arranging ceramic tiles on the floor of the building;
 - Arranging power supply, water supply and sewage systems for the building;
 - Arranging glass walls around the greens house.

Greenhouse is a newly constructed building in the contours of the gardener's house with the dimensions 30.0 X 7.6. The building represents metallic frames supporting glass panels.

- **3.** Horse Stable, which is located in botanical garden as well, was built in the 19th century and belonged to Dadiani family. The building consists of three parts. Rehabilitation process includes the following works:
 - Removing and disposing excess earth accumulated inside the building;
 - Mechanical cleaning walls from growing vegetation;
 - Applying gravel cover and concrete tiles on the ground;
 - Recovering the walls which are built with cobblestones and Georgian brick.
- **4. Cross-shaped Palace**. The two-storied palace, so called cross-shaped palace, was first described by the French orientalist and Kartvelologist Marie Brosset. Currently, there are only ruins left of the first floor, which are made of cobblestone. However, Marie Brosset made the sketches of the second floor. According to the sketches, the first floor of the

building was built with stone, while second floor was constructed in wood. Currently, there are only ruins left of the first floor, which are made of cobblestone. The floor and some parts of the walls are made of Georgian brick. Construction works aim to recover the initial image of the building. The SP includes conservation of the fireplace, floor and the hall partitions.

- **5. Auxiliary building for Nursery** with the dimensions 23.9 X 7.6 meters will be place in the north part of the botanical garden. The building with serve the garden staff to store equipment used for garden maintenance. The building has modern architectural look, metal foundation and concrete-made walls. The SP covers surface revetments of the building.
- **6. Public Toilets** will be place in three different locations in the botanical garden. Unit 1 will be nearby the Administrative building. Unit 2 will be placed in the north part of the botanical garden, Unit 3 will be placed in the south-east part of the garden.
- **7. Cashier, Security booth** are intended to be for guards and for ticket sellers. Two buildings will be placed in the garden, one at the east gate and other at the west gate of the botanical garden.
- **8. Garden landscaping** includes arrangement of artificial water turbines, decorative tanks, open water channels, park benches and litter bins, four gates at east, west, north and south entrances of the botanical garden.
- **9. Buildings to be demolished** are the ones that are currently useless, like: ruins of the former office of the Botanical Garden Director, and two buildings of non-functional toilets. Because the buildings do not have historical value and at the same time are not compatible to the visual side of the garden, they need to be demolished.

(A) IMPACT IDENTIFICATION

Has sub-project a tangible impact on	The SP has a modest negative environmental impact.			
the environment?	The main impact will be during the construction phase, which includes works for rehabilitation of the existing old building. The SP is located in the area with modified environment. Therefore, the impact is transitory and insignificant (noise, emissions, construction waste, temporary disturbance of traffic and access, etc.). In operation phase proper management of generated household waste and waste water should be ensured to reduce impact on the environment. The SP is expected to have tangible long-term positive impact on the social and natural environment.			
What are the significant beneficial and adverse environmental effects of sub-project?	The SP is expected to have a long-term positive social impact through improving living conditions of the local population.			
	The expected negative environmental impact is likely to be short term and typical for medium scale construction works in modified landscape: noise, dust, vibration, and emissions from the operation of construction machinery; generation of construction waste. The later impacts are related to the generation of waste and waste water from maintenance of the community center.			
	The buildings are connected to the municipal water supply and sewage network, so after the SP implementation, water usage or sewage discharge will not be increased.			
May the sub-project have any significant impact on the local communities and other affected	The long-term social impact will be beneficial as local community will be provided with new recreational area, which at the same time has cultural heritage value.			
people?	Limited and temporary positive impact related to Job opportunities for construction workers during construction and limited during operation is expected.			
	Negative impact is short-term and limited to the construction site. They are related to the possible disturbance described above.			
	The land plot with the cadastral code 43.31.49.143 is registered in the Public Register, as the property of			

Zugdidi Municipality under the according to the
Ordinance N1794 of 07.09.2016 of the Government of
Georgia. (See attached file – Cadastral information).

(B) MITIGATION MEASURES

Were there any alternatives to the sub-project design considered?	Given that the SP envisages rehabilitation and expansion of the existing old buildings in garden and arrange a landscaping, no alternatives have been considered.
What types of mitigation measures are proposed?	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 and obtain wood materials only from licensed providers, prevent water and soil from pollution (fuel spills due to equipment failure, concrete spills etc.,), avoid disturbance of population (noise, dust, emissions) through proper work/supplies scheduling, good maintenance of the construction machinery, etc.
	Construction works will be conducted with manual labor or using small machinery. Delivery of construction materials and removal of construction waste from the territory will be carried out using small scale transport up to 10 tones. Movement of construction vehicles will be limited to the existing trails only. Visual signs will be put at the trails. Pedestrians will not be allowed to walk at the tracks where the vehicles move. Specific locations will be set for temporarily placement of construction materials and construction waste.
What lessons from the previous similar projects have been incorporated into the sub-project design?	MDF have wide experience of implementation of medium and large scale buildings rehabilitation and construction projects financed by various donor organizations. Based on lessons learned from previous similar projects, design envisages not only rehabilitation and extension of the building but also landscaping of the botanical garden.

Have concerned communities been involved and have their interests and knowledge been adequately taken into consideration in subproject preparation?

The SP has been developed by the non-commercial Legal Entity - Georgian Museums Association and LEPL National Agency for Cultural Heritage Preservation of Georgia together with Zugdidi Municipality in consultation with the Sakrebulo and as a response to the current situation.

By the Decree N264 of the Government of Georgia of June 11, 2015, the Dadiani Gardens and Palace complex were granted a category of cultural heritage of national importance.

SP-specific EMP will be made available for Zugdidi population and will be discussed in a consultation meeting prior to the commencement of works.

(C) RANKING

The SP 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?	✓	
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?		✓
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.)?		√
If ar	nswer to any above question (except question 1) is "Yes", then OP/BP 4.12 Involuntary	Resettlement	is

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 & ADMINISTRATIVE				
Country	Georgia			
Project title	SECOND REGIONAL AND MUNICIPAL INFRASTRUCTURE			
	DEVELOPMENT PROJECT			
Sub-Project title	Zugdidi Botanical Garden (Zugdidi Municipality) Rehabilitation			
	Sub-Project			
Scope of site-specific activity	Present sub-project (SP) is for the reconstruction and rehabilitation of the buildings located in the botanical garden area. Dilapidated and historically non-valuable buildings will be dismantled. Water and electricity supply as well as sewage systems, outdoor lightning, irrigation system will be arranged. Works for botanical garden landscaping and rehabilitation of tracks, fences and gates will be undertaken. The SP includes the following specific activities:			
	 Rehabilitation of the Administrative building: Dismantling of the concrete tiles and rearrangement with the similar materials; Dismantling destroyed columns and rearrangement with the similar materials; Dismantling of the roof, wood constructions and galvanized sheet metal cover and rearranging; Dismantling wall surfaces inside and outside of the building; Arranging aluminum doors and windows; Arranging ceramic tiles on the first floor of the building; Arranging laminate parquet on the second floor of the building. On the first floor of the building, exhibition and conference halls will be arranged, as well as exposition storage room, guard room and toilets. The second floor will be for botanical 			
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	architectural look, metal foundation and concrete-made walls. The SP covers surface revetments of the building.				
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	Cashier, Security booth are intended to be for guards and for ticket sellers. Two buildings will be placed in the garden, one at the east gate and other at the west gate of the botanical garden.				
	Garden landscaping includes arrangement of artificial water turbines, decorative tanks, open water channels, park benches and litter bins, four gates at east, west, north and south entrances of the botanical garden.				
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Institutional	Task Team Leade	r·	Safeo	uards Specialists:	
arrangements (WB)	Xiaolan Wang		_	ejan Kapanadze,	
	, addidir wang			Environment	
				cca Lacroix, Social	
Implementation	Implementing entity:	W	orks	Works contractor:	
arrangements	Municipal	supe	ervisor:	(tbd)	
(Borrower)	Development Fund of	Con	sulting		
	Georgia	_	ıny Eptisa		
			icios de		
		_	ieria S.L.		
CITE DECORPTION	Spain				
SITE DESCRIPTION	Zuadidi Musakaka like				
Name of institution whose premises are to	Zugdidi Municipality				
be rehabilitated					
Address and site location					
of institution whose	, 5				
premises are to be	E-mail: <u>zugdidissakrebulo2014@gmail.com</u>				
rehabilitated					

Who owns the land? Who uses the land (formal/informal)?	The land plot with the cadastral code 43.31.49.143 is registered in the Public Register, as the property of Zugdidi Municipality under the according to the Ordinance N1794 of 07.09.2016 of the Government of Georgia. (See attached file – Cadastral information).
Description of physical and natural environment around the site	The Zugdidi municipality holds the Odishi plain, Odishi plateau and mountainous mountain range. Area - 668 km², including agricultural lands 340 km². There are frequent networks of rivers in the district, there are many wetlands and small lakes. In addition to the river Enguri, Zugdidi municipality is crossing the rivers: Jumi, Chkhuushi, Chanistskali, Gray and others.
for material sourcing, especially aggregates, water, stones?	Water will be available at the construction site from the municipal water supply system. Distance to the nearest licensed borrow pit is approximately 7 km.
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. 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 (including wood materials, sand/gravel and schist) must be obtained from licensed providers, (ii) if contractor wishes to open quarries or extract material (rather than purchasing these materials from other providers), then the contractor must obtain licenses for extraction, (iii) if contractor wishes to operate own concrete plant (rather than purchasing these materials from other providers), then the contractor must prepare technical report on inventory of atmospheric air pollution stationary source and agree with Ministry of Environment and Natural Resources Protection (MoENRP); (iv) Permanent placement of the cut ground generated in
	the course of earth works in a selected location must be

- approved by local (municipal) governing bodies in written:
- (v) Construction waste must be disposed on the nearest municipal landfill in accordance with written agreement with the Solid Waste Management Company of Georgia Ltd.
- (vi) Constructor must gain permit from the LEPL National Agency for Cultural Heritage Preservation of Georgia GOST and SNIP norms must be adhered.

GRIEVNACE REDRESS MECHANISM

Appropriate grievance redress mechanism was established to solve grievances of Project-Affected People, as required. Zugdidi Municipality has assigned a responsible person – Badri Meskhi, Head of the Economic and Infrastructural Service of Zugdidi Municipality (Tel: 595 900 444, mailto:badri.meskhi@gmail.com) to receive, review and react to the APs grievances. The contact person from the MDF is Nutsa Gumberidze (Tel: +995 598 88 20 19, feedback@mdf.org.ge)

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. During public consultations, the local population will be informed about the grievance redress issues and received information about contact persons.

PUBLIC CONSULTATION

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

Population of the city was consulted by Zugdidi municipality administration and their interest has been taken into consideration in preparation process of the SP.

EMP drafted for the SP will be made available for the local community and will be discussed in a consultation meeting prior to tender procedures.

ATTACHMENTS

Attachment 1: Site plan, photos and a sketch of the new building.

Attachment 2: Documents on the public consultation (to be provided)

Attachment 3: Agreement on waste disposal (to be provided)

Others as required.

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

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
0. 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.
A. General Rehabilitation and /or Construction Activities	Air Quality	 (a) Demolition debris shall be kept in controlled area and sprayed with water mist to reduce debris dust; (b) During pneumatic drilling/wall destruction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site (c) The surrounding environment (sidewalks, roads) shall be kept free of debris to minimize dust (d) There will be no open burning of construction / waste material at the site (e) There will be no excessive idling of construction vehicles at sites (f) Truck loads should be confinement and protected with lining.
	Noise	 (a) Limit activities to daylight working hours; (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 is not allowed. Proper mufflers will be used on machinery.
	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.
W	Vaste management	. ,	
		(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.
			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) b)	Use existing plants, quarries or borrow pits that have appropriate official approval or valid operating license. 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.
	Earthworks	a)	Topsoil should be stripped before starting of earthworks;
		b)	Proper topsoil storage practice should be applied to ensure to maintain physico-chemical and biological activity of the soil; Temporary protective silt fencing should be erected to avoid erosion (wash down);
		c)	Stored topsoil should be used for reinstatement and landscaping.
		d)	Topsoil from the sites, which will not be reinstated to the initial conditions will be distributed carefully on the surrounding area.
			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 reinstated topsoil will then be harrowed, where practical, to protect the stability and promote vegetative growth.
		f)	In case chance find is encountered in the course of earth works, the contractor must immediately stop any physical activity on site and informs the MDF. The MDF promptly notifies the Ministry of Culture and Monument Protection, which takes over responsibility for the following course of action. Works may resume only upon receipt of written permission from the Ministry of Culture and Monument Protection.

C. Individual wastewater treatment system	Water Quality	 a) The approach to handling sanitary wastes and wastewater from building site (installation of the septic tank) must be approved by the local authorities. b) Monitoring of new wastewater systems (before/after) will be carried out.
H. Traffic and	Direct or indirect	(a) In compliance with national regulations the contractor will insure that the construction site is properly secured and
Pedestrian Safety	hazards to public traffic and pedestrians by construction activities	 construction related traffic regulated. This includes but is not limited to: Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards Construction site should be fenced and properly secured to prevent unauthorized access (especially of children); Appropriate lighting and well defined safety signs should be provided; Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement

PART D: MONITORING PLAN

Activity	What Activity (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?)
		CONSTRUCTI	ON 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

Earthworks	Temporary storage of	Construction	Inspection	In the course of	Prevent pollution	MDF,
Laitiiwoiks	excavated material in the pre-	site	inspection	earth works	of the	Construction
	defined and agreed upon	Site		Cartii WOIKS	construction site	supervisor
	locations;				and its	Supervisor
	iocations,				surroundings with	
	Dockfilling of the everyated				construction	
	Backfilling of the excavated					
	material and/or its disposal to				waste;	
	the formally designated				Prevent damage	
	locations;				and loss of	
					physical cultural	
	In case of chance finds				resources;	
	immediate suspension of				Prevent topsoil	
	works, notification of the				losses.	
	Ministry of Culture and					
	Monument Protection, and					
	resumption of works					
	exclusively upon formal					
	consent of the Ministry.					
	Topsoil is striped before					
	starting of the earthworks;					
	Proper topsoil storage practice			Construction		
	is applied; Temporary			period: starting		
	protective silt fencing is					
	erected;			from topsoil		
	·			stripping and		
	Striped topsoil is used for			ending with		
	reinstatement and			reinstatement		
	landscaping.					
Sourcing of inert material	Purchase of material from the	Borrowing	Inspection of	In the course of	Limiting erosion	MDF,
	existing suppliers if feasible;	areas	documents	material	of slopes and	Construction
	,		Inspection of	extraction	degradation of	supervisor
	Obtaining of extraction license		works		ecosystems and	'
	by the works contract and				landscapes;	
	strict compliance with the				Limiting erosion	
	license conditions;				of river banks,	
					water pollution	

	Terracing of the borrow area, backfilling to the exploited areas of the borrow site, and landscape harmonization; 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				with suspended particles and disruption of aquatic life.			
Generation of construction waste	stream. 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		
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								
Generation of waste from maintenance of rehabilitated building	Proper management of solid waste	Municipal area	Inspection	Throughout operation of the community center	Prevent pollution with solid waste	Zugdidi municipality		

Generation of waste water	Proper operation of the	Rehabilitated	Inspection	Throughout	Prevent pollution	Zugdidi
from maintenance of	septic tank	building; Water		operation of	with waste water	Municipality
rehabilitated building		course near the		the community		
		rehabilitated		center		MoENRP
		community				
		center				

Attachment 1: Site location and pictures

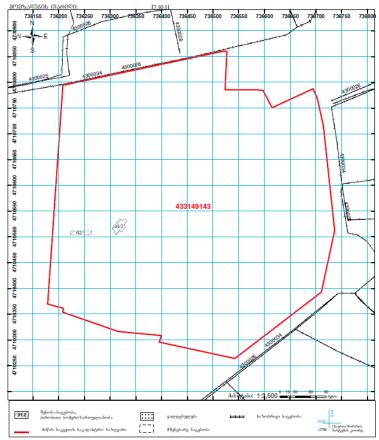
Cadastral Information





ᲡᲐᲥᲐᲠᲗᲕᲔᲚᲝᲡ ᲘᲣᲡᲢᲘᲪᲘᲘᲡ ᲡᲐᲛᲘᲜᲘᲡᲢᲠᲝ ᲡᲐ%ᲐᲠᲝ ᲠᲔᲔᲡᲢᲠᲘᲡ ᲔᲠᲝᲕᲜᲣᲚᲘ ᲡᲐᲐᲒᲔᲜᲢᲝ ᲡᲐᲙᲐᲓᲐᲡᲢᲠᲝ ᲒᲔᲒᲛᲐ

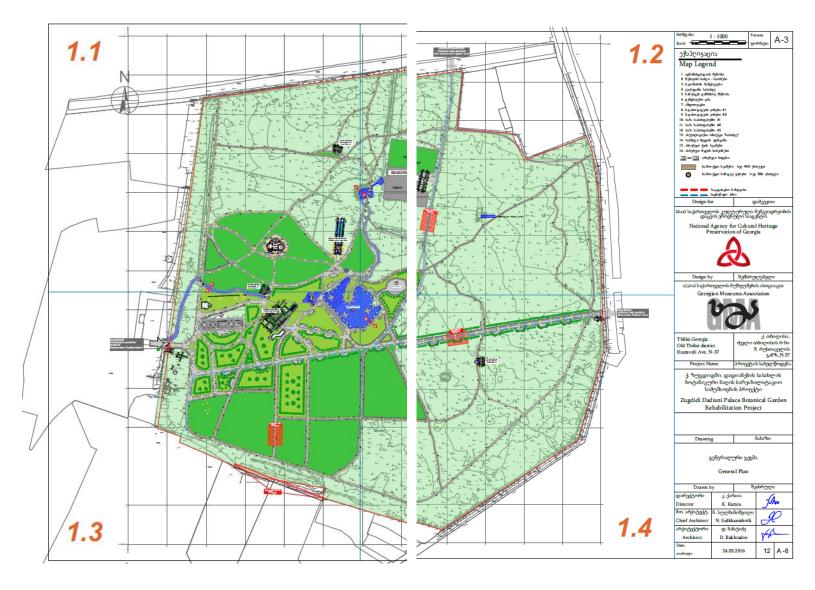
ᲛᲘᲬᲘᲡ ᲜᲐᲙᲕᲔᲗᲘᲡ ᲡᲐᲙᲐᲓᲐᲡᲢᲠᲝ ᲙᲝᲓᲘ: ᲒᲐᲜᲪᲮᲐᲓᲔᲒᲘᲡ ᲠᲔᲒᲘᲡᲢᲠᲐᲪᲘᲘᲡ ᲜᲝᲛᲔᲠᲘ: ᲛᲘᲬᲘᲡ ᲜᲐᲙᲕᲔᲗᲘᲡ ᲤᲐᲠᲗᲝᲒᲘ: *43 31 49 143 882011502189 259770* ძ3.მ. არასასෆීშლო-სამმშონმო



საჯარო რუმტრის უროვნული საცენტო: ობილასი 0102 წმ. ნიკოლოზისნ. ჩხეთხა ქ. 2 ტელ: (995-32). 91-04-27; ფაქთ: (995-32). 91-03-41. ზუგელიდის სარეგისტრაციო სამსახური. ქ. ზუგელდი,2100-სტალინის ქ. № 5

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General Plan



3იზუალიზაცია Visualization





Renders of the Stable



3იზუალიზაცია Visualization



Renders of Gardener's house



Gardening auxiliary building

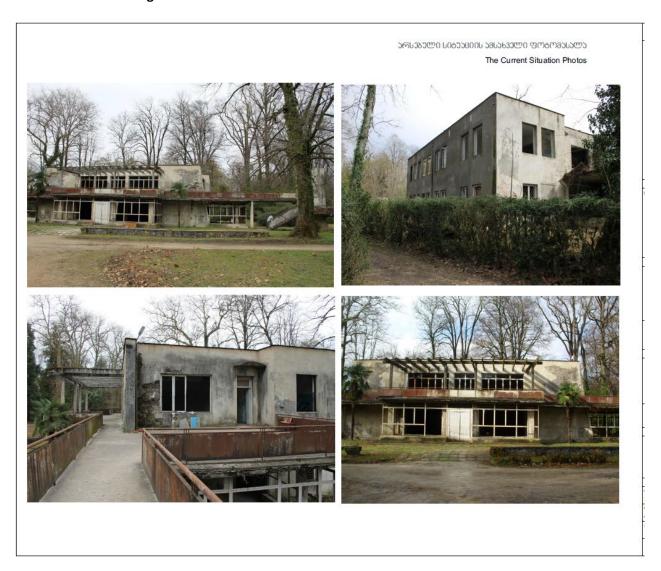
30ზუალიზაცია Visualization





Photo materials

Administrative Building



არსაბული სიბუაციის ამსახველი ფობომასალა The Current Situation Photos









Stable



Cross-shaped Palace



Gardener's House

არსაგული სიბააციის ამსახვალი ფობომასალა The situation in the photo material











