

Semi-Annual Environmental Monitoring Report

#14 Semestral Report

Reporting period: January - June 2025

July 2025

GEO: Construction of Khevi-Ubisa Section (E60 Highway Route), F2 Project

Financed by the Asian Development Bank
Project Number: 49257-001 Loan No 3715 - GEO

Prepared by: Roads Department of the Ministry of Regional Development and Infrastructure of Georgia for the Asian Development Bank

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Abbreviations

ADB	Asian Development Bank
BP	Batching Plant
CC	Construction Contractor
CSCS	Consultancy Services for Construction Supervision
CSC	Construction Supervision Consultant
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMR	Environmental Monitoring Report
GRM	Grievance Redress Mechanism
HNRB	Hunan Road & Bridge Construction Group Co
MAC	Maximum Admissible Concentration
MoEPA	Ministry of Environmental Protection and Agriculture
NFA	National Forest Agency
NOC	No Objection Certificate
PIU	Project Implementation Unit
RD	Road Department
Row	Right of Way
SC	Supervision Consultant
SDS	Spoil Disposal Site
SEMP	Site-Specific Environmental Management Plan
SPS	Safeguard Policy Statement
SFF	State Forest Fund
SAEMR	Semi Annual Environmental Monitoring Report
PS	Performance Standards of IFC
PPE	Personnel Protective Equipment
NCR	Non-Conformance Report

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1. INTRODUCTION

1.1 Preamble

1. This report presents the semi-annual review of environmental monitoring for the E-60 East-West Highway (Khevi-Ubisa section) Improvement Project, covering the period from January to June 2025.
2. This report is the 14th Semi-Annual EMR for the E-60 highway (Khevi-Ubisa section) improvement project.

1.2 Headline Information

3. The project is currently in Phase 3, the Defect Notification Period (DNP). Major road works have been completed, and the road has been open to traffic since October 28, 2023.
4. The project involves the construction of a new road section of the E-60 highway located in Imereti Region of Central Georgia. Section F2 forms the Khevi - Boriti portion of the Khevi-Ubisa-Shorapani-Argveta section of the E-60 highway. The project involves the construction of 20 tunnels, 35 bridges, 2 interchanges, 6 underpasses, 4 animal corridors and 19 culverts.
5. The length of the Project Road is given below:
 - 1) Right Lane (TA - Tbilisi-Argveta direction) -12.197km ;
 - 2) Left Lane (AT - Argveta -Tbilisi direction)-12.193k
6. This F2 section, new alignment runs through the scattered population of various villages and the most impacted by the new alignment are Khunevi and Vertkvichala settlements. The alignment runs through mountainous area characterized by heavy impediments during wintertime, basically in the form of snow and frost and geologically complex area with mixed forest and riverine ecosystems.
7. The Project outline (km 0+000 – 12+197) from Khevi to near Boriti Police station:

Classification of road:	International highway
Design speed:	100 km/ hr.
Speed Limit:	80 km/ hr.
Road length:	12.197 km
Road width:	27 m
Numbers of lanes:	4 lanes

8. The official commencement date for the project was set on July 22, 2019. The original completion date was scheduled for July 6, 2022. Extensions for the works were granted, first up to May 31, 2023, and subsequently to October 28, 2023.
9. The road has been opened for the traffic on 28-10-2023: however, contractor is continuing the activities to complete the outstanding works of the Project and secondary roads.

2. PROJECT DESCRIPTION AND CURRENT ACTIVITIES

2.1 Project Description

10. E-60 highway connecting the Black Sea coast to the capital of Georgia passes through a mountainous area 600-850 meters above the sea level. The Khevi-Argveta alignment is located on the mountainous area, excluding the last 10-12 km section, which is located on the flat terrain. The proposed highway is located on the complex geological and geographical area and crosses numerous small mountain rivers and ravines. Mixed forests, typical to this climate zone, cover the slopes of the mountains.
11. The existing 2-lane road passes through difficult mountainous terrain paralleling first the river Rikotula and then, the river Dzirula and consists of multiple bridges and several tunnels.
12. The government of Georgia has requested ADB to finance for the construction of the Khevi-Ubisa section of E-60 highway. The project is classified as Category A Project – Environment safeguard under ADB SPS 2009.
13. The Project involves the construction of a new road section of the E-60 highway located in Imereti Region of Central Georgia (Figure 1). Proposed Section F2 forms the Khevi - Boriti portion of the Khevi-Ubisa-Shorapani-Argveta section of the E-60. The length of the Project Road is given below:
 - 1) Right Lane (TA - Tbilisi-Argveta direction) -12.197km ;
 - 2) Left Lane (AT - Argveta -Tbilisi direction)-12.193km.
14. Total twenty tunnels 20 with length 9110.93 meters are proposed including:
 - 9 tunnels on carriageway TA (two existing tunnels to rehabilitate) with total length of 4,340 m;
 - 11 tunnels on carriageway AT with total length of 5020 m.
15. The project road also includes (35) bridges, of which 18 bridges on TA carriageway with total length of 4210 m and 17 bridges on AT carriageway with total length of 4186 m.
16. Technical features of the alignment considered during detail design include:
 - Design speed – 100 km/h (speed limit 80 km/h);
 - Number of traffic lanes – 4;
 - Width of traffic lane – 3.75 m;
 - Width of each carriageway – 7.5 m;
 - Width of paved shoulder (emergency lane) – 2.5 m;
 - Width of verge – 1.0 m;
 - Width of central reserve – 5.0 m;
 - Width of paved shoulder at the central reserve – 1.0 m;
 - Total width of each paved platform – 11.0 m;
 - Width of road bed – 27.0 m;
 - Carriageway cross-fall on straight sections – 2.5%;
 - Minimum radius of horizontal curve – 400 m;
 - Maximum longitudinal gradient– 4%;
 - Minimum convex curve – 15 000 m;
 - Minimum concaved curve – 15 000 m;
 - Number of Interchanges- 2.
17. In addition to that, project includes 6 underpasses for rural roads, 4 animal corridors, and 19 culvers.

Figure 1: Location of Project Area



18. The project is classified as **category A** for the environment under ADB's Safeguard Policy Statement (2009). Environmental Impact Assessment (EIA) was prepared in May 2018 and disclosed on ADB website in September 2018.
19. Road Department of Georgia submitted an Environmental Impact Assessment of Section F2 of the Khevi-Ubisa-Shorapani-Argveta Road (E60 Highway) to the MoEPA in May 2018. The Environmental Impact Assessment (EIA) approval was received from the MoEPA on November 19, 2018.

2.2 Project Contracts and Management

20. Information related to the project execution is given in Table 1:

Table 1: Project information up to June 2025

Employer	Road Department of Georgia, Ministry of Regional Development and Infrastructure of Georgia
Funding Source	Asian Development Bank (ADB)
The Engineer	UBM
Contractor	Hunan Road & Bridge Construction Group Co (HRBCC), Ltd.
Contract Number	KURP/CW/OCB-01
Contract date	November 20, 2018
Commencement Date of Works	July 22, 2019
Contract Period original	1080 days
Contract period after extension	1624 days
Original Completion date	July 06, 2022
Completion date after first extension of time	May 31, 2023
Completion date for taking over works	October 28, 2023
Full section of the road opened for road users	October 28, 2023
Defects Notification Period	2 years
Contract Price (GEL)	GEL 732,296,478.02(BID PRICE INCLUDED VAT18%)

21. Summary of civil works contracts and works' progress is summarized in Table 2. All awarded contracts included EMPs cleared by ADB and any conditions of applicable national EIA clearance. EMP included as appendix X of technical specifications and Section 3.4 (Scope of EIA) of General Report Document (COD# GP GEO2000 GE RP001) of the F2 project.

Table 2: Summary of Civil Works Contracts and works' progress (June 2025)

Package	Scope	Contractor	Signed	Approval Date			CC Environmental personnel		Civil Work		Progress as of	
				SSEMP	COVID-19 HSMP	ERP	Environmental officer	Health and Safety officer	Start	End	31 Dec. 2024	30 June 2025
F2	Construction of Khevi- Ubisa Section F2 of East West Highway 1. Right lane (TA - Tbilisi-Argveta direction) - 12.197km; 2) Left lane (AT - Argveta -Tbilisi direction)- 12.193km.	HNRB	20 Nov 2018	13 Aug 2019	18 Nov 2020	18 Nov 2020	Levan Inashvili	Victor Rusetsky	22 July 2019	October 28, 2023	100%	100%

Note: The Month/Years in brackets are planned schedule.

COVID-19 HSMP = COVID-19 Health and Safety Management Plan, ERP = Emergency Response Plan, SSEMP = site-specific environmental management plan

22. TOR for the CSCS Contract contains the following tasks for the environmental specialists:
- Ensure that the provisions of the approved Environmental Management Plan are reflected in the Contractor's Specific Environmental Management Plan (SEMP) prior to its acceptance by the Engineer, the Employer and ADB, and thereafter ensure that the Contractor complies in every respect with the provisions of the SEMP;
 - Develop an environmental auditing protocol for the construction period, regularly supervise the environmental monitoring, and submit periodic reports based on the monitoring data and laboratory analysis reports. These reports will be included as an annex to the Consultant's Monthly Report
 - Develop a program for hands-on training of Contractor's staff in implementing the SEMP.
23. Obligation of the contractor, to safeguard, mitigate adverse impacts and rehabilitate the environment is addressed through environmental provisions in the FIDIC conditions of contract for construction, MDB harmonized addition- June 2010 and special clauses included in the contract related to environment, especially, section 116 (pollution) and appendix X of technical specifications. FIDIC clause 4.18 (protection of environment), 4.8 (safety procedures), 6.4 (labor laws), 16.3 (cessation of work/ remedial work), 2.3 b (employer's personnel), 4.21 (progress report) are important in this regard.
24. The Contract for CSCS was awarded to ULUSLARARASI BİRLEŞMİŞ MÜŞAVİRLER MÜŞAVİRLİK HİZMETLERİ A.Ş (UBM) in May 2019 for three phases of the project:
- Phase 1: Design review, to be completed in a period of three months and submitted to RD
 - Phase 2: Construction supervision and contract administration. The construction period is for 1080 days.
 - **Phase 3: Defects Notification Period, two years. Current state of the Project.**
25. Contact details of ADB, CC, SC and RD representatives are given in Table 3. However, the contact details can be available on request.

Table 3: Main Environmental staff of ADB, CC, SC and RD

Organization	Position	Name
ADB	Senior Transport Specialist	Zaigham Naqvi
	Senior Environmental Specialist (Safeguard)	Ninette Pajarillaga
	ADB National Environmental Consultant	Name: Giorgi Kobaladze
	Associate Safeguards Officer Georgia Resident Mission	Nino Nadashvili
Client/ Borrower	Environmental Specialist of RD	Luiza Bubashvili
	Head of Environmental and Social Division of RD	Mikheil Ujmajuridze
	Head of Environmental Unit of RD	Gia Sopadze
	H&S Specialist of RD	Giorgi Kochiashvili
CSC	International Environmental Specialist	Kashif Bashir

	Environmental Expert	Ketevan Nadirashvili
Contractor	Project Manager	Dai_Xiangyang
	Environmental Specialist	Levan Inashvili

26. Status of compliance with environmental safeguards related covenants in the Project's Loan Agreement signed between Government of Georgia and ADB on October 05, 2018¹ is summarized in Table 4.

Table 4. Loan Agreement Compliance Status

Schedule	Paragraph	Covenant	Compliance Status
4	3	Procurement: The borrower shall not be awarded any works contract which involves environmental impacts until: (a) the appropriate authority of the Borrower has granted the final approval of the EIA; and (b) the Borrower has incorporated the relevant provisions from the EMP into the Works contract.	Complied EIA approved by MoEPA on 19-11-2018 by MoEPA. All awarded contracts included EMPs cleared by ADB and any conditions of applicable national EIA clearance. EMP included as appendix X of technical specifications and Section 3.4 (Scope of EIA) of General Report Document (COD# GP GEO2000 GE RP001) of the F2 project.
4	6	Environment The borrower, through the Implementing Agency, shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the project and all project facilities comply with a. All applicable laws and regulations of the borrower and project executing agency related to environment health and safety b. The environment safeguard; and c. All measures, and requirement set forth in the EIA, the EMP, and any corrective or preventive actions set forth in the Monitoring Reports	Being complied with During the reporting period, Project is at phase 3, Defect notification period. Full section of the road has been opened for traffic on 28-10-2023. Contractor remained involved in rehabilitation works for the disturbed area. All applicable laws and regulations are being followed for permits from MoEPA and Ministry of Economy and Sustainable Development (MoESD). Contractor obtained all the permits from the relevant Ministries.
4	22	Safeguard- Related Provisions in Bidding Documents and Works Contracts: Borrower, through the Implementation Agency, shall ensure that all bidding documents and contracts to works contain	Being complied with EMP as a part of bidding documents and budget allocated for environment and social measures Preventive measures and corrective actions were undertaken by the

¹ <https://www.adb.org/sites/default/files/project-documents/49257/49257-001-lna-en.pdf>

		provisions that require contractor to - Comply with the measures relevant to the contractor set forth in the EIA, EMP, and RP (to the extent they concern impacts on affected people during construction) and any corrective or preventive actions set forth in a safeguard monitoring report - Make available a budget for all such environment and social measures - Provide the borrower with written notice of any unanticipated environment or resettlement risk or impacts that arise during construction, implementation, or operation of the project that were not considered in the EIA, the EMP, and the RP	contractor to comply with the measures set forth in the EIA and EMP. Contractor is rehabilitating the primary facilities including campsite, Batching plants, and dumpsites.
4	23	<u>Safeguards Monitoring and Reporting</u> The borrower shall cause the Project executing Agency and Implementing Agency to do the following: - Submit semi-annual safeguard monitoring reports to ADB during the construction of the Project until its completion, and, thereafter, submit annual reports to ADB during its operation, and disclose relevant information from such reports to affected persons promptly upon submission - If any anticipated environment and/ or social risk risks and impacts arise during construction, implementation or operation of the project that were not considered in the EIA, the EMP, and the RP, promptly Inform ADB of the occurrence of such risks or impacts, with detailed description of the event and	Being complied with RD submitting Semiannual monitoring report and all the set forth measures in EIA, Conditions set by MoEPA, and National Legislations are addressed in the SAEMR This is the 14th Semiannual Monitoring Report

		proposed corrective action plan c. Report any actual or potential breach of compliance with measures and requirements set forth in the EMP or RP promptly after becoming aware of the breach.	
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27. Under the Contract, the Contractor shall comply with all applicable national and local environmental laws and regulations as well as applicable respective standards under the Contract. The Contractor shall:

- Establish an operational system for managing environmental impacts. The Contractor's environmental engineer conducts daily site inspections, Environmental violations are identified and recorded, and violation report is sent to management for corrective actions. The management is responsible for issuing correction notice to site supervisor and give target date for correction. The contractor's environmental engineer shall inspect the site at due date and report the correction progress to the management. If the correction is not done properly, penalty will be issued to site supervisors. The consulting engineers also conduct jointly weekly site inspections with Contractor and send weekly environmental report to contractor for correction. The contractor improves the site conditions and reply to the engineer for the corrective actions taken.
- Develop the Specific EMP (SEMP) as well as other location specific and topic specific EMPs upon request by identifying environmental risks arising from the Works, the mitigation measures to be applied, and monitoring to be carried out.
- Implement the required mitigation measures and monitoring
- Take any corrective or preventative actions set out in safeguards monitoring reports that the Employer will prepare from time to time to monitor implementation of the EMP, and
- Submit monthly compliance reports to the engineer.

28. The Contractor Hunan Road & Bridge Construction Group Co Ltd. (HNRB) is responsible for implementation of EMP throughout the project during construction phase. The Supervision Consultant UBM (Engineer) is responsible to: i) monitor the implementation of EMP/SEMP by the Contractor at all its active construction sites and project related facilities; ii) after completion of the construction activities conduct post-construction environmental audit and prepare post-construction environmental monitoring report.

29. Responsibility of management for environmental monitoring and implementation of the SEMP is given to the Environmental Protection Manager Mr. Levan Inashvili. He has direct authority from the Project Manager to give instruction to all site staff regarding environmental issues.

2.3 Project Activities during Current Reporting Period

30. Currently the project is at operation stage. Main construction activities have been completed.

1. Tunnelling:

- TUN-2001-AT completed.
- TUN-2001-TA completed.
- TUN-2002-AT completed.
- TUN-2003-AT completed.
- TUN-2005-AT completed;
- TUN-2005-TA completed
- TUN-2006-AT completed;
- TUN-2006-TA completed;
- TUN-2007-AT completed;
- TUN-2007-TA completed;
- TUN-2008-AT completed;
- TUN-2008-TA completed;
- TUN-2009-AT completed;
- TUN-2009-TA completed;
- TUN-2010-AT completed;
- TUN-2010-TA completed;
- TUN-2011-AT completed;
- TUN-2011-TA completed.

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2. Bridges:

- BRI-2101-AT completed.
- BRI-2101-TA completed.
- BRI-2102-AT completed.
- BRI-2103-AT completed.
- BRI-2104-AT completed.
- BRI-2105-AT completed.
- BRI-2106-AT completed.
- BRI-2107-AT completed.
- BRI-2102-TA completed.
- BRI-2103-TA completed.
- BRI-2104-TA completed.
- BRI-2105 TA completed.
- BRI-2106-TA completed.
- BRI-2107-TA completed.
- BRI-2109-AT completed.
- BRI-2109-TA completed.
- BRI-2110-AT completed.
- BRI-2110-TA completed.
- BRI-2111-AT completed.
- BRI-2111-TA completed.
- BRI-2113-AT completed.
- BRI-2113-TA completed.

- BRI-2114-AT completed.
- BRI-2114-TA completed.
- BRI-2115-AT completed.
- BRI-2115-TA completed.
- BRI-2116-AT completed.
- BRI-2116-TA completed.
- BRI-2117-AT completed.
- BRI-2117-TA completed.
- BRI-2118-AT completed.
- BRI-2118-TA completed.
- BRI-2121 completed.
- BRI-2122 completed.
- BRI-2123 completed.

3. Culvert:

- CUL-2203 Culvert completed.
- CUL-2204 Culvert completed.
- CUL-2205 Culvert completed.
- CUL-2208 Culvert completed.
- CUL-2209 Culvert completed.
- CUL-2210 Culvert completed.
- CUL-2213 Culvert completed.
- CUL-2214 Culvert completed.

4. Retaining Wall:

- 2512# Retaining wall completed.
- 2521# Retaining wall completed.
- 2522# Retaining wall completed.
- 2523# Retaining wall completed.
- 2510# Retaining wall completed.
- 2501# Retaining wall completed.
- 2502# Retaining wall completed.
- 2505# Retaining wall completed.
- 8# bridge Retaining wall (variations) completed.

5. No. 1 Interchange:

- Earthwork excavation completed;
- 2521&2523# Retaining wall completed.
- 2301#Underpass completed.

6. No. 2 Interchange:

- Earthwork excavation completed; Subgrade filling completed.

31. Currently contractor is building the secondary access roads, interchange, and rehabilitation works for the disturbed sites. Progress of works carried out is summarized in table 5 below:

Table 5: Construction progress during reporting period (January – June 2025)

WORK DESCRIPTION	DIMENSION	DESIGN	ACTUAL	%	NOTE
Bill No.2 Setting Out and Site Clearance					
2.1 Basic topography and detailed setting out					
For main road	km	24.391	24.391	100	-

For secondary roads	km	3.06	3.06	100	-
Interchanges	km	3.53	3.53	100	-
Demolitions	mc	55561	55561	100	-
Cutting trees of more than 0.1 m diameter	Lump Sum	1	1	100	-
Bill No.3 Earthworks					
Topsoil removal	m3	38206.0	38206.0	100	-
Excavation of soil mechanically	m3	420950.0	419564.5	100	-
Excavation of soil by means of blasting	m3	561240	561240	100	-
Construction of embankment	m3	564550.0	564550.0	100	-
Construction of dividing strip	m3	29660.0	18756.0	100	-
Slope protection	m3	18720	18720	100	-
Bill No.4 Culverts and drainage					
Box Culvert – 2.0m X 2.5m	Linear meter	805	805	100	-
Box Culvert – 4.0m X 2.5m	Linear meter	83	83	100	
Box culvert on local roads	m³	681.63	0	100	
Bill No.5 Bridges 35 sets					
BRI 2101 TA	set	1	1	100	-
BRI 2101 AT	set	1	1	100	-
BRI 2102 TA	set	1	1	100	-
BRI 2102 AT	set	1	1	100	-
BRI 2103 TA	set	1	1	100	-
BRI 2103 AT	set	1	1	100	-
BRI 2104 TA	set	1	1	100	-
BRI 2104 AT	set	1	1	100	-
BRI 2105 TA	set	1	1	100	-
BRI 2105 AT	set	1	1	100	-
BRI 2106 TA	set	1	1	100	-
BRI 2106 AT	set	1	1	100	-
BRI 2107 TA	set	1	1	100	-
BRI 2107 AT	set	1	1	100	-
BRI 2108 TA	set	1	1	100	-

BRI 2109 TA	set	1	1	100	-
BRI 2109 AT	set	1	1	100	-
BRI 2110 TA	set	1	1	100	-
BRI 2110 AT	set	1	1	100	-
BRI 2111 TA	set	1	1	100	-
BRI 2111 AT	set	1	1	100	-
BRI 2112 TA	set	1	1	100	-
BRI 2112 AT	set	1	1	100	-
BRI 2113 TA	set	1	1	100	-
BRI 2113 AT	set	1	1	100	-
BRI 2114 TA	set	1	1	100	-
BRI 2114 AT	set	1	1	100	-
BRI 2115 TA	set	1	1	100	-
BRI 2115 AT	set	1	1	100	-
BRI 2116 TA	set	1	1	100	-
BRI 2116 AT	set	1	1	100	-
BRI 2117 TA	set	1	1	100	-
BRI 2117 AT	set	1	1	100	-
BRI 2118 TA	set	1	1	100	-
BRI 2118 AT	set	1	1	100	-
BRI 2121 L1	set	1	1	100	-
BRI 2122 L2	set	1	1	100	-
BRI 2123 LR1	set	1	1	100	-
Bill No.6 Tunnels 20 sets					
TUN 2001 TA	set	1	1	100	-
TUN 2001 AT	set	1	1	100	-
TUN 2002 AT	set	1	1	100	-
TUN 2003 TA	set	1	1	100	-
TUN 2003 AT	set	1	1	100	-
TUN 2004 AT	set	1	1	100	-
TUN 2005 TA	set	1	1	100	-
TUN 2005 AT	set	1	1	100	-

TUN 2006 TA	set	1	1	100	-
TUN 2006 AT	set	1	1	100	-
TUN 2007 TA	set	1	1	100	-
TUN 2007 AT	set	1	1	100	-
TUN 2008 TA	set	1	1	100	-
TUN 2008 AT	set	1	1	100	-
TUN 2009 TA	set	1	1	100	-
TUN 2009 AT	set	1	1	100	-
TUN 2010 TA	set	1	1	100	-
TUN 2010 AT	set	1	1	100	-
TUN 2011 TA	set	1	1	100	-
TUN 2011 AT	set	1	1	100	-
Bill No.7 Equipment for Tunnels 20 sets					
TUN 2001 TA	set	1	1	100	-
TUN 2001 AT	set	1	1	100	-
TUN 2002 AT	set	1	1	100	-
TUN 2003 TA	set	1	1	100	-
TUN 2003 AT	set	1	1	100	-
TUN 2004 AT	set	1	1	100	-
TUN 2005 TA	set	1	1	100	-
TUN 2005 AT	set	1	1	100	-
TUN 2006 TA	set	1	1	100	-
TUN 2006 AT	set	1	1	100	-
TUN 2007 TA	set	1	1	100	-
TUN 2007 AT	set	1	1	100	-
TUN 2008 TA	set	1	1	100	-
TUN 2008 AT	set	1	1	100	-
TUN 2009 TA	set	1	1	100	-
TUN 2009 AT	set	1	1	100	-
TUN 2010 TA	set	1	1	100	-
TUN 2010 AT	set	1	1	100	-
TUN 2011 TA	set	1	1	100	-

TUN 2011 AT	set	1	1	100	-
Bill No.8 Road Pavement					
Concrete pavement-Main Road	km	24.391	24.391	100	-
Sand and gravel mix pavement-local road	m3	2629	2629	100	-
Asphalt pavement, secondary road-1	km	1.5	1.5	100	-
Construction of market area	m3	2645	2645	100	-
Bill No.9 Road furniture					
Main roads	Km	24.391	24.391	100	-
Secondary roads	km	3.06	3.06	100	-
Interchanges	km	3.53	3.53	100	-
Bill No.10 Interchanges					
Interchange-1	km	1.4	1.4	100	-
Interchange-2	km	1.7	1.7	100	-
Interchange-3	km	0.43	0.43	100	-
Bill No.11 Relocation of Utilities					
Reconstruction of 35KV line	Lump Sum	1	1	100	-
Reconstruction of 10KV line	Lump Sum	1	1	100	-
Reconstruction of 0.4KV line	Lump Sum	1	1	100	-
New construction power line	Lump Sum	1	1	100	-
Bill No.12 Greenery					
Seeding of perennial grass, watering and further treatment	Sq.m	123339.00	123339.00	100	-
Planting of shrubs, watering and further treatment	Sq.m	22800.00	22800.00	100	-
Bill No.13 Retaining walls 16 sets					
Main roads	piece	12	12	100	-
Interchange-1	piece	2	2	100	-
Interchange-2	piece	1	1	100	-
Interchange-3	piece	1	1	100	-
Construction of Rip rap on CL203 RWA-2525	piece	1	1	100	-
Bill No.14 Lighting					

Main roads	km	24.391	24.391	100	-
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32. During the reporting period, construction of secondary roads and rehabilitation works were carried out. Overall progress of works is 100 %. Most of the staff at site belong to the security.

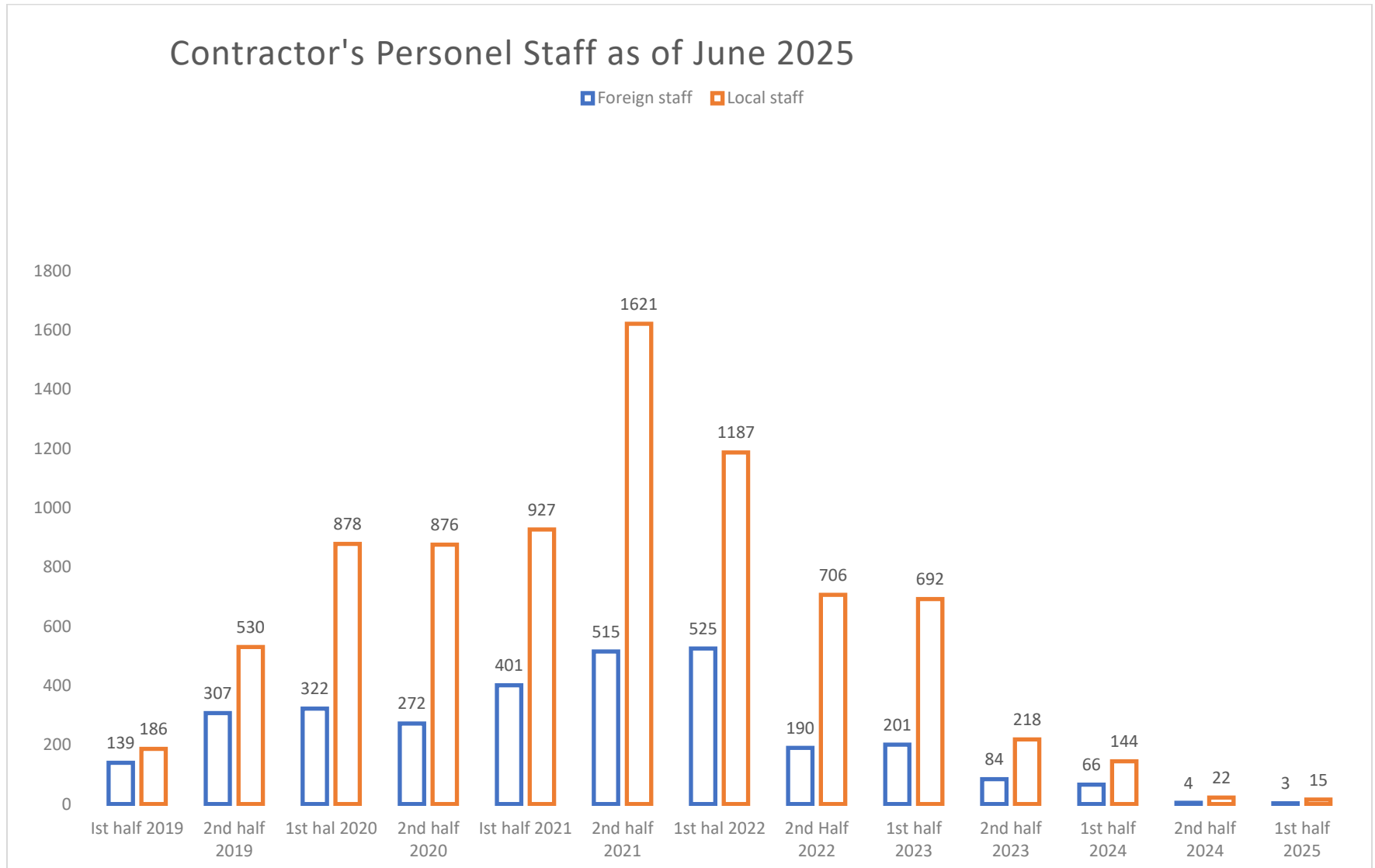
2.4 Information on personnel working on construction site

33. Overall staff hired by the contractor up to June 2025 is given below (Table 6):

- Total number of employees - 18
- Foreign staff – 3
- Local Georgian staff – 15 (7 Georgian skilled workers + 8 Georgian Security Guards)
- Number of working hours – 8
- Number of shifts – 1
- Workers in night shift- 0

34. The graphical presentation of number of foreign and local staff hired by the contractor is shown in the figure 2.

Figure 2: Contractor's Personnel as of June 2025



35. It is evident from the graph that there is a significant change in number of total staff from the construction stage and the number of staff is the lowest as the project is at DNP stage and contractor is demobilizing step by step. The ratio of the local to foreign workers is 83 % local and 17% foreign workers. As informed by the contractor that during the June 2025 most of the staff at site belong to the security.

2.5 Description of Any Changes to Project Design

36. No change in the project design was approved during the reporting period.

2.6 Description of Any Changes to Agreed Construction Methods

37. No changes to the agreed construction methods were approved during the reporting period.

3. ENVIRONMENT SAFEGUARD ACTIVITIES

3.1 Description of Environment Safeguards Activities

38. As the project is currently in the operational phase at the DNP stage, CSC environmental experts conducted site visits for the inspection of the site in December 2025 to ensure the rehabilitation of dumpsites 11, other disturbed areas, and construction activities for secondary roads align with the requirements of the EMP and contract conditions.
39. Environmental expert coordinated with the MOEPA and facilitated their site visit on June 12, 2025 to inspect the SDS 11.
40. The Engineer's environmental specialists prepare the semi-annual reports that are submitted to the RD. These reports depict the ongoing construction activities, environmental issues, and the status of compliance.

3.2 Site Inspections/Audits

41. The project is currently in the operational stage and the DNP phase. During the reporting period engineer ensured that the contractor did not left the debris or construction waste at the sites and the campsites and batching plants have been decommissioned according the to the contractual conditions.
42. Based on the safeguard policy requirements of ADB; to conduct an external independent monitoring and assessment of the projects' environmental compliance and reporting, the qualified External Environmental Monitoring Firm was engaged for all Environment Category A Road projects in Georgia. The objectives of external environmental monitoring are to provide an independent review and assessment of (i) the achievements of Georgian Transport Sector projects in environmental safeguards objectives and principles, (ii) the effectiveness, impact and sustainability of taken measures to minimize, mitigate and/or compensate environmental impacts, (iii) the necessity of further mitigation measures if any, (iv) to identify strategic lessons for future policy formulation and planning, and (v) capacity building in environmental safeguards.
- The external environmental monitoring firm (EEMF) "Ecospectri" Ltd conducted the site inspection a on 01.05.24. The representatives of the EEMF "Ecospectri" Ltd on behalf of RD conducted the site inspection to verify compliance with the Contractor's Environmental Management Plans (EMPs) and progress toward the expected outcomes. The findings of the EEMF indicate that as of June 2024, the project is being implemented in accordance with the conditions of the ADB loan agreement, specifically regarding the Inclusion of environmental clauses, EMP, and Environmental Monitoring Plans (EMoP) in the contract conditions and Securing of Environmental Impact Assessment (EIA) approval and obtaining the relevant permits and licenses required for project implementation. Additionally, the firm concluded that the SAEMRS are being submitted on regular basis, which are disclosed on the ADB and RD websites.
43. In March 2025, the ADB Geo Safeguard Review Mission conducted a site visit to the F2 project. The purpose of this visit was to inspect the post construction situation and activities at the site.

44. Status of obtaining the required environmental permits and approvals from MoEPA and other relevant authorities is given in the Table 7. Contractor has obtained all the required permits required at this stage and nothing is pending related to approvals.

Total Required= 63

Total Obtained = 63

Progress = 100 %

Table 7: Status of required permits/approvals during Project life

Issue	Status	Approving Authority	Submission & Approval Dates
Re cultivation Plan for the Main Camp	Submitted/Approved	MEPA	25.04.2019
			12.06.2019
Re cultivation Plan for the Batching Plant #2	Submitted/Approved	MEPA	25.04.2019
			12.06.2019
Re cultivation Plan for the Batching Plant #1	Submitted/Approved	MEPA	03.06.2019
			05.09.2019
Re cultivation Plan for the Batching Plant #3	Submitted/Approved	MEPA	06.08.2019
			05.09.2019
Re cultivation Plan for the Sub camp #1	Submitted/Approved	MEPA	03.06.2019
			05.09.2019
Re cultivation Plan for the Sub camp #2	Submitted/Approved	MEPA	03.06.2019
			05.09.2019
Re cultivation Plan for the Sub camp #3	Submitted/Approved	MEPA	03.06.2019
			05.09.2019
Re cultivation Plan for the Sub camp #4	Submitted/Approved	MEPA	03.06.2019
			05.09.2019
Waste Management Plan for MEPA	Submitted/Approved	MEPA	30.09.2019
			25.10.2019
Technical Inventory Report about Stationary Sources of Ambient Air Pollution and Emissions of Pollutants Emissions for the Batching Plant #2	Submitted/Approved	MEPA	25.04.2019
			19.06.2019
Technical Inventory Report about Stationary Sources of Ambient Air Pollution and Emissions of Pollutants Emissions for the Batching Plant #1	Submitted/Approved	MEPA	03.06.2019
			07.08.2019
Technical Inventory Report about Stationary Sources of Ambient Air Pollution and Emissions of Pollutants Emissions for the Batching Plant #3	Submitted/Approved	MEPA	31.08.2019
			03.09.2019
	Submitted/Approved	MEPA	25.04.2019

Technical Conditions for Water abstraction from the Surface Water Objects for the Batching Plant #2			02.08.2019
Technical Conditions for Water abstraction from the Surface Water Objects for the Batching Plant #1	Submitted/Approved	MEPA	18.06.2019
			10.08.2019
Technical Conditions for Water abstraction from the Surface Water Objects for the Batching Plant #3	Submitted/Approved	MEPA	06.08.2019
			03.09.2019
Screening document for the placement of fuel tanks/refueling station	Submitted/Approved	MEPA	18.06.2019
			09.08.2019
Design of the Main Camp	Submitted/Approved	RD/MEPA	05.03.2019
			15.03.2019
Design of the Sub Camp #1	Submitted/Approved	RD/MEPA	18.06.2019
			31.10.2019
Design of the Sub Camp #2	Submitted/Approved	RD/MEPA	18.06.2019
			31.10.2019
Design of the Sub Camp #3	Submitted/Approved	RD/MEPA	18.06.2019
			31.10.2019
Design of the Sub Camp #4	Submitted/Approved	RD/MEPA	18.06.2019
			31.10.2019
Permit for tree cutting within the RoW	Submitted/Granted	MEPA/NFA /NASP	19.07.2019
			21.08.2019
Permit for cutting the Georgian Red Listed tree species within the RoW	Submitted/Granted	Government of Georgia/MEPA	18.07.2019
			20.09.2019
Screening application for the arrangement of the Rock Crushing Plant in village Vertkvichala	Submitted/Resubmitted/Approved	MEPA	23.12.2019
			28.02.2020
			31.03.2020
Technical Conditions for Water abstraction from Surface Water Objects for 56 points	Submitted/Approved	MEPA	23.12.2019
			03.02.2020
Design of the spoil disposal site in village Vertkvichala (#11)	Submitted/Resubmitted/Approved	MEPA	27.01.2020
			21.03.2020
			27.08.2020
Screening application for the arrangement of the waterflow channel at the spoil disposal site in village Vertkvichala (#11)	Submitted/Approved	MEPA	21.03.2020
			26.08.2020
Permission for cutting the Georgian Red Listed species of trees at the spoil disposal site in village Vertkvichala (#11)	Submitted/Granted	Government of Georgia/MEPA	27.08.2020
			31.12.2020

Design of the spoil disposal site in village Khevi (#12)	Submitted/Approved	MEPA	12.03.2020
			23.03.2020
Technical Inventory Report about Stationary Sources of Ambient Air Pollution and Emissions of Pollutants Emissions for the Rock Crushing Plant	Submitted/Approved	MEPA	30.04.2020
			16.06.2020
Re cultivation Plan of the Rock Crushing Plant	Submitted/Approved	MEPA	18.04.2020
			30.06.2020
Design of the spoil disposal site in village Sakasria (#6) (updated)	Submitted/Approved	MEPA	26/12/2020
			05/02/2021
Design of the spoil disposal site in village Vertkvichala (#7) (updated)	Submitted/Approved	MEPA	26/12/2020
			05/02/2021
Design of the spoil disposal site in village Vertkvichala (#9) (updated)	Submitted/Approved	MEPA	26/12/2020
			05/02/2021
Screening application for the river protection structure at the spoil disposal site in village Sakasria (#6) (Updated version – Rockfill berm)	Submitted/Resubmitted/Approved	MEPA	12.02.2021
			27.03.2021
			07.05.2021
Screening application for the river protection structure at the spoil disposal site in village Vertkvichala (#7) (Updated version – Rockfill berm)	Submitted/Resubmitted/Approved	MEPA	12.02.2021
			27.03.2021
			07.05.2021
Screening application for the river protection structure at the spoil disposal site in village Vertkvichala (#9) (Updated version – Rockfill berm)	Submitted/Resubmitted/Approved	MEPA	12.02.2021
			27.03.2021
			07.05.2021
Re cultivation Plan of the Spoil Disposal Site #11	Submitted/Approved	MEPA	30.10.2020
			26.11.2020
Screening for the gabions at the spoil disposal site in village Khevi (#12)	Submitted/Approved	MEPA	11.07.2021
			20.08.2021
Screening application for the arrangement of the waterflow channel at the spoil disposal site in village Vertkvichala (#11 Expanded)	Submitted/Approved	MEPA	16.07.2021
			09.09.2021
Compensation Tree Planting Plan	Submitted/Resubmitted/Approval	RD/ADB	16.08.2021
			03.09.2021
			17.09.2021
Design of the spoil disposal site in village Vertkvichala (#15)	Submitted/Resubmitted/Approved	MEPA/National Environmental Agency	23.09.2021
			22.03.2022

			20.05.2022
Design of the spoil disposal site in village Sakasria (#16)	Submitted/Resubmitted/Approved	MEPA/National Environmental Agency	23.09.2021
			22.03.2022
			20.05.2022
Design of the spoil disposal site in village Sakasria (#17)	Submitted/Resubmitted/Approved	MEPA/National Environmental Agency	23.09.2021
			22.03.2022
			20.05.2022
Approval of Maximum Allowable Discharge of Pollutants from the groundwater from the tunnels	Submitted/Granted	MEPA	21.10.2021
			18.11.2021
Permission for cutting the Georgian Red Listed Tree species on the territory designated for arrangement of the SDS #11 expanded	Submitted/Granted	Government of Georgia/MEPA	04.11.2021
			22.12.2021
Re cultivation Plan of the spoil disposal site #9 in village Vertkvichala	Submitted/Approved	MEPA	08.02.2022
			24.02.2022
Screening application for the river protection structure at the spoil disposal site in village Vertkvichala (#15)	Submitted/Approved	MEPA/National Environmental Agency	24.05.2022
			08.08.2022
Screening application for the river protection structure at the spoil disposal site in village Sakasria (#16)	Submitted/Approved	MEPA/National Environmental Agency	24.05.2022
			08.08.2022
Screening application for the river protection structure at the spoil disposal site in village Sakasria (#17)	Submitted/Approved	MEPA/National Environmental Agency	24.05.2022
			08.08.2022

45. The project is now in the operational stage and the DNP phase, with the road opened for traffic. The contractor has completed the construction of the secondary road. All primary facilities, except for the main camp and Batching Plant 3, have been decommissioned. These two facilities will remain operational until the end of the DNP period for maintenance purposes. Currently, most of the staff on-site are focused on securing the project area. No new environmental issues have been observed at the site
46. During the DNP stage, the primary issues pertain to the decommissioning and recultivation of the project's main facilities. Below is the status of decommissioning and recultivation for these facilities as described in Table 8. The contractor has completed the decommissioning of all facilities, except for the main camp and Batching Plant 3, which will remain operational until the end of the DNP period.

Table 8: Decommissioning and Recultivation Status of Project Primary Facilities

#	Activity	Required Action	Responsibility	Approval Status	Findings and Area of concerns	Corrective Action Status
1	Decommissioning and Recultivation of the site for Subcamp 1	CC to implement recultivation /reinstatement activities according to the approved recultivation plan at the site designated for Subcamp 1 in village Khevi, Kharagauli municipality	HNRB Contractor	Approved by MoEPA 05.09.2019	Completed Land has been handed over to the landowner after decommissioning of the campsite. Currently, landowner installed the concrete batching plant for private works.	Completed No further Action required Agreement signed with the land owner.
2	Decommissioning & Recultivation of the site for Subcamp 2	CC to implement recultivation /reinstatement activities according to the approved recultivation plan at the site designated for Subcamp 2 in village Khunevi, Kharagauli municipality	HNRB Contractor	Approved by MoEPA 05.09.2019	Land handed over to the owner and agreement signed. Agreements with the landowner. No further Action required.	Completed
3	Decommissioning & Recultivation of the site for Subcamp 3	CC to implement recultivation /reinstatement activities according to	HNRB Contractor	Approved by MoEPA 05.09.2019	Completed by the Contractor Contractor cleaned the area and removed the building material from there and left the concrete floor on local's demand as they want to use this as parking facility. Construction works ongoing for the building the access road and drainage channel.	Completed

		the approved reclamation plan at the site designated for Subcamp 3 in village Vertkvichala, Kharagauli municipality				
4	Decommissioning & Reclamation of the site for Subcamp 4	CC to implement reclamation /reinstatement activities according to the approved reclamation plan at the site designated for Subcamp 4 in village Sakasria, Kharagauli municipality	HNRB Contractor	Approved by MoEPA 05.09.2019	Contractor shifted labor and their belongings, handed over the land to contractor as the owner wants to keep concrete structure and signed the agreement. No further Action required as now it's in control of landowner.	Completed
5	Decommissioning & Reclamation of the site for the Main Campsite	CC to implement reclamation /reinstatement activities according to the approved reclamation plan at the site designated for Main Campsite in village Boriti, Kharagauli municipality	HNRB Contractor	Approved by MoEPA 12.06.2019	Still in use for accommodation and office works and contractor will use until the completion of the local roads and other project related works. A part of this campsite is being used by the Emergency services 112.	Still in Use of the contractor.

6	Decommissioning & Recultivation of the site for Concrete Batching Plant 1	CC to implement recultivation /reinstatement activities according to the approved recultivation plan at the site designated for Batching Plant 1 in village Khevi, Kharagauli municipality	HNRB Contractor	Approved by MoEPA 05.09.2019	Contractor decommissioned the batching plant and provide the slope protection by placing concrete blocks and signed agreement with the owner that he wants to keep the hard floor. No further Action Required.	Completed No further action required
7	Decommissioning & Recultivation of the site for Concrete Batching Plant 2	CC to implement recultivation /reinstatement activities according to the approved recultivation plan at the site designated for Batching Plant 2 in village Khunevi, Kharagauli municipality	HNRB Contractor	Approved by MoEPA 12.06.2019	Contractor decommissioned the batching plant and removed the concrete floor; however, left some area on the 3 rd land owner demand. However, currently the 3 rd landowner also demanding to remove the hard floor and contractor has removed the hard floor. Contractor removed concrete floor and cleared all the area.	Completed No further action required
8	Decommissioning & Recultivation of the site for Concrete Batching Plant 3	CC to implement recultivation /reinstatement activities according to the approved	HNRB Contractor	Approved by MoEPA 05.09.2019	BP 3 is still in use for secondary road construction and contractor will use it until the completion of the Project.	BP will be used for maintenance purpose until the end of the DNP .

		recultivation plan at the site designated for Batching Plant 3 in village Sakasria, Kharagauli municipality				
9	Crushing Plant	CC to recultivate/ reinstate the area as agreed in the Recultivation Plan	HNRB	30-03-2020	Completed Contractor decommissioned the crushing plant and handed over to land owner. Currently land is being used by F1 contractor. No further action required by contractor for F2.	Completed No further action required

47. There are three issues on hold the previous bi-annual reports. The contractor resolved one noncompliance by clearing the area near BP 3. However, rehabilitation work is currently on hold for SDS #11, the main camp, and batching plant #3, which are still being used by the contractor. The contractor has a positive attitude and made good progress in resolving these issues. The implementation status of the corrective actions proposed in the previous reports is provided in Table 9 below.

Table 9: Implementation Status of Corrective Actions from previous monitoring reports

ID #	Issue	Action required	Responsibility	Target date	Description of Resolution	If not yet resolved, indicate the reason why and specify further required
1	River protection works required along river Dzirula at 7 sites including: SDS# N6, N7, N11, N12, N15, N16, N17	CC to start river protection works parallel with construction activities	Contractor	Up to completion of excavation works at Chumateleti-Khevi F1 project.	The contractor has completed rehabilitation work at six sites. SDS#11 is currently in use by GOG fouded projecht and will be rehabilitated once project finishes excavating and dumping soil at SDS#11. 	On Hold <u>Out of seven, six sites completed.</u>

						
2	Inert waste near BP 3	Contractor to remove all the inert waste along the river bank near BP 3	Contractor	2 weeks	The contractor removed the inert material 	Resolved
3	Decommissioning works at main campsite	CC to implement re-cultivation /reinstatement activities according to the approved recultivation plan at the site designated for Main Campsite in village Boriti,	Contractor	February	Still in use for accommodation and office works and the contractor will use until the completion of the local roads and other project related works. One part of the building is given for the 112 Emergency services.	On Hold up to completion of DNP period. RD has intention to keep that building for

		Kharagauli municipality			 	the services. Emergency
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4	Decommissioning & Re-cultivation of the site for Concrete Batching Plant 3	CC to implement re-cultivation /reinstatement activities according to the approved re-cultivation plan at the site designated for Batching Plant 3 in village Sakasria, Kharagauli municipality	Conractor	July 2024	Batching Plant 3 is still in use of the Contractor for secondary roads and maintenance works.	On Hold up to completion of DNP.

48. The engineer has established NCRs and a corrective action tracking register to follow up on the open NCRs on the project level, and reminders are being sent to take corrective actions, when required. As the project is in the DNP phase, only one letter was written to the Contractor regarding the cultivation works at SDS 11. The details are given below in Table 10.

Table 10: Correspondence between SC and CC to resolve issues related to dumpsites

Date	Engineer Letter	Subject	Issue/ Concern	Required Action	Target Date of completion	Progress
07/12/2024	3705-CKUSE60-UBM-GE	Warning for the washing out of SDS 11	Rehabilitation of the dumpsite 11	Contractor is required to build the river channel and rehabilitation of SDS 11	SDS#11 is currently in use by GOG founded project and will be rehabilitated once project finishes excavating and dumping soil at SDS#11.	Ongoing

3.3 Issues Tracking (Based on Non-Conformance Reports)

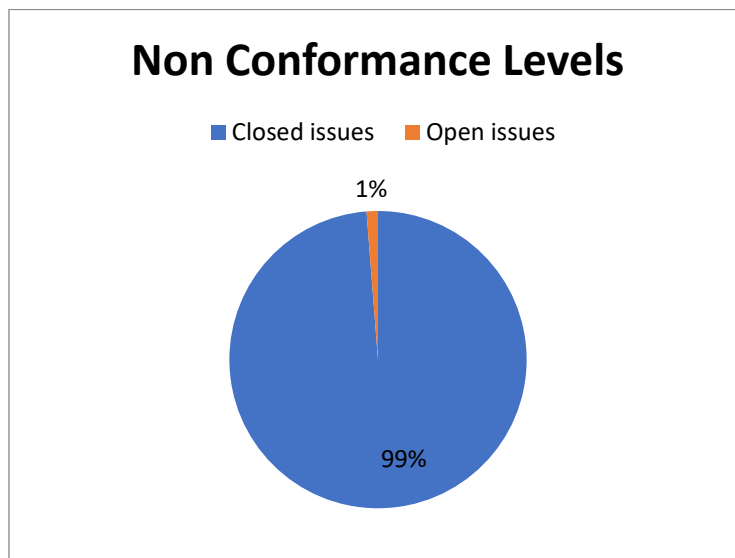
49. The issues tracked during the reporting period are detailed in Table 11. There are three issues that pertain to the rehabilitation and recultivation of the project's primary sites, which are expected to be completed by the end of this year.

Table 11: Summary of issue tracking during the project (January – June 2025)

Total number of issues for the Project	323
Number of open issues (for next Q)	3 on hold
Number of closed issues (during project life)	320
Percentage closed	99.1 %
Issues opened this reporting period	0
Issues closed this reporting period	1

50. Data on the number of closed and open issues is presented in Figure 3. This data is based on the issues that were observed and have been closed or remained open during the Project.

Figure 3: Non-Conformance levels during the Project



51. During the project's duration, there were a total of three hundred twenty-three (323) issues identified. Out of these, three hundred twenty (320) issues have been resolved.
52. The remaining three issues on hold are as follows:
1. Rehabilitation and recultivation of the main camp.
 2. Decommissioning of Batching Plant #3 will be postponed until the end of the DNP period for repair and maintenance work.
 3. SDS#11 is currently in use by GOG founded project and will be rehabilitated once project finishes excavating and dumping soil at SDS#11.

The contractor will then rehabilitate and recultivate the area according to the design approved by MoEPA.

These pending issues were communicated to the contractor through letter #3705-CKUSE60-UBM-GE, dated December 7, 2024.

3.4 Trends

53. As the project is at operation stage and contractor has opened the highway for the traffic. The contractor has completed the construction of the secondary roads. The contractor has completed the rehabilitation works of the six sites out of the seven sites according to the approvals granted by MoEPA and rehabilitation and land levelling of the disturbed areas under the bridges.
54. There was no new violation observed during the reporting period. The only three issues on hold from the previous reporting periods are related to the rehabilitation of the SDS 11 and decommissioning the batching plant 3 and Main Camp. The contractor will decommission the batching plant at the end of 2025. SDS#11 is currently in use by GOG founded project and will be rehabilitated once project finishes excavating and dumping soil at SDS#11.
55. During the project implementation phase, the contractor attitude towards resolving environmental non compliances was positive.

3.5 Unanticipated Environment Impacts or Risk

56. No unanticipated environment risk observed during the reporting period.

4. RESULTS OF ENVIRONMENTAL MONITORING

4.1 Overview of the Monitoring Conducted During Current Period

57. N/A as project is at operation stage and Instrumental monitoring is not required at this stage as set in the EIA.

4.2 Summary of Monitoring Outcomes

58. N/A as project is at operation stage

4.3 Material Resource Utilization

59. Since the beginning of project up to June 2025, following construction materials were mobilized on site by the Contractor. The construction work completed at the end of last year 2024.

Table 12: Construction Material Mobilization

#	Materials	Unit	Delivered up to June 2025
1	Cement	ton	408847.63
2	Rebar	ton	74573.766
3	I-beam steel	ton	16733.92
4	Structural pipe	ton	1894.18
6	Steel fibre	ton	463.86
7	Anchor bars	ton	46.58
8	Anchor cable	ton	17.9585

9	Geotextile	m ²	34960
10	Rock Nail	ton	200.26
11	Water stops	Piece	1500
12	Drain pipe	meter	3216
13	Waterproof	m ²	16488
14	Steel wire rope	m ²	44065
15	Elastomeric Bearing	set	7864
16	Steel Strand	ton	1529.276
17	Steel Plate	ton	15575.802
18	Angle Steel	ton	2960.7
19	Welding Wire and Flux	ton	55
20	Expansion joint	meter	184.8
21	Bolts	set	925023

4.3.1 Water, Fuel and Electricity Consumption

60. During the reporting period activities involving water consumption include: construction of secondary roads, interchanges, and batching plant operation, dust suppression and water being used for lavatories and washing facilities by the workers and in the kitchen.
61. Diesel fuel is being consumed for the operations of heavy vehicle and equipment used for the construction activities and power generators at the construction site and batching plants. Electricity is being used for campsite and offices. The details of water, fuel and electricity consumption is given below in Table 13.

Table 13: Water, Fuel and Electricity consumption

#	Materials	Unit	Cumulative from start of the Project
1	Electricity	Kilowatt-hour	3637120
2	Diesel	Liters	2066609
3	Petrol	Liters	13230
6	water	Cubic meters	14120

4.4 Waste Management

62. Household waste is collected and transported by the subcontractor (municipal service company “Kharaguldasuftaveba”) on a regular basis. Different types of hazardous waste are temporarily kept in the restricted area (fenced on impervious base with roof) before transported by the licensed waste transportation/treatment company (LTD “Sanitary”).

Information regarding the generation of waste during reporting period is given in the Table 14.

Table 14: Waste management (January - June 2025)

#	Domestic/Hazardous Waste & Sewage	Estimated Volume	Storage Area	Licensed Company
1	Household waste	1800 kg	Camp sites, Workshops, Construction sites	Kharagauli Municipality (Kharaguldasuftaveba)
2	Sewage water	180 m ³	Septic tanks	Individual Entrepreneur Akaki Tskhadadze (18001007374) Contracted since October 2020) collects the sewage by Cesspool Truck, transports it to Zestaponi and discharges it in Zestaponi sewage system, operating under the LTD United Water Supply Company of Georgia (UWSCG) of the Ministry of Regional Development and Infrastructure of Georgia. Each sewage transfer note is duly signed upon discharge by the local representative of the UWSCG.

4.3 Current Period

63. The main source that generates the big amount of the waste is earthworks, specifically: excavation of the soil and rock soil material excavated from the tunnels. Estimated calculations for spoil generation and excavated material up to June, 2025 are given below:

Estimated spoil generation: 4,900,000 m³

Estimated spoil reuse for embankments: 850,000 m³

Excavated spoil material up to June 2025: 3, 570,000 m³

4.5 Health and Safety

64. The Contractor's HSE team: Mr. Zheng Yulin (HSE Manager), Mr. Xu Chunlei (HSE Supervisor), Mr. Merab (HS trainer) and Mr. Giorgi (HS Specialist) were at the site. Project management and HSE management team are responsible for maintaining safety and protection against HSE accidents and are available on-site. Engineer's safety specialist has been demobilized due to completion of the Main works. Currently as per information provided by HNRB, only security guards present at the site.

4.5.1 Community Health & safety

- 65. No incident reported involving community members or no traffic incident was recorded during the reporting period.
- 66. The contractor has appointed security officers to supervise the active construction site and has installed CCTV cameras at the main campsite. To ensure safety, the contractor is providing barriers and fencing along the road to isolate and secure the construction activities from road users. Additionally, traffic signs, emergency lights, road markings, barricades, and signage are being provided to guide the road users and facilitate a smooth flow of traffic.

4.5.2 Occupational Health & Safety

- 67. Daily safety inspections of the construction site for secondary roads were being carried out by HSE representatives as part of a continuous process. The Contractor's HSE specialist reported all safety deviations to project management. The HSE department conducted mandatory HSE induction for new employees and provides specialized safety training to enhance the safety culture within the organization.
- 68. The Contractor supplies mandatory personal protective equipment (PPE) for all the workers on site based on the nature of the Job.
- 69. Additionally, the HSE team conducted monthly inspections of fall protection and lifting equipment.
- 70. NO work-related accident was reported during the reported period.

4.5 Trainings

- 71. Project is at operation stage; Induction training is provided when any new worker comes; working at height, tunnel safety trainings were provided by the contractor. TBTs were conducted on daily basis for the workers involved in construction of secondary roads.

4.6 Grievance Redress Mechanism and Complaints

- 72. A grievance redress mechanism (GRM) is established during consultations to allow affected persons to appeal any disagreeable decision, practice or activity arising from land or other assets compensation. GRM also provides a forum to the public/ community who might believe that they are adversely affected by the project. The broad structure, procedure and function of GRM were discussed during the consultation meetings. During public consultation meetings, the APs were informed of their rights and the procedures for addressing complaints whether verbally or in writing. Grievance Redress Committees (GRCEs) were established before the start of LARP implementation at Municipality level (Kharagauli Municipality) and includes representatives of the mayor, of the village governments and of the APs (including a woman AP). Upon commencement of civil work, the CC and CSC are actively engaged in GRM in addressing the concerns/complaints related to construction process. The complaint resolution is first attempted at Municipality level GRCE. If any aggrieved AP is unsatisfied with the GRCE decision at Municipality level, the complaint will be raised to the Resettlement Division of RDMRDI within 2 weeks after receiving the decision from GRCN. The grievance mechanism does not impede access to the country's judicial or administrative remedies. Affected Persons can approach the court of law at any time and independent of grievance redress process.

4.6.1 Summary of the Grievance Redress Status (Maintained by RD)

- 73. RD received 63 grievances from the APs up to reporting date. Here are the following issues identified by complainants:

- Damage to Infrastructure/Assets
- Crop Compensation
- Inclusion in LARP
- Loss of business
- Compensation Rate
- HSE Concerns
- Noise Disturbance
- Restriction or loss of access and
- Other

74. Out of the 63 grievances, 61 (97%) have been successfully addressed, with 2 (3%) grievances currently open and are under review. The nature of these grievances is diverse: i) 6 pertain to compensation assessment, ii) 21 relate to inclusion in LARP, iii) 1 is linked to crop compensation, iv) 14 are associated with damage to infrastructure/assets, v) 1 involves disturbance due to noise, dust and noise, vi) 7 are connected with HSE, vii) 5 are relevant to loss of business, viii) 3 complaint is registered due to loss of access, and ix) 5 complaints fall into the "other category." The RD team, along with the social/resettlement specialist from the CSC and contractor, is diligently working to resolve these grievances. The overall number of grievances has significantly decreased and a detailed breakdown by category is provided in Table 15.

Table 15: RD Complaint Log
(Total Grievances Received up to the End of Reporting Period June 2025)

Number of Complaints by Category:	Closed	Tech.hold²	Open	Total	%
Damage to Infrastructure / Assets	13	0	1	14	22,22%
Crop Compensation	1	0	0	1	1,59%
Other	5	0	0	5	7,94%
Inclusion in LARP	21	0	0	21	33,33%
Disturbance: Noise / Vibration / Dust	1	0	0	1	1,59%
Restriction or loss of access	1	0	0	1	1,59%
Recruitment / Employment	0	0	0	0	0,00%
Loss of business	5	0	0	5	7,94%
Compensation Rate	6	0	0	6	9,52%
Registration / Ownership Status	0	0	0	0	0,00%
HSE Concerns	5	0	1	6	9,52%
Loss of Access	3	0	0	3	4,76%
Total	61	0	2	63	100%

4.6.2 Grievance Redress Status at Project Site maintained by PMSC (UBM)

75. A total of 185 grievances have been received, originating either directly from the local community or through RD since the Project's inception. Of this total, 72 complaints were filed by females, and 113 were submitted by males. Concerning the received grievances,

² Those are the cases which are related to ongoing vibration monitoring throughout the construction.

119 were related to damaged infrastructure/assets, 17 were related to design issues/inclusion in LARP, 26 pertained to restriction or loss of access, 7 involved losses of business, 8 were associated with disturbance due to noise, 2 were related to HSE concerns, 2 were concerning road upgrading, and 3 were categorized as "Other." Out of the 185 grievances, 179 (97%) have been successfully resolved, while 6 (3%) remained open. The contractor and CSC continue their efforts to address and resolve these outstanding complaints. Notably, all 6 pending complaints have already been forwarded to the contractor. Efforts to resolve these issues are currently underway and are expected to be completed by August 2025, according to the contractor. Progress will be documented in the next Semi-Annual Report, scheduled for submission in December 2025. The detailed breakdown by category is presented in Table 16. Notably, 69 of the 72 complaints lodged by women have been resolved a 96% rate while 110 of the 113 complaints from men have also been addressed, yielding the 96% resolution. The project team emphasizes equal importance in addressing both male and female complaints, underscoring their commitment to ensuring the project remains free from any form of complaint.

Table 6.2: Summary of the Grievance Log maintained by PMCSC (UBM) for entire period

Number of Complaints by Category:	Closed	Tech.hold	Open	Total	%
Damage to Infrastructure / Assets	114	1	4	119	64,32%
Crop Compensation	1	0	0	1	0,54%
Other	3	0	0	3	1,62%
Inclusion in LARP	17	0	0	17	9,19%
Disturbance: Noise / Vibration / Dust	8	0	0	8	4,32%
Restriction or loss of access	25	0	1	26	14,05%
Recruitment / Employment	0	0	0	0	0,00%
Loss of business	7	0	0	7	3,78%
Compensation Rate	0	0	0	0	0,00%
Registration / Ownership Status	0	0	0	0	0,00%
HSE Concerns	2	0	0	2	1,08%
Road Upgrading	2	0	0	2	1,08%
Total	179	1	5	185	100%

76. A positive development is that no complaints were submitted during the reporting period, even while the DNP is underway. This clearly demonstrates the confidence the locals have in the project team, RD, Engineer, and Contractor. The team has been diligently addressing all pending complaints, with 97% already resolved. The remaining issues are expected to be resolved by the end of August 2025.

5. FUNCTIONING OF SSEMP

5.1 SSEMP Review

77. Contractor with full assistance from the international environmental safeguard expert of the engineer prepared SEMP with its sub-plans and the corrected version of SEMP by the

engineer was submitted to RD through letter no. 0025/CKUSE60/UBM-GE dated: July.08.2019 which has been approved on August 12, 2019. The Copy of SEMP and its sub-plans are available at engineer as well as contractor's office for the implementation.

78. One section has been added to the SEMP during preparation regarding the suggested monetary penalties to discourage the contractor from any environmental violations. Contractor is updating spoil disposal Plan for each of the new spoil disposal which is not mentioned in the EIA and preparing necessary documentation to include these sites as project related facility. Topic Specific-EMPs (TSEMPs) include the followings:

Topic Specific Plans:

- (a) Waste Management Plan;
- (b) Spoil Disposal Plan for Arrangement of Spoil Disposal Area;
- (c) Re-cultivation Plan;
- (d) Traffic Management Plan;
- (e) Occupational Health and Safety Plan;
- (f) Emergency Response Plan;
- (g) Air Quality Plan;
- (h) Spill Response Plan;
- (i) Noise and Vibration Management Plan;
- (j) Clearance, Re-vegetation and Restoration Management Plan;
- (k) Groundwater Management Plan;
- (l) Tunnel Blasting Plan;
- (m) Biodiversity Management Plan.
- (n) Grievance Redress Mechanism;
- (o) Chance Find Procedure; and
- (p) HSE Plan

Site Specific Plans:

- (a) Construction Camps Plan;
- (b) Concrete Batching Plants and Workshop Plan; and
- (c) Bridge Construction Plan (for each bridge construction site).

79. In accordance with the Asian Development Bank (ADB) Safeguard Policy Statement 2009 (SPS) and the loan or grant agreement between ADB and the borrower, the borrower is required to assess implications of unanticipated risks and impacts under the project; and to identify and implement necessary risk mitigation measures. The unexpected event did not occur within the reporting period.

5.2 Status of Recultivation Plan

80. During the reporting, Contractor has completed the recultivation/ rehabilitation works for all the sites except the SDS #11 which is in use of Chumateleti –Khevi F1 project to dump the spoil. After the completion of dumping the spoil by F1, they will level the site.

6. GOOD PRACTICES

6.1 Best Practices Adopted

81. Following best practices are adopted by the contractor during the reporting period:
- The contractor has successfully completed the rehabilitation and recultivation of six spoil disposal sites, as well as the river protection works in accordance with the requirements set by the Ministry of Environment Protection and Agriculture (MoEPA).

- RD established office of 112, emergency services, Ministry of Interior in the main camp and it is functioning effectively.

7. SUMMARY AND RECOMMENDATION

7.1 Summary

82. Project is in operation phase and road has been opened for the traffic since October 28, 2023. The construction of secondary roads has been completed. Overall progress of works is 100 %.
83. It is evident from the graph that there is a significant change in number of total staff from the construction stage and the number of staff is the lowest as the project is at DNP stage and contractor is demobilizing step by step. The ratio of the local to foreign workers is 83 % local and 17% foreign workers. As informed by the contractor that during the June 2025 most of the staff belong to the security.
84. During the project's duration, there were a total of three hundred twenty-three (323) issues identified. Out of these, three hundred twenty (320) issues have been resolved.
85. The remaining three issues pertain to the rehabilitation and recultivation of the main camp; Batching Plant # 3 decommissioning will be on hold up to the end of the DNP period for the repair and maintenance works. SDS#11 is currently in use by GOG founded project and will be rehabilitated once project finishes excavating and dumping soil at SDS#11
86. Out of the 63 grievances received by RD , 61 have been successfully addressed, with 2 grievances currently open and are under review
87. Overall, the contractor's behavior towards resolving environmental problem was positive during the implementation of the Project.

7.2 Recommendations

88. Table 17 summarize the recommended mitigation measures which contractor is required to apply in the 3rd and 4th quarter of 2025 to meet the requirements furnished in the EMP and conditions of the contract at this stage of the project:

Table 17: Summary of recommendations and responsibilities

Recommendations	Responsibility
Complete the reinstatement/ repair works at the site, where required.	CC to implement and CSC to monitor
SDS#11 is currently in use by GOG founded project and will be rehabilitated once project finishes excavating and dumping soil at SDS#11.	CC to implement and CSC to monitor
Continue delivering the waste to the municipality from the main camp until leaving the site	CC to implement and CSC to monitor
Rehabilitate/ recultivate the BP3 and main camp according to the contractual requirements.	CC to implement and CSC to monitor
Don't leave debris, construction waste, municipal waste while leaving the site	CC to implement and CSC to monitor

ANNEXES

Annex-1 Project Pictures

A view of Main Camp



Office of the Emergency Services at the main camp site



A view of the Batching Plant 3 at site.



A view of the Spoil Disposal Site 11



Annex 2: Correspondence details during DNP period.



Construction Supervision Consultant for the
E60 Highway F2 Khevi-Ubisa Project

Attention to:

Mr. Dai Xiangyang (Contractor's Representative)
HNRB-Construction of Khevi-Ubisa Section (E60 Highway Route)-KURP/CW/OCB-01

Subject: Warning for the risk of washing out the Disposal Sites

Our Reference: 3709/CKUSE60/UBM-GE

Date: 12.07.2024

References:

(1) Employer 's letter N 2-08/15076	Dated:09.10.2023
(2) Engineer's letter 3043/ CKUSE60/UBM-GE	Dated:10.02.2023
(3) Engineer's letter 3491/ CKUSE60/UBM-GE	Dated: 04.10.2022
(4) Engineer's letter 3068/CKUSE60/UBM-GE	Dated: 01.03.2023
(4) Engineer's letter 3298/CKUSE60/UBM-GE	Dated: 10.06.2023
(5) Engineer's letter 3505/CKUSE60/UBM-GE	Dated: 11.10.2023
(6) Engineer's letter 3561/CKUSE60/UBM-GE	Dated: 11.10.2023

Dear Mr. Xiangyang,

Dear Mr. Xiangyang,

Progress is being made by the contractor in arranging river embankment structures at the dumpsites. Specifically, the construction of embankment structures at dumpsites N6, N7, N12, N15, N16, and N17 is nearly complete. However, the situation at dumpsite N11 remains problematic.

Despite numerous verbal and written warnings from the Engineer (ref 2-6), there are still no protective structures in place at the disposal areas. Consequently, there is a risk of the disposal sites being washed away.

The Engineer is aware that over the past year, waste rock has not been deposited at N11 by Contractor F-2; instead, waste rock from F-1 has been imported. However, the contractor has not provided the legal justification for this action (transfer of the dumpsite to another party or use by others) to the Engineer.

We would like to remind you that according to Order No. 2-1328 issued by the Minister of Environment Protection and Agriculture of Georgia (N11 landfill screening decision), the total volume of inert waste allowed at the landfill is 2,292,359 m³. For the safe disposal of such a large volume of waste rock, the project includes plans to modify the riverbed and redirect the river flow during both low and flood periods using a 1230-meter concrete trapezoidal channel. Additionally, to divert water flow from the river to the channel, a concrete retaining wall (dam) should be constructed at the channel's beginning, with bridges at the tributaries to facilitate water entry into the main channel.

Given that a significant amount of waste rock has already been deposited at the reservoir and flood prevention measures (such as the water channel and dam) have not been implemented,

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Georgian Branch: Apakidze 11, Room 501 Tbilisi/ GEORGIA

there is a substantial risk of the reservoir overflowing during periods of high water, potentially leading to severe environmental consequences, even catastrophic ones.

We are forwarding a letter (ref (1)) from the City Hall of Kharagauli Municipality to the Department of Roads concerning this issue. Please provide your position on resolving these issues within 5 days.

With Kind Regards,



Fethi ERDEM
Team Leader

UBM Uluslararası Birleşmiş
Müşavirler Müşavirlik Hizmetleri A.Ş.
Construction Supervision Consultant for the
E60 Highway F2 Khevi-Ubisa Project (KURP/CS/QCBS-01)

For due Action:

Mr. Dai Xiangyang (Contractor's Representative)
HNRB-Construction of Khevi-Ubisa Section (E60 Highway Route)-KURP/CW/OCB-01

For Information:

Mr. Levan Kupatashvili (Deputy Chairman)
Ministry of Regional Development and Infrastructure of Georgia-Roads Department of Georgia

Attachment: N/A

Response Required: ☒ Yes ☐ No