

Semi-Annual Environmental Monitoring Report

#4 Semestral Report

Reporting period: July - December 2021

January 2022

GEO: Construction of Shorapani – Argveta Section (E60 Highway Route), Lot F4 Project

Financed by the Asian Development Bank

Project Number: GEO 53178-001

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CURRENCY EQUIVALENTS

(as of December 2021)

Currency unit	–	{United State Dollars(USD)}
{ GEL}1.00	=	#{ 0.3257 USD}
\$1.00	=	{ 3.07032 GEL}

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ABBREVIATIONS

ADB	Asian Development Bank
AP	Affected Person
BOD	Bio-Chemical Oxygen Demand
BP	Batching Plant
CAR	Corrective Action Requirement
CAREC	Central Asia Regional Economic Corridor
CC	Construction Contractor
COD	Chemical Oxygen Demand
CLO	Community Liaison Officer
CSCS	Consultancy Services for Construction Supervision
CSC	Construction Supervision Consultant
CSEMP	Contractor's Contract Specific Environmental Management Plan
dB (A)	Decibel
DO	Dissolved Oxygen
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EMP	Environmental Management Plan
EMR	Environmental Monitoring Report
ESR	Environmental Sensitive Receiver
GRM	Grievance Redress Mechanism
HIV	Human Immunodeficiency Virus
HS	Health & Safety
HSE	Health Safety and Environment
IEE	Initial Environmental Examination
IFC	International Finance Corporation
MAC	Maximum Admissible Concentration
MoEPA	Ministry of Environmental Protection and Agriculture
MoESD	Ministry of Economy and Sustainable Development
MoM	Minutes of Meeting
MRDI	Ministry of Regional Development and Infrastructure of Georgia
NCN	Non-Conformance Notice

NCR	Non-Conformance Report
NFA	National Forest Agency
NOC	No Objection Certificate
OSHA	Occupational Safety and Health Administration
PPE	Personnel Protective Equipment'
PAPs	Project Affected Persons
PIU	Project Implementation Unit
QC	Quality Control
RD	Road Department
RoW	Right of Way
SC	Supervision Consultant
SEMP	Site Specific Environmental Management Plan
SFF	State Forest Fund
SPS	Safeguard Policy Statement
STD	Sexually Transmitted Diseases
TSS	Total Suspended Solids
VG	Village Governor

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1. INTRODUCTION

1.1 Preamble

1. This report presents the Semi-Annual Environmental Monitoring review of Shorapani – Argveta Section (E60 Highway Route), Lot F4 Construction Project and covers the period of July to December 2021.
2. This report is the fourth Semi-Annual Environmental Monitoring Report (SAEMR) prepared for the Project.

1.2 Headline Information

3. The Project is a newly built a two-lane highway project with a total length of 14.7 km and involves construction of a new road section of the E-60 highway, namely Lot F4, located in Imereti Region that is one of the main historical, economic, cultural and educational regions of central Georgia. Lot F4 forms the Shorapani – Argveta portion of the Khevi-Ubisa-Shorapani-Argveta section of the E-60.
4. The project involves the construction of 2*6 tunnels, 2*7 bridges, 4 interchanges, 2*1 overpass, 5 underpasses and 50 culverts. The length of the Project Road is given below:
 - 1) Right lane (TA – meaning Tbilisi – Argveta direction) - 14.778 km,
 - 2) Left lane (AT – meaning Argveta – Tbilisi direction) - 14.726 km
5. The Project alignment is located within Zestaphoni Municipality, which covers a total area of 423 square kilometers and includes the towns of Zestaphoni and Shorapani as well as numerous small villages such as Kveda Tseva, Shorapani, Zestaphoni, Kveda Sakara, Argveta. Besides, the alignment runs through forest areas, agricultural land plots, hilly forest slopes, residential areas and riparian ecosystems.
6. The Project outlines (km 0+000 – 14.7+000):
 - Classification of road: Highway
 - Design speed: 100 km/h
 - Speed Limit: 80 km/h
 - Road length: 14.7 km
 - Road width: 27.60 m
 - Numbers of lanes: 2x2
 - Lane width: 3.75 m
7. The Official Work Commencement Date for the construction is 20th October 2020. The period of implementation of the contract, including the Defects Notification Period and until the issuing of Final Acceptance and Performance Certificate is 60 (sixty) months after the Commencement Date. The construction completion date for the Project is 20th October 2023.

2. PROJECT DESCRIPTION AND CURRENT ACTIVITIES

2.1 Project Description

8. 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 Project Road comprises Lot F4 (Shorapani – Argveta) of the Khevi-Ubisa-Shorapani-Argveta Road (E-60). The proposed highway is located on the complex hilly-mountainous geographical area and crosses numerous mountains, rivers and ravines. Mixed forests, typical to this climate zone, cover the slopes of the mountains.

9. The alignment is located on the left side of the existing 2-lane road both as exposed road and through two tunnels. The existing road passes through difficult mountainous terrain paralleling first the River Rikotula and then, the River Dzirula and consists of multiple bridges and several tunnels.
10. The government of Georgia has requested ADB to finance for the construction of the proposed highway. The project is classified as Category A Project – Environmental Safeguards under ADB SPS 2009 since it is considered to have significant diverse impacts over a wide area, such as noise impacts, significant quantities of spoil disposal, road safety impacts, and vibration. Environmental Impact Assessment (EIA) was prepared in May 2019 and disclosed on ADB website in October 2019.
11. National EIA document was prepared and submitted by the Roads Department (RD) to the Ministry of Environmental Protection and Agriculture (MoEPA) in December 2017. State Ecological Expertise approval obtained from MoEPA on 26-03-2018. This covers all scopes under the Project.
12. The Project involves the construction of a new road section of the E-60 highway located in Imereti Region of Central Georgia (see Figure 1). Proposed Lot F4 forms the Shorapani-Argveta 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 – meaning Tbilisi – Argveta direction) - 14.778 km,
 - 2) Left lane (AT – meaning Argveta – Tbilisi direction) - 14.726 km

Figure 1: Location of Project Area



13. The project includes construction of 2*6 tunnels with total length 8506.36 meters, 2*7 bridges with total length of 5020.54 meters, 2*1 overpasses with total length of 84.64 meters, 5 underpasses with total length of 198 meters, 50 culverts with total length of 1552.07 meters and 4 interchanges with total length of 13466 meters.
14. Bridges' length will vary from 32 meter to 846 meters. Tunnels will be constructed with double tubes with length from 399 meters to 1193 meters.
15. Technical parameters 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: 27.60 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

2.2 Project Contracts and Management

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

Table 1: Project Information

Employer	Road Department of Georgia, Ministry of Regional Development and Infrastructure of Georgia
Funding Source	Asian Development Bank (ADB)
The Engineer	UBM Uluslararası Birleşmiş Müşavirler Müşavirlik Hizmetleri A.Ş. (Turkey) and SMEC International PTY LTD (Australia)
Contractor	Guizhou Highway Engineering Group Co Ltd and China National Technical Import & Export Corporation Joint Venture
Contract Number	SARP/CW/OCB-01
Contract Date of the Contractor	16.01.2020
Starting Date of Construction	20.10.2020
Contract Period	36 months (36+24 month engineer)
Original Completion Date	20.10.2023
Expired time	15
Remaining time	21 months
Defects Notification Period	24.3 months 730 days
Contract Price (GEL)	GEL 582 777 310.00

17. The TOR for the Consultancy Services for Construction Supervision (CSCS) Contract contains the following tasks for the environmental specialists:

- Scrutinize Contractor's construction method statement for its compliance with environmental aspects,
- Review and approve Contractor Site Specific EMPs,
- Supervise the Contractor in all matters concerning environmental aspects,
- Monitor compliance with the EMP by the Contractor and issue Non-conformances Reports as needed,
- Review Contractor's Corrective Action Plans,

- Review and approve temporary construction areas use and associated Site Specific EMPs for such sites,
 - Assist the Employer in undertaking and monitoring of environmental safeguards,
 - Identify and report any environmental issues that may arise during construction to the Team Leader and the Employer,
 - Perform regular coordination with the Employer for any matters related to implementation, monitoring and reporting of ADB's safeguards policy.
 - Task performed by the International Environmental Specialist include: monitoring of the non-compliances related to construction works such as wastewater discharge, air pollution, noise pollution, oil spills, concrete washout spill, chemical spills at site, wearing of the PPEs and other HSE related tasks, water sprinkling at access roads, waste handling at campsites and other project related facilities, sewage handling, arrangements to avoid river water pollution, issuing the NCRs for non-compliances observed with the help of National expert. Ensuring the compliance for all the non-compliances issues pointed out by the filed staff and other team members. Prepared the Semi-annual report based on the non-compliances observed and NCRs issued during the reporting periods, corrective actions taken by the contractor and further recommendations made by CSC for the upcoming quarters
 - Tasks performed by National Environmental Specialist include : monitored the campsites and active construction sites with CC environmental officer, gave instruction for the non-compliances observed in the field and issued NCRs along with corrective actions to be taken. Ensured the instrumental monitoring is being carried out by the certified laboratory for air, noise, ground water, surface water and vibration on monthly basis. Prepared monthly EMR and reviewed the CCs EMR and Instrumental monitoring reports.
18. 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, Multilateral Development Banks (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), 2.3b (employer's personnel), 4.21 (progress report) are important in this regard.
19. The Contract for CSCS was awarded to UBM for three phases of the project:
- 1) Phase 1: Design review, to be completed in a period of three months and submitted to RD
 - 2) Phase 2: Construction supervision and contract administration. The construction period is for 36 months
 - 3) Phase 3: Defects Notification Period, 24 months
20. Contact details of ADB (Asian Development Bank), SC (Supervision Consultant), CC (Construction Contractor), and RD (Road Department) representatives are given in Table 2 below:

Table 2: Main Environmental Staff of ADB, CC, SC and RD

Organization	Position	Name	Nationality
ADB	Head Office, Environmental Specialist, Portfolio, Results,	Name: Ninette Pajarillaga Cell: e-mail: npajarillaga@adb.org	

	Safeguards and Gender Unit (PSG), CWRD		
	ADB/RETA International Environmental Safeguards Consultant	Name: Ketidgebudze Cell: +995577232937 e-mail: ketidgeb@adb.org kdgebudze.consultant@adb.org	Georgian
	Associate Safeguards Officer Georgia Resident Mission	Name: Nino Nadashvili Cell: +995 595 070442 e-mail: nnadashvili@adb.org	Georgian
RD	Environmental Specialist	Name: Luiza Bubashvili Cell: +9995219141 e-mail: likabubashvili@yahoo.com	Georgian
	Head of Environmental Unit	Name: Gia Sopadze Cell: +10599939209 e-mail: soggia@gmail.com	Georgian
SC	International Environmental Specialist	Gülden Baydar (resigned during reporting period) Cell: +905327443051 e-mail: gbaydar@ubm.com.tr	Turkish
	Environmental Expert	Bidzina Peradze Cell: +995599501918 e-mail: bperadze@gmail.com	Georgian
CC	Project Manager	Name: Chen Yuqiang Cell: +995599200396 e-mail: gggg3bc@gmail.com	Chinese
	Environmental Specialist	Name: David Kurdadze Cell: +995595116017 e-mail: d.kurdadze@capto.ge	Chinese

21. Information of civil works contracts and works' progress is summarized in Table 3. All awarded contracts included EMPs cleared by ADB and conditions of applicable national EIA clearance.

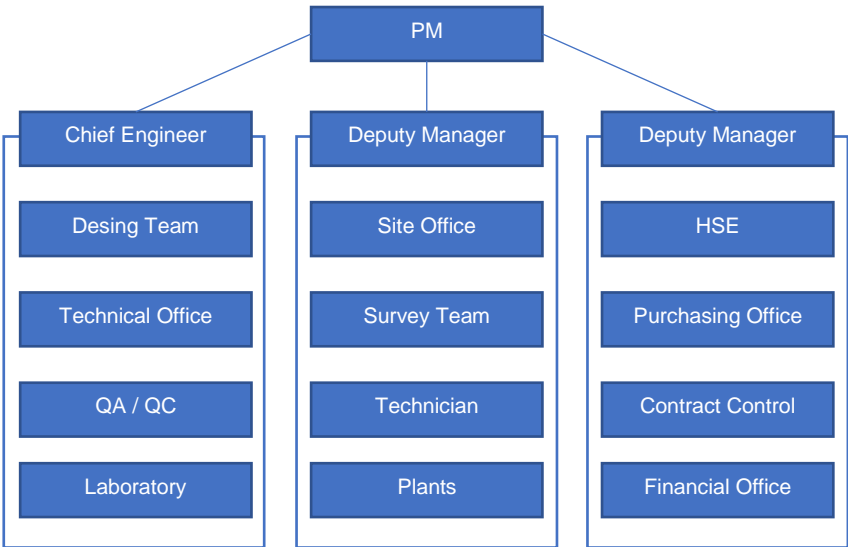
Table 3: Summary of Civil Works Contracts and works' progress

Package	Scope	Contractor	Signed	Approval Date			Environmental personnel		Civil Work		Progress as of	
				SSEMP	COVID-19 HSMP	ERP	Environment al officer	Health and Safety officer	Start	End	30 Jun 2021	31 Dec 2021
F4	SUPERVISION OF CONSTRUCTION WORKS FOR F4 SHORAPANI-ARGVETA PROJECT (E60 HIGHWAY ROUTE). 1. Right lane (TA - Tbilisi-Argveta direction)- 14.778km; 2) Left lane (AT - Argveta -Tbilisi direction)- 14.726km.	GGG	16 of January 2020	07 Jun 2021	17 Aug 2021	17 Nov 2020	Davit Kurdadze	Giorgi Karelidze	20 Oct 2020	20 Oct 2023	0%	5.7% Finencial Complition 4,76% phizical complition
	1.2 m Pile Drilling for foundation construction	Babu Ltd	31 May 2021						31 May 2021	In Progress	0%	18%
	1.2 m Pile Drilling for foundation construction	Marmara Inshaat Ltd	10 Apr 2021						10 Apr 2021	In Progress	0%	18%
	1.2 m Pile Drilling for foundation construction	Pozitivi Pile LLC	30 Jun 2021						13 Mar 2020	In Progress	0%	18%
	Relocation of Water Pipes	Sandro Ltd	07 Jun 2021						07 Jun 2021	23 Aug 2021	0%	50%
	Relocation of Gas Pipes	Gazproekti 2009 Ltd	17 Jun 2021						17 Jun 2021	2 Aug 2021	0%	100%
	Relocation of Power Lines	Mshenebeli 2017,Ltd							10 Feb 2021	In Progress	0%	52%

									The Compa ny aproval date but the subcon tractors contrac t indicat es 27/05/2 020			
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22. 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. Contractor is responsible to:
- Establish an operational system for managing environmental impacts,
 - Develop the SEMP as well as topic specific EMPs before commencement of construction activities 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,
 - Submit monthly compliance reports to the engineer.
23. Contractor, Guizhou Highway Engineering Group Co Ltd, is responsible for implementation of SEMP throughout the project during construction phase. The Supervision Consultant, UBM (Engineer), is responsible to;
- Monitor the implementation of SEMP by the Contractor at all its active construction sites and project related facilities,
 - Prepare monthly and semi-annual Environmental Monitoring reports for the Employer based on the SEMP monitoring and implementation activities.
24. Responsibility of daily management for environmental monitoring and implementation of the SEMP is given to the HSE Manager, Mr Du Jun. He has direct authority from the Project Manager to give instruction to all site staff regarding environmental issues. The project organization chart for key management staff of Guizhou Highway Engineering Group Co Ltd is provided in Figure 2 below:

Figure 2: Contractor Project Management Staff



25. Contractor revised organization chart for Health, Safety, Environmental and Social management as shown in Figure 3. According to new management structure, Community Liaison Officer (CLO) directly reports to the Project Manager of the Contractor. Moreover, the Contractor appointed a Traffic Officer to during this reporting period to organize and regulate equipment and traffic relevant issues. The team is responsible for implementation, supervision, and monitoring of the activities on-site.

Figure 3: Contractor’s H&S, Environmental and Social Organization Chart



2.3 Project Activities during Current Reporting Period

26. Table 4 summarizes the construction activities being undertaken during this monitoring and reporting period at different sections of the Project.

Table 4: Project Activities carried out during the reporting period

Tunnel N1	Ongoing trimming of slope at the Portal "A" side
Tunnel N2 AT	Continued excavation by the mean of blasting, installation of steel ribs and 20cm shotcrete spraying
Tunnel N2 TA	Commenced and continued excavation by the mean of blasting, installation of steel ribs and 20cm shotcrete spraying
Tunnel N3 AT	continued mechanical excavation, installation of steel ribs and 20cm shotcrete spraying Tbilisi side
Tunnel N3 TA	Injection of grouting material Tbilisi side
Tunnel N4	Continued construction of D191 240mm micropiles for the Portals from Argveta side, arrangement of surface drainage
Tunnel N5 TA	continued mechanical excavation, installation of steel ribs and 20cm shotcrete spraying
Tunnel N5 AT	completed temporary portal construction
Culvert N 4211	commenced and continued assembling of steel cages for the culvert, concrete pour for the bottom slab and the first section of the culvert
Culvert N 4212	completed construction of the culvert
Culvert N 4213	culvert's construction completed including hydro insulation, backfilling still remains
Underpass 4301	continued assembling of steel cages, installation of formwork and concrete pour
Culvert N 4214	commenced assembling of steel cage for the culvert
Culvert N 4215	Completed structural excavations, arrangement of gravel bed and concrete key

Culvert N 4217	Completed structural excavations, arrangement of gravel bed and concrete key
Interchange N3, Culvert N 4237	completed culvert's construction, including hydro insulation
Interchange N3, Culvert N 4238	completed culvert's construction, except hydro insulation
Interchange N3, Culvert N 4239	completed culvert's construction
Interchange N3, Culvert N 4240	continued culvert's construction, steel cages assembling is ongoing
Interchange N3, Culvert N 4241	completed culvert's construction, including hydro insulation
Interchange N1	earthworks ongoing trimming of slope
Interchange N1, culvert N4230	continued culvert construction assembling of steel cages and concrete pour ongoing
Interchange N2	earthworks
Interchange N3	continued construction of embankment fill from borrow pit material
Interchange N3 Overpass 4401	mobilization of drilling machin for construction of piling foundation and arrangement of temporary fill
Interchange N4	completed construction of culvert 4246, Culvert Ramp CL500, km 0+295
Bridge N1	cutting of trees, arrangement of access road, mobilization of piling machine completed
Bridge N2	drilling of piles, construction of pile caps and piers columns is ongoing
Bridge N3	completed concrete pour for AB No.1 of TA bridge, for AT AB No.1 continued assembling of steel reinforcement
Bridges N4 AT and TA	construction of the bridge's abutments and piers is ongoing continued construction of raft foundations, pier columns and abutments from AB 1 to Pier N7
Bridge N6	km 10 earthworks are ongoing, construction of D=1,2 m piles completed
Km 4	continued construction of local road to Puti village construction of sub base and base layers completed, asphalt pavement remains
Km 4+900 to km 5	continued trimming of slope by excavators
PK 8+300 to PK 8+700 (Batching Plant N2 area)	excavation of soil and transportation at dumpsite

Km 10 to km 11	construction of embankment fill between culverts NN 4212 to 4213 and at Bridge N6
Utilities	Relocation of Gas pipes, high voltage electrical lines (including pylons) and water pipes ongoing

27. Progress of works carried out during the reporting period is summarized in Table 5 below:

Table 5: Construction Progress during Reporting Period

Row	Description of Main Activities	% W.F.	Progress	Cumulative progress Including December	Cumulative progress including November	Progress in December
1	Bill No 1. General Items	0,00%	Actual			
			Planned			
2	Bill No 2. Setting Out and Site Clearance	0,23%	Actual	64,33%	64,33%	
			Planned	90,87%	89,76%	1,10%
3	Bill No 3. Earthworks	4,21%	Actual	17,94%	17,94%	
			Planned	38,06%	33,09%	4,98%
4	Bill No 4. Culverts and Drainage	1,31%	Actual	14,42%		
			Planned	58,27%	53,61%	4,66%
5	Bill No 5. Bridges and Overpasses	46,00%	Actual	3,04%	3,04%	
			Planned	11,81%	10,09%	1,72%
6	Bill No 6 & 7 Tunnels	36,49%	Actual	3,97%	3,97%	
			Planned	26,58%	21,79%	4,79%
7	Bill No 8. Road Pavement	4,07%	Actual	0,56%	0,56%	
			Planned	4,67%	3,67%	1,01%
8	Bill No 9. Road Furniture	3,42%	Actual			
			Planned			
9	Bill No 10. Interchanges	1,81%	Actual	6,34%	6,34%	
			Planned	53,32%	53,24%	0,08%
10	Bill No 11. Relocation Of Utilities	0,94%	Actual	72,51%	72,51%	
			Planned	100,00%	100,00%	
11	Bill No 12. Greenery	0,55%	Actual			
			Planned			
12	Bill No 13. Retaining Walls	0,47%	Actual			
			Planned	34,33%	20,83%	13,50%

13	Bill No 14. Lighting	0,43%	Actual			
			Planned			
14	Daywork	0,05%	Actual			
			Planned			
Overall Progress of the Project		100,00%	Actual	4,76%	4,76%	0,0%
			Planned	19,97%	17,05%	2,92%

2.4 Information on Personnel Working at Construction Site

28. Overall personnel hired by Contractor as of December, 2021 is summarized below and Table 6 shows detailed information about personnel working at the site.

- Total number of employees: 589
- Foreign Staff (including Management, Administration and Technical Staff) : 251
- Local Staff (skilled and unskilled workers) : 338

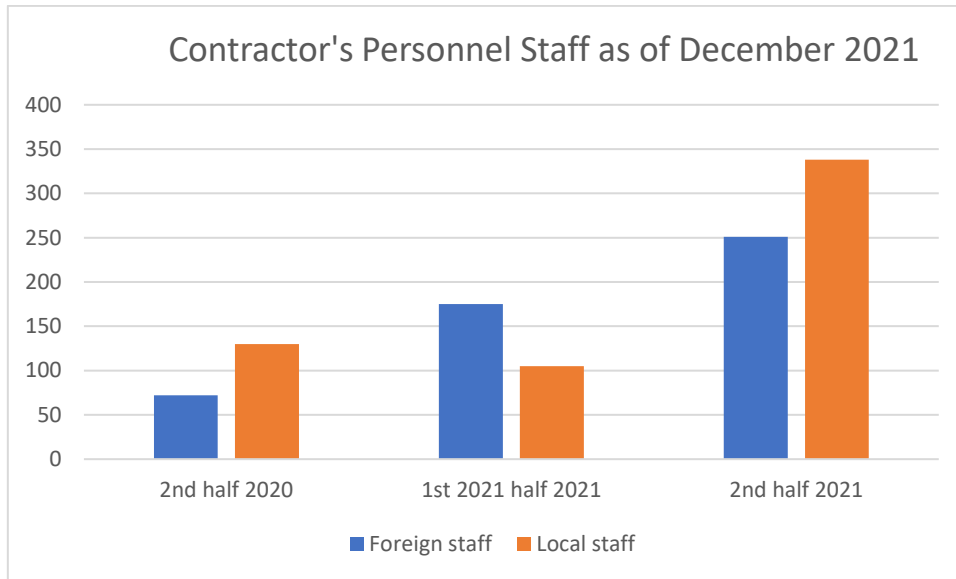
Table 6: Information of Personnel Working at Site as of December 2021

#	Human Resources	Total
1	Company leaders	3
2	Project Manager	1
3	Quality Control	4
4	Technical officer	36
5	Administration	18
6	Site Manager	5
7	Site Engineers	27
8	HSE	3
9	Surveyors	7
10	Foremen's	6
11	Operators	51
12	Drivers	21
13	Plant Operators Plant Operators and labors	18
14	Garage facilities and camp	6
15	Mess hall	18
16	Skilled workers	113
17	Unskilled workers	179
18	Security	12

19	Flagmen	22
20	Sub-Contractors Personal	39
21	Total	589

29. The graphical presentation of number of foreign and local staff hired by Contractor is shown in the Figure 4. Total number of the Contractor's staff is increased by 39% compared to 2nd half of 2020 within this reporting period.

Figure 4: Contractor's Staff as of Dec 2021



2.5 Description of any Changes to Project Design

30. There is no change in project design during the reporting period; however, the Contractor submitted a variation proposal of Tunnel 6 due to geological conditions (April 22, 2021, Ref 20210422-017-GHEC-UBM). The contractor proposed to change the initial design to an open excavation roadbed. On April 1, 2021, RD, Engineer and Contractor jointly inspected the site and a meeting was also held regarding this between the RD, Engineer and Contractor on April, 7, 2021 accordingly to evaluate and to discuss the proposal. RD demanded from the Contractor to prepare the cost and time impact report. The variation has not been yet finalized as the contractor has not submitted the necessary documentation for review.

2.6 Description of any Changes to Agreed Construction Methods

31. There are no changes to the agreed construction methods were approved during the reporting period.

3. ENVIRONMENT SAFEGUARD ACTIVITIES

3.1 General Description of Environment Safeguards Activities


32. Mr. Bidzina Peradze has been assigned as local Environmental Specialist in May, 2021 to check the environmental impacts caused by the construction activities and the compliance with the requirements of EIA, SEMP and conditions of contracts.

33. The Engineer's environmental specialists prepare the monthly and semi-annual reports to be submitted to the RD. These reports depict the ongoing construction activities, environmental issues, health and safety issues, grievance status, implementations of mitigation measures defined in EIA and the status of compliance.
34. Environmental specialists of the Contractor and the Engineer are conducting regular site visits to monitor the compliance of EMP. In addition to that, HS specialist of the Contractor and Engineer are monitoring the compliance of PPEs, traffic safety and the other safety related issues.
35. Grievance Redress Mechanism (GRM) and HSE logbooks are being maintained by engineer's social team and contractor's HSE team respectively. However, these good practices need to be maintained on continual basis.
36. Construction Contractor's Consultant in occupational health and safety, social and environmental issues is Capto BMG LLC.



3.2 Site Audits



37. Frequent site visits were carried out by the environmental expert of the Engineer, Mr. Bidzina Peradze, to the following sites:
 - Office sites,
 - Camp areas,
 - Access roads,
 - Concrete batch plant 1 & 2,
 - Cutting of trees,
 - Topsoil Stripping,
 - Interchange 1 & 2,
 - Construction of Access Road for Tunnel 3,
 - Tunnel 2 & 3 Portals
 - Steel Bar Processing Plant.
38. International environmental expert of the Engineer, Ms. Gulden Baydar, has resigned on 01.11.2021 and to replace the new International Environmental expert has not been yet nominated and expected to be hired in April 2022. This semi-annual environmental monitoring report has been prepared in the light of information gathered from the International environmental expert (Gulden Baydar) site visits during reporting period, national environmental expert, HSE personnels, and review of the documentation received, communication with project's parties, inspection reports, monthly progress reports, and weekly construction minutes of meetings (MoMs).
39. The method adopted for inspection includes visual inspection, interview with workers, review of permits obtained, daily quality control reports and monthly reports.
40. Identified non-compliance and corrective actions taken by the Contractor during Jul-Dec 2021 reporting period are given in Table 7.



Table 7: Identified Non Compliance and required Corrective Actions



ID #	Affected Location	Date	Issue raised	Mitigation Required	Estimated time	Corrective Actions (Provide Pictures)	Status of Action
1	BP# 2	July 2021	Unprotected slope. Large boulder causing hazard to fall down	Large boulders need to be removed from the steep slopes. Slope needs to be stabilized.	One week	<p>Non-Conformance mentioned in the previous report has been corrected, large stones have been removed from the slope;</p> 	Closed July 2021
2	Project site	July 2021	Welders need to be provided with special aprons	Welders to be provided with aprons and other necessary equipments	One week	Welders were provided with welder's aprons and other necessary equipment.	Closed July 2021



							
3	Bridge# 2	July 2021	Pavement of access road to bridge# 2	Access road to bridge# 2 need to be concreted Provide tire washing facility	Two weeks	Bridge №2 : Concrete was laid on the entrance road and a tire washing area arranged; 	Closed August 2021


							
4	TUN# 3	July 2021	Issue related to safety sign installations at the slopes	Safety sign should be installed along the roads with slopes on the sides	Two weeks	Safety signs have been installed at the edge of the slope; 	Closed July 2021
5		July 2021	Safety violation for working at heights	The safety violations mentioned in the previous reports must	Two weeks	The safety violations mentioned in the previous reports are being corrected. Workers are using protective harnesses, working	Closed July 2021

				be addressed. Workers should use protective harnesses, working platform and guardrails on the scaffolding		platform and guardrails have been installed on the scaffolding; 	
6	BP# 2	August 2021	There are lots of street dogs on site, it is not allowed for dogs to be on the construction site; 	Street dogs should not be allowed to enter in the batching plant	Two weeks	CC to take strict actions and security guards should not let the dogs enter in the vicinity of batching plant.	Open
7	Interchange # 1	Sept 2021	Deep excavation to be fenced	Excavation need to be fenced at	Two weeks	Excavation fenced at Interchange # 1 properly	Closed


				Interchange # 1			Sept 2021
8	Interchange# 2	Sept 2021	Unsafe access to bridge abutment 	Safe access required in the shape small bridge with handrail		Non-conformity has been corrected and safe bridge has been installed, with protective railings;	Closed Sept 2021
9	BP# 2	Sept 2021	Poor housekeeping observed at the workshop	Workshop need to be cleaned out	One week	The armature workshop is regularly being cleaned of waste;	Closed Sept 2021


							
10	TUN# 2	Oct 2022	Installation of ventilation System for Tunnel # 2	Ventilation system must be installed on the both portals of Tunnel #2 before atarting of any blasting activity; Its required that ventilation system will be turned on when there are works carried out in the tunnel;	Two weeks	Ventilation system has been installed on the both portals of Tunnel #2 	Closed Nov 2021



							
11	TUN# 2 East portal	Oct 2021	Safety procedure need to be followed before starting blasting	All of the safety procedures need to be followed for blasting .works, except Mobilization of ambulance on the blasting sites.	Two weeks	<p>Tunnel №2 East Portal. All of the safety procedures are followed for blasting works, except the mobilization of ambulance on the blasting site; Recommendation: There should be an ambulance presented on site during the blasting works.</p> 	Closed Nov 2021



12	TUN# 3	Oct 2021	Access bridge for TUN# 3 need to be rehabilitated for the vehicles crossing	Access bridge on the River bridge is required for the passing of vehicles	3 weeks	<p>Tunnel №3 Crossing Bridge : The access bridge to the third tunnel, bridge over the river Borimela, has been reconstructed;</p> 	Closed Nov 2021
13	Crossroad # 1	Oct 2021	Handling of oxygen cylenders	Special Cage required for the oxygen cylenders to be placed in verticle posion in the cage	2 weeks	Oxygen cylinders are placed in the appropriate cabinet, and safety warning signs istalled.	Closed Nov 2021



				and must be chained			
14	Project site	Oct 2021	Missing safty signs	Safety signs must be installed at the site made of solid material	One week	Safety signs made of solid material are placed on the cabinets and at various sites	Closed Oct 2021


							
15	Interchange # 1	Nov 2021	Fencing of the deep excavation posing the risk of fall	The openings must be fenced with solid barriers, appropriate warning signs	Two weeks	Action pending	Open



				must be installed, there is a danger of not only for personnel to fall in but also for cars.			
16	Bridge# 3	Nov 2021	Personnel do not use special personal protective equipment,	it is required to use face shield when cutting the armature, as there is a high risk of facial damage. It is not allowed to perform special works without appropriate personal protective equipment.	Immediately	CC to provide the PPEs and strict enforcement required to wear PPEs	Open

							
17	BP#1 and Camp 3	Nov 2021	Fencing of the batching plant and campsite required to restrict the unauthorized entry	CC to Fence the camp# 2 and BP# 1 territory	Two weeks	Contractor fenced the required territory	Closed Nov 2021
							

18	BP# 1 Camp# 3	Dec 2021	<p>Access road used for heavy machinery parking must be graveled at BP#1</p> 	<p>CC to gravel the road to avoid the slush caused during the wet season and mud carried out by vehicles to main highway</p>	1 week	Action required	Open
19	Culvert 4301	Dec 2021	<p>Poor house keeping at various sites</p> 	<p>Housekeeping needs to be improved and waste needs to be collected from the site</p>	1 week	<ul style="list-style-type: none"> - Waste collected - Site supervisors and managers notified and instructed 	<p>Closed Dec 2021</p>

							
20	Bridge# 6	Dec 2021	Concrete spill on the Ground 	Concrete washout needs to be removed	2 weeks	<ul style="list-style-type: none"> - Concrete collected and removed - Local supervisors warned and instructed regarding concrete washout practices - Regular inspection required 	Closed Dec 2021
21	Tunnel #2 Bridge #6	Dec 2021	Spill on open ground	All oily and greasy containairs shall be placed on secondary containments. Drip trays shall be provided	ASAP	Local supervisors warned and instructed	Open

							
22	Project site	Dec 2021	Fire extinguishers are not at site	Fire extinguishers must be at site and installed as per national regulation		Fire extinguishers are at site now and after inspection will be distributed to sites	Closed Dec 2021

						 	
23	Batching Plant N2, Workshop, and Workers' Camp N3	Dec 2022	Disturbance with noise and dust on residential houses located near to the west portal of Tunnel TUN-4005 raised due to the Contractor's batching plant activities.	To reduce the impact of the noise on the residential house, the Contractor has to arrange a 5 meters metal barrier alongside the construction (from Pk82+40 to Pk85+50) between the construction site and the	Two weeks	Currently, the Batching Plant N2 does not operate since 10 th December 2021.	Open

				residential house. CC to relocate the batching plant incase noise barrier doesnot reduce the noise level below the standards.			
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41. Engineer has established NCRs and corrective action tracking register for follow up the open NCRs on the project level and reminders are being sent on regular basis. The corresponding detail between engineer and contractor during the reporting period regarding NCRs, corrective actions required and resolving of environmental issues is given in the Table 8.

42. Implementation Status of Corrective Actions proposed in the previous monitoring report is presented in Table 8 below.

Table 8 : Implementation Status of Corrective Actions proposed in the previous monitoring report(s)

Issue	Required Action	Responsibility	Timing (Target Dates)	Description of Resolution and Timing (Actual)	If not yet resolved, indicate the reason why and specify further required action and timeframe.
1. Diesel generator is placed on the ground without a drip tray at Interchange # 2	Provide drip trays for generator	Contractor	June 2021	CC started the manufacturing the drip trays at the site. And started providing for secondary containment under generators.	Resolved
2. During drilling of tunnel portal, spoiled soil and rocks are falling in to the River Borimela Near Tunnel 3 portal	All disposed material should be removed and river bank, protection should be made River must be cleaned and	Contractor	July 2021	CC cleaned up the River area	Resolved
3. Welding apron must be provided for welders	Welding apron must be provided for welders	CC	Sept 2021	CC provided the Welding Aprons	Resolved
4. Damaged crane ropes must not be used, must be renewed	CC to use the new rope for crane when old get damaged	CC	Aug 2021	Supervisor informed not to use the old ropes	Resolved
5. Contractor has not provided an HIV (Human Immunodeficiency Virus) Awareness Program covering of HIV/AIDS management plan, orientation and awareness to workers about sexually transmitted diseases (STD), screening tests of	Contractor was notified to start this training till 2nd week of June 2021. NO HIV aid management plan is submitted yet and contractor informed that they are searching for a subcontractor	CC	Sept 2021	CC to provide HIV aid program up to June 2022.	Pending Due to increased Covid 19 case, preference was given to treat Covid19 cases.

workers, distribution of promotion material etc.	to conduct the training				
6. Contractor has not assigned permanent medical personnel yet for providing medical assistance in case of medical emergency, including safe evacuation of injured person. There is only one Nurse Nino Okhroshidze at site.	Contractor to hire the Doctor at the site	CC	Q1, Q2 2022	CC to hire the Doctor on full time basis.	Pending CC did not hire the Doctor during the reporting period and must hire as soon as possible

Table 9: Correspondence between SC and CC to resolve environmental issue including NCRs and corrective actions required during reporting Period

13/07/2021	0442-CSAE60F4-UBM-GE	Hazardous Waste Storage Area
13/07/2021	0446-CSAE60F4-UBM-GE	Borimela River Protection
13/07/2021	0447-CSAE60F4-UBM-GE	action Plan for Environmental Issues and Documentations
16/07/2021	0457-CSA60F4-UBM-GE	The Issue of Borimela River Protection.
02/08/2021	0484-CSAE60F4-UBM-GE	Reminder regarding Sharing of Instrumental Monitoring Results
04/08/2021	0491-CSAE60F4-UBM-GE	Approval for Spill Response Plan Rev 2
04/08/2021	0492-CSAE60F4-UBM-GE	Approval for Specific Environmental Management Plan-Rev4
06/08/2021	0499-CSAE60F44-UBM-GE	Approval for Topsoil Stripping and Storage Plan-Rev2
17/08/2021	0520-CSAE60F4-UBM-GE	Approval for Protective Action Plan against COVID-19

18/08/2021	0522-CSAE60F4-UBM-GE	The Warning Regarding the Prevention of Spread of Covid-19
23/08/2021	0528-CSAE60F4-UBM-GE	Instrumental Environmental Monitoring Results, July 2021
02/09/2021	0566-CSAE60F4-UBM-GE	Updated COVID-19 Cases on Site and Defective Slope support Excavation Works at TUN 4005 AT-TA-A
22/09/2021	0611-CSAE60F4-UBM-GE	Reminder for Submission of Instrumental Monitoring Results
01/10/2021	0639-CSAE60F4-UBM-GE	Reminder for Soil Contamination Measurements
20/10/2021	0689-CSAE60F4-UBM-GE	Environmental Monitoring Report August 2021 Published By ADB
12/11/2021	0779-CSAE60F4-UBM-GE	Instrumental Environmental Monitoring Results, September 2021
30/11/2021	0823-CSAE60F4-UBM-GE	Additional documents of Environmental Monitoring Company (SDSC)
30/11/2021	0824-CSAE60F4-UBM-GE	Instrumental Environmental Monitoring Results, October 2021

3.3. Issues Tracking

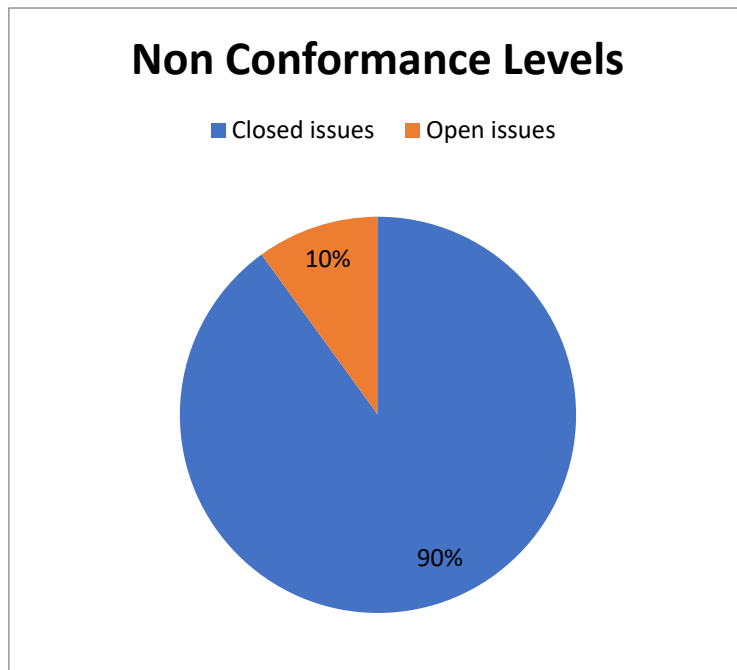
43. Statistics of corrective action requirements in work during reporting period is given in the Table 10. There was no pending issue from the previous reporting period.

Table 10: Summary of Issue Tracking During the Project

Total number of issues for the Project	80
Issues opened this reporting period	23
Issues closed this reporting period	17
Number of open issues	8
Number of closed issues	72
Closed in percentage	90

44. Data on the number of closed and open issues is presented in Figure 5. This data is based on the issues that were observed and have been closed or remained open during the Project.

Figure 5: Non-Conformance levels during the Project



45. Identified non-conformities occurred in work sites were issued to the Contractor through inspection reports (Annex 2) by the Engineer to take corrective actions. Issues raised, required mitigation measures, corrective actions taken and current status of actions are presented in the Table 10.
46. Out of eighty (80) issues, seventy-two (72) issues were closed and there are eight (8) corrective action required for the follow up in the next reporting period. The open issues are relevant to (i) poor housekeeping (ii) Street dogs at the site, (iii) Earthen path for heavy machinery parking causing slush during wet season, (iv) absence of drip trays under the drums and generators and (v) Personnel do not use special personal protective equipment (vi) requirement of HIV Aid awareness program (vii) hiring of the Doctor at the site (viii) resolution of complaint about noise from the residents.

3.4 Trends

47. Most of the violations observed during the reporting period requiring special attention to resolve include: Oil drums without drip trays, deep excavation without guard rails, poor housekeeping, steep slopes, workers without PPES, access roads to be paved. However, contractor has positive attitude towards resolving problems. Most of the issues are being fixed regularly; however, some are repeated due to workers behavior for which CC is conducting regular trainings, TBTs and Tool box meetings.

3.5 Unanticipated Impacts or Risk

48. Occupational Health and Safety Plan, Emergency Response and Preparedness Plan and Specific Environmental Management Plan were updated accordingly for reflection of anti-COVID measures by the Contractor and the plans were approved by the Engineer through official letters Ref: 0490-CSAE60F4-UBM-GE, 0490-CSAE60F4-UBM-GE and 0492-CSAE60F4-UBM-GE respectively. Continuous outbreak of Covid-19 (Omicron), the fifth wave in the world causing serious consequence to human health, and in terms of increasing cost of the project and slow development progress. Contractors taking actively protective measures against COVID-19. and following the recommendations related to COVID -19 issued by relevant Authorities. Contractor distributed "Coronavirus Protection Manual" among the staff, and providing the PPEs, face mask, disposable hand sanitizer,

and disinfecting the working areas regularly. CC ensuring to take temperature for everyone twice per day.

49. In particular the Contractor launched a poster campaign providing necessary instructions (information posters) within all Camp facilities and worksites. Strict procedures were developed for entering the Contractor's facilities, such as thermal screening by a touch-free thermometer, adequate provision of a rapid test at the project site offices, provision of disinfectant of alcohol-based sanitizer at the project site office and worksites.
50. All the training was postponed that required the groups of people, and the number of meetings were reduced together with the number of attendees. Social distance is practiced during the necessary toolbox talks. Personnels are entering the dining facilities with the small groups and tables are distanced from each other.
51. All these control measures are being supervised by the Contractors management team, in order to stay in compliance. The Engineer is constantly monitoring this process. COVID-19 RTPCR testing is being performed in site office.

Figure 6: COVID-19 Testing at Project Site Office

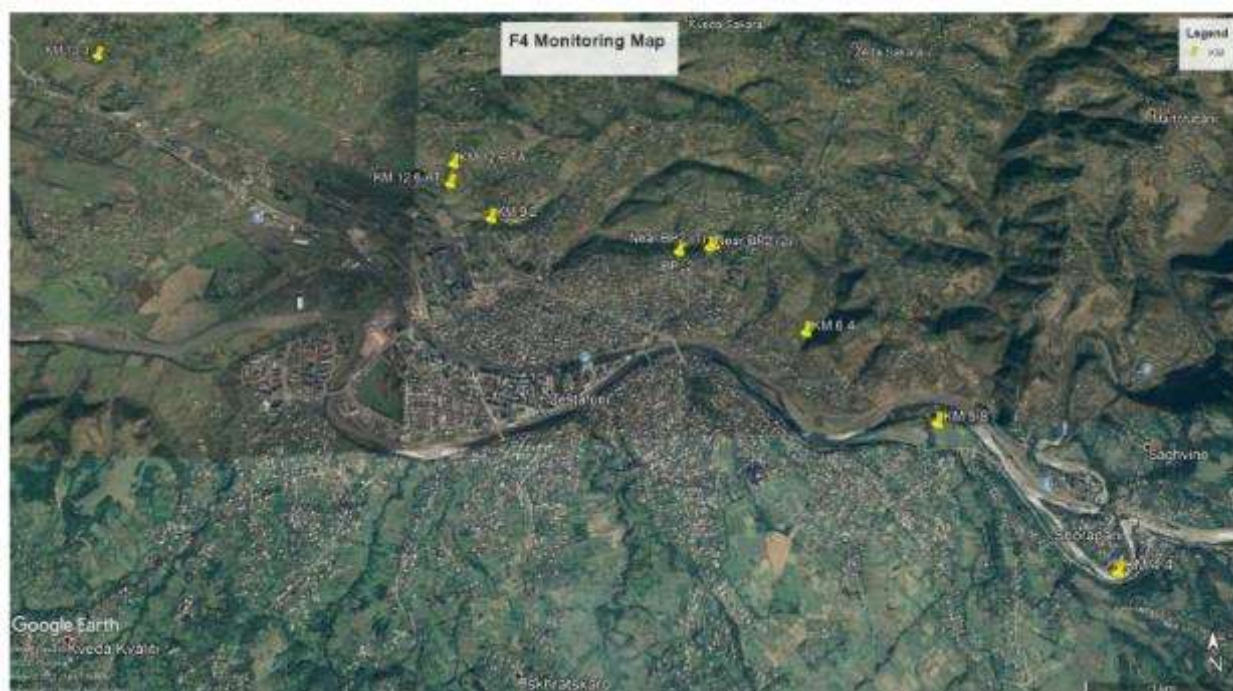


4. RESULTS OF ENVIRONMENTAL MONITORING

4.1 Overview of the Monitoring Conducted During Current Period

52. During the monitoring period, Contractor started instrumental environmental monitoring since August 2021. Contractor has hired a certified laboratory, DG Consulting LTD, dated on 22nd, April for insturmental analysis for noise, air, surface water, ground water, wastewater and soil quality.
53. The contractor has hired the certified laboratory DG Consultant and instrumental monitoring for noise, vibration, air, surface water, wastewater and ground water quality testing was carried out for the reporting period on monthly basis based on the frequency given in the EIA's Table 98 "Instrumental monitoring plan".
54. The sampling location for air, noise and vibration and water quality were selected considering the ongoing construction activities as shown in Figure 7. The objective was to evaluate the potential impacts on the environmental sensitive receptors resulting from the construction activities. The results of the instrumental monitoring are given in tabular form while, details are given in Annex 2.

Figure 7: Location of sampling points for air noise & vibration and water quality (July - December 2021)



Surface Water Quality

55. During the reporting period July – December 2021 for surface water sampling analysis, the surface water samples were collected from River Dzirula and River Borimela at different locations as shown in Table 11. The samples were taken 50 meters upstream and 50 meters downstream from the construction site to evaluate the water quality difference before and after the construction activities. The results as indicated in Table 10 show slight variation in terms of Total Suspended Solids (TSS) in the river water quality at 50 meters upstream and downstream from the bridge piling activities. CC to restrict all kind of machinery entering the river protection zone.

Table 11: Surface water results (July- December 2021)

Measurement in August 2021								
Location: Point #1: Bridge# 2 Upstream, Downstream to riv. Dzirula								
#	Parameters	Point# 1		Point #2		-	Unit	Applicable Standard MAC/IFC
		Upstream 50 meters	Downstream 50 meters	Upstream 50 meters	Downstream 50 meters			
<i>Physical & Chemical Tests</i>								
1	pH	8.15	8.19	-	-	-	pH	6.5-8.5
2	BOD5	<3.0	<3.0	-	-	-	mg/l	6
3	COD	30	34	-	-	-	mg/l	30
4	Total Suspended Solids (TSS)	46	65	-	-	-	mg/l	50

5	Nitrates (NO ₃)	<1	<1	-	-	-	mg/l	10 ^a Total N (NO ₃ +NO ₂)
6	Phosphate (PO ₄)	0.5	0.5	-	-	-	mg/l	2
7	Oil & grease	<3	<3	-	-	-	mg/l	10 ^a
<i>Microbiological</i>								
8	Total Coliform bacteria	2100	3500	-	-	-	MPN in 100 ml	-
Measurement in September 2021 Location: Point #1: BRI#2 Upstream, Downstream riv. Dzirula								
#	Parameters	Point# 1		Point# 2		-	Unit	Applicable Standard MAC/IFC
		Upstream 50 meters	Downstream 50 meters	Upstream 50 meters	Upstream 50 meter			
<i>Physical & Chemical Tests</i>								
1	pH	8.11	8.12	-	-	-	pH	6.5-8.5
2	BOD5	<3.0	<3.0	-	-	-	mg/l	6
3	COD	34	40	-	-	-	mg/l	30
4	Total Suspended Solids (TSS)	9	7	-	-	-	mg/l	50
5	Nitrates (NO ₃)	<1	<1	-	-	-	mg/l	10 ^a Total N (NO ₃ +NO ₂)
6	Phosphate (PO ₄)	0.26	0.24	-	-	-	mg/l	2
7	Oil & grease	<3	<3	-	-	-	mg/l	10 ^a
<i>Microbiological -</i>								
9	Total Coliform bacteria	4500	5800			-	MPN in 100 ml	-
Measurement in October 2021 Location: Point #1: Bridge # 2 Upstream, Downstream riv. Dzirula Location: Point #1: Bridge # 3Upstream, Downstream riv. Borimela								
#	Parameters	Point# 1		Point# 2		-	Unit	Applicable Standard MAC/IFC
		Upstream 50 meters	Downstream 50 meters	Upstream 50 meters	Downstream 50 meter			
<i>Physical & Chemical Tests</i>								
1	pH	8.21	8.22	8.24	8.23	-	pH	6.5-8.5
2	BOD5	<3.0	<3.0	<3.0	<3.0	-	mg/l	6

3	COD	16	18	30	32	-	mg/l	30
4	Total Suspended Solids (TSS)	21	23	1.4	1.3	-	mg/l	50
5	Nitrates (NO ₃)	<1	<1	<1	<1	-	mg/l	10 ^a Total N (NO ₃ +NO ₂)
6	Phosphate (PO ₄)	0.82	0.86	0.5	0.51	-	mg/l	2
7	Oil & grease	<3	<3	<3	<3	-	mg/l	10 ^a
<i>Microbiological</i>								
9	Total Coliform bacteria	2200	1900	8900	27200	-	MPN in 100 ml	-
Measurement in November 2021								
Location: Point #1: Bridge# 2 Upstream, Downstream riv. Dzirula								
#	Parameters	Point# 1		Point# 2		-	Unit	Applicable Standard MAC/IFC
		Upstream 50 meters	Downstream 50 meters	Upstream 50 meters	Downstream 50 meter			
<i>Physical & Chemical Tests</i>								
1	pH	8.12	8.17	-	-	-	pH	6.5-8.5
2	BOD5	<3.0	<3.0	-	-	-	mg/l	6
3	COD	48	50	-	-	-	mg/l	30
4	Total Suspended Solids (TSS)	6	3	-	-	-	mg/l	50
5	Nitrates (NO ₃)	<1	<1	-	-	-	mg/l	10 ^a Total N (NO ₃ +NO ₂)
6	Phosphate (PO ₄)	0.7	2.32	-	-	-	mg/l	2
7	Oil & grease	<3	<3	-	-	-	mg/l	10 ^a
<i>Microbiological</i>								
9	Total Coliform bacteria	2500	3500	-	-	-	MPN in 100 ml	-
Measurement in December 2021								
Location: Point #1: Upstream , Downstream Bridge 2. Dzirula								
#	Parameters	Point# 1		Point# 2		-	Unit	Applicable Standard MAC/IFC
		Upstream 50 meters	Downstream 50 meters	Upstream 50 meters	Downstream 50 meter			
<i>Physical & Chemical Tests</i>								

1	pH	8.15	8.16	-	-	-	pH	6.5-8.5
2	BOD5	<3.0	<3.0	-	-	-	mg/l	6
3	COD	64	368	-	-	-	mg/l	30
4	Total Suspended Solids (TSS)	2	2	-	-	-	mg/l	50
5	Nitrates (NO ₃)	<1	<1	-	-	-	mg/l	10 ^a Total N (NO ₃ +NO ₂)
6	Phosphate (PO ₄)	0.8	0.8	-	-	-	mg/l	2
7	Oil & grease	<3	<3	-	-	-	mg/l	10 ^a
<i>Microbiological</i>								
9	Total Coliform bacteria	57000	82000	-	-	-	MPN in 100 ml	-

a: IFC indicative values for treated sanitary sewage discharge

Noise and Vibration Monitoring

56. Sampling locations for noise levels were selected to evaluate the impact on the Noise sensitive receptors (NSR) due to various construction activities during the reporting period. The average equivalent noise levels (LAeq) recorded are indicated in table 12 and compared with the day time IFC limits 55 dB(A) for the residential areas and educational institutions.

57. Overall, the LAeq results vary between 42 dB (A) to 68 dB(A). According to outdoor indoor noise reduction (OINR) by Federal Highway Administration US department of Transportation “Noise Measurement Handbook (FHWA-HEP-18-065)” the noise reduction in the interior of the building with masonry structure and single glazed window would be up to 25 dB(A) while the windows are closed and with open windows reduction is 10 dB(A). This means that slightly higher noise level outside the building would not be felt inside the building by the residents. Moreover, noise levels were taken close to the active construction sites.

Table 12: Average equivalent noise levels result during the monitoring period

Location	Average Equivalent Noise level (LAeq) Measurement dB(A)							IFC Standard d(BA)
	Baseline	July 2021	Aug 2021	Sept 2021	Oct 2021	Nov 2021	Dec 2021	
BP# 2	-	-	42	52	52	62	48	55 dB(A)
Tunnel #6	-	-	58	-	-	-	-	
Km 6.4	-	-	68	-	55	-	-	

Puti Road	-	-	-	48			
BP# 1	-	-	-		57	68	69

58. Results of the vibrations as indicated in the table 13 reveals that the vibrational levels are insignificant and within the permissible range of the criteria set in the EIA and conditions of contract.

59. According to the criteria set in EIA based on BS 6472 and German standard DIN 4150-3: 1999 for damage to structures, there is no damage likely to structure building due to vibration at PPV less than 5 mm/sec, risk of cosmetic damage from 5-15 mm/sec and risk of structural damage at PPV greater than 15 mm/sec.

Table 13: Vibrational Monitoring Results (July – December 2021)

Location	Peak Particle Velocity (PPV) mm/sec			Displacement, mm; peak values		
	Transversal Y	Vertical Z	Longitudinal X	Transversal Y	Vertical Z	Longitudinal X
Measurement in August 2021						
BP# 2	0.221	0.118	0.150	0.67	0.43	0.46
TUN #6	0.102	0.147	0.173	0.131	0.198	0.218
Measurement in September 2021						
BP# 2	0.142	0.126	0.173	1.862	1.173	1.077
Puti Road	0.134	0.252	0.173	0.258	0.140	0.137
Measurement in October 2021						
BP# 2	0.378	0.828	0.441	-	-	-
BP# 2 (2 nd session)	0.370	0.835	0.631	-	-	-
Measurement in November 2021						
BP 2	0.528	0.575	0.410	-	-	-
BP 2	0.095	0.110	0.110	-	-	-
Measurement in December 2021						
BP 2	0.150	0.142	0.121	-	-	-
BP 2	0.638	0.111	0.402	-	-	-

Air Quality Monitoring

60. The air quality monitoring sampling locations and test results are described in Table 13 during the reporting period from July – December 2021. All the other criteria pollutant NO₂ and SO₂ and dust levels are within the national limits for air quality in Georgia. Table 14.

Table 14: Air Quality Monitoring Results (July - December 2021)

Measurement in August 2021

Indicator	Duration	National/ IFC limits	Unit	BP# 2	TUN# 6	
Sulphur Dioxide (SO ₂)	7 days	50	mg/m ³	<0.002	0.052	
Nitrogen Dioxide (NO ₂)	7 days	40	mg/m ³	0.005	0.002	
Particulate Matter (PM ₁₀)	30 minutes	50 ^b	µg/m ³	21	21	
Particulate Matter (PM _{2.5})	30 minutes	25 ^b	µg/m ³	23	23	
Measurement in September 2021						
Indicator	Duration	National/ IFC limits	Unit	BP# 2	Puti Road	Km 4.4
Sulphur Dioxide (SO ₂)	7 days	50	mg/m ³	<0.002	0.002	0.002
Nitrogen Dioxide (NO ₂)	7 days	40	mg/m ³	<0.002	0.002	0.002
Particulate Matter (PM ₁₀)	30 minutes	50 ^b	µg/m ³	12	15	25
Particulate Matter (PM _{2.5})	30 minutes	25 ^b	µg/m ³	12	15	25
Measurement in October 2021						
Indicator	Duration	National/ IFC limits	Unit	BP# 1	BP# 2	
Sulphur Dioxide (SO ₂)	7 days	50	mg/m ³	0.002	0.002	
Nitrogen Dioxide (NO ₂)	7 days	40	mg/m ³	0.007	0.012	
Particulate Matter (PM ₁₀)	30 minutes	50 ^b	µg/m ³	9	9	
Particulate Matter (PM _{2.5})	30 minutes	25 ^b	µg/m ³	10	10	
Measurement in November 2021						

Indicator	Duration	National/ IFC limits	Unit	BP# 1	BP# 2
Sulphur Dioxide (SO ₂)	7 days	50	mg/m ³	<0.002	<0.002
Nitrogen Dioxide (NO ₂)	7 days	40	mg/m ³	0.013	0.005
Particulate Matter (PM ₁₀)	30 minutes	50 ^b	µg/m ³	12	11
Particulate Matter (PM _{2.5})	30 minutes	25 ^b	µg/m ³	11	11
Measurement in December 2021					
Indicator	Duration	National/ IFC limits	Unit	BP 1	KM 4.4
Sulphur Dioxide (SO ₂)	7 days	50	mg/m ³	<0.002	<0.002
Nitrogen Dioxide (NO ₂)	7 days	40	mg/m ³	0.028	0.024
Particulate Matter (PM ₁₀)	30 minutes	50 ^b	µg/m ³	23 at BP2 (session 1)	23 at BP2 (session 2)
Particulate Matter (PM _{2.5})	30 minutes	25 ^b	µg/m ³	16 at BP2 (session 1)	16 at BP 2 (session 2)

^b:IFC guidelines for 24 hours are being used as there is no standard for 30 minutes

4.2 Summary of Monitoring Outcomes

61. For regular monthly instrumental monitoring of the parameters for air, water and noise levels and control the pollution levels, the contractor has hired the DG consulting certified laboratory and carrying out testing on monthly basis from August 2021.
62. Air quality tested at various locations along the project area and test results revealed that the dust level and gaseous pollutant levels are within the National and IFC acceptable range.
63. There is no significant effect of construction activities on river Dzirula as revealed by the water testing at 50 m upstream and 50 downstream of construction activities at bridge # 2 and upstream at the start of the Project and downstream at the end of the Project.
64. Vibration levels are insignificant. Maximum noise levels recorded are 68 dB(A) close to the active construction sites.

4.3 Material Resource Utilization

65. Up to December 2021, following materials were mobilized on site by the Contractor:

Table 15: Material mobilization

#	Major materials	Unit	Cumulative
1	Cement	Ton	16,890.680
2	Steel Reinforcement	Ton	5,624.538
3	Bitum and Bitumen emulsion	Ton	6.038
4	Granular materials for Sub Base	M ³	0.000
5	Granular materials for Base	M ³	6,535.000
6	Granular materials for Concrete	M ³	0.000
6.1	Sand	M ³	31,482.000
6.2	Crushed Aggregates	M ³	30,123.000
7	Cages for piles	Unit	0.000

4.4 Waste Management

66. The Contractor developed a Waste Management plan to describe the requirements for establishing and conducting proper waste management and to address the handling, storage, and management of wastes to assure that works are conducted in a manner that minimizes environmental risk and shared with the MoEPA in 2020. Contractor received comments in January, 2021 for revision of the plan. After revision and resubmission of the plan dated April,23,2021 it was approved dated in May,7, 2021 by the MoEPA. Approval letter is presented in Annex 8. The plan has not been shared to the Engineer officially since it is under translation process.
67. The Contractor renewed the agreement with the “Zestafoni Cleaning and Improvement Service Center” of the Zestafoni Municipality regarding provision of the collection and transportation of domestic wastes in February,2,2021. Renewed contract is presented in Annex 9. The agreement is valid until February,1,2022.
68. Contractor has developed a waste log to record the movements of all non-hazardous and hazardous wastes in a format as given in Annex 10. This register/log mainly includes;
- Type of waste,
 - The volume or mass of the waste,
 - Date of disposal,

- Sub-contractor's name.

69. Detailed information regarding the type of waste disposed of and responsible licensed companies are given in Table 16.

Table 16: Waste Management (July-Dec 2021)

#	Domestic/Hazardous Waste & Sewage	Volume /kg/m ³	Licensed Company
1	Household waste	176 m ³	NNLEP "Zestafoni Cleaning and Improvement Service Center" of the Zestafoni Municipality
2	Sewage water	78 m ³	Sanitari LLC
3	Used tires	0	Sanitari LLC
4	Hydraulic and used oil	0	Sanitari LLC
5	Waste paints and varnishes	0	Sanitari LLC
6	Chemical additive tanks	0	Sanitari LLC
7	Oil drums	0	Sanitari LLC
8	Used food oil	0	Sanitari LLC
9	Printer tonner	0	Sanitari LLC
10	Absorbents (e.g., oil filters, polluted clothes and materials)	0	Sanitari LLC
11	Medical Waste	0	Sanitari LLC
12	Metal Scraps	0	"Geosteel" LTD
13	Wood Waste	82.5 m ³	Given to Local Citizens

70. Contractor keep records of waste transfer notes filled and signed by the Contractor, waste carrier and receiving facility. During the reporting period, a total of 176 m³ domestic waste was transferred to be disposed of. Receipts are presented in Annex 11.

71. Contractor constructed septic tanks in worker camp no2 and worker camp no3 with a total capacity of 90m³ and 45m³ respectively. During reporting period, in January and February, contractor discharged a total of 78m³ domestic waste water through licenced vacum trucks owned by "Sanitari LLC".

4.5 Current Period

72. 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 volume for spoil generation are given below:

- Estimated spoil generation: 1.830.000 m³
- Estimated spoil reuse for embankments: 1.330.000 m³
- Spoil need to be disposed of: 500.000 m³

73. Data regarding the excavated material up to the end of reopring period is not available at this stage. However, two spoil disposal areas were approved by the Ministry of Regional

Development and Infrastructure of Georgia (MRDI), Roads Department of Georgia (RD). The first approved area is located at the administrative borders of Zestafoni Municipality, N45 Sergo Zakariadze Street (c/c: N32.10.41.096; 32.10.41 .262), right side of existing E60 main Road KM 185+00 to KM 200+00 with a total area of 42 438 m². The second approved spoil area is located in village Kveda Sakara (C/C N32.03.44.018) with 10900 m² total area. Contractor has not obtained "land use permit" for the areas yet. Permits will be presented in the 4th semi-annual environmental monitoring report.

4.6 Health and Safety

74. HSE Team is responsible for implementation, supervision, and monitoring of the construction activities on-site on daily-basis to ensure occupational and community health and safety are maintained. The Contractor's HS specialists include the followings:

Jan Du : Head HSE officer

Giorgi Karelidze; Local HSE officer

Giorgi Qimeradze: HSE staff

Lasha Peradze : Traffic Safety

75. Engineer's local HS specialist Mr. Zaal Giorgadze has being continuously monitored contractor's HS performance at working areas and provided advice to the Contractor on how risks must be mitigated. HS specialist, Mr Giorgadze, prepared and reported approximately 20 weekly safety observation reports during reporting period. Moreover, Mr. Zura Rukhadze joined to Engineer's team as Road Safety Specialist to ensure traffic safety is ensured during construction period.

4.6.1 Community Health and Safety

76. No incident reported involving community members or no traffic incident was recorded during the reporting period.

77. Contractor has appointed flagmen to control the movement of heavy vehicles in construction sites and to control the traffic while vehicles entering and exiting the construction sites. All flagmen were trained about HSE requirements of the project.

78. Contractor has appointed security officers on all construction site entrances and installed CCTV camera control system in all camp areas and batching plants. Camp areas and batching plants are fenced along to provide isolation. DETECTORI has installed CCTV Cameras which are being watched and operated by the DETECTOR

4.6.2 Occupational Health and Safety

79. Regular safety inspection of construction site is being conducted by HS representatives as a continuous process. HS specialist reports all safety deviations to HSE Manager on a daily basis. HS department conducts mandatory HSE induction for new employees, started to provide special safety trainings for workers to raise safety culture including working at height, flagmen training, driving safety, requirements for earthwork activities and lifting operations. Moreover, HS specialist prepares documentations for trainings, risk assessments for special works and work procedures.

80. Contractor is providing the mandatory PPEs and special protective equipment for the workers on site. Nevertheless, enforcement to usage is insufficient. Contractor purchased welder's aprons (30 no's) for welders and safety shoes and distributed to workers.

- 81. Based on data provided by the HSE team no incident was reported during the reporting period
- 82. Trends related to the accidents reported during the reporting period are given in Table 17. Based on data provided by the HSE team no incident was reported during the reporting period.

Table 17: Types of Accidents Reported

Accident Type	Reporting Period (July 2021 to December 2021)	Total (Dec 2020 to Dec 2021)
Near Miss	0	0
Accident Minor	0	1
Accident Major	0	0

4.7 Trainings

- 83. Contractor continues the training program to form a lasting culture on the behavior and activities of employees that in turn affects the environmental, social and safety performances. The program covers both mandatory induction training and work specific trainings.
- 84. During the reporting period, given trainings covered the following topics:
 - Induction training,
 - Tree cutting,
 - Tops soil stripping and storage,
 - Hazardous non-hazardous waste handling storage,
 - Refuiling process,
 - Environmental and social training,
 - Earthwork activities,
 - Driving safety,
 - Lifting operations,
 - Working at height,
 - Flagmen training,
 - Toolbox talks
 - Refresh to the Concrete Mixer truck drivers training cisterns wash out procedure and Usage of the separators
 - Refuelling Process
 - Blasting activities
- 85. General Environmental and Social training on environmental issues was conducted for 263 persons of the Contractor’s staff. The training covered basic knowledge related to Environmental Legislation, top soil preservation, air quality, waste management, land contamination, spill prevention, biodiversity, noise, resources management, chemical management, community safety, cultural heritage and code of conduct. Sample attendance list are enclosed in Annex 4.

86. During reporting period 9810 toolbox talks were provided by HS officer or foremen or site supervisor. Moreover, HS and general requirements for tree cutting training was provided for 17 staffs, topsoil stripping and storage training was provided to 28 staffs, hazardous&non-hazardous waste handling storage training were provided for 276staffs, training for refuelling was given to 72 staffs, earthwork activities was provided for 48 staffs, lifting operations was provided for 7 staffs, working at height training was provided for 8 staffs and 12 flagmen were trained about general HS requirements of the Project.
87. Contractor continues the training program to form a lasting culture on the behavior and activities of employees that in turn affects the environmental, social and safety performances. The program covers both mandatory induction training and work specific trainings.

4.8 Social Management and Grievance Redress Mechanism

88. The Contractor revised organization chart for Health, Safety, Environmental and Social management and according to the new management structure Contracto’s CLO, Mr. Davit Guruli, directly reports to the Project Manager. Furthermore, Engineer appointed Dr. Mohammad Isa Ansari (Mobile phone: +91 9910020765) as International Resettlement and Social Development Specialist at the beginning of May,1,2021. Local Social Development Specialist. Mr. Gelashvili and Dr. Ansari will be monitoring the status of the Contractor’s compliance with social management.
89. Grievance Redress Mechanism (GRM) was developed by the Contractor and submitted to Engineer for reviewing and approval (February 19, 2021- Ref: 20210403-0148-GHEC-UBM, April,3,2021- Ref: 20210316-0134-GHEC-UBM and April,16,2021-Ref: 20210416-0166-GHEC-UBM). GRM was approved in April 2021.
90. The Contractor has not posted the contact information of GRCE on the notice boards for the community yet. Also, the Contractor has not set-up and publicize a 24-hour hotline for complaints. Therefore, the Engineer has issued NCR about it on 20th August 2021 with the letter 0523-CSAE60F4-UBM-GE.
91. Grievance Status in the Month of December 2021. A total of 77 grievances were received, wherein 43 related to Damaged structure/Assets, 14 complaints logged were pertinent to design issue/inclusion in LARP, 16 Restriction or Loss of Access, 3 Disturbance: Noise / Vibration / Dust, and Other 1 is related to the local residents’ demand to construct additional structures. Out of 77 grievances, 21 have been resolved, 14 are forwarded to RD for necessary action, 34 are forwarded to the Contractor for their necessary remedial actions and 8 is under review of the Engineer to investigate the matter and then forward to the Contractor or RD, as indicated in Table 18.

Table 18: Status of Grievances

N	Nature of Grievances	No. of Total Grievances	Status			
			Resolved	Unresolved		
				Forwarded to RD	Forwarded to CC	Under review
1	Damage to Infrastructure / Assets	43	13	1	23	6
2	Inclusion in LARP	14	2	10	2	0
3	Restriction or Loss of Access	16	6	3	6	1
4	Disturbance: Noise / Vibration / Dust	3	0	0	3	0
5	Other	1	0	0	0	1
	Total	77	21	14	34	8

92. Among the 30 unresolved grievances related to Damaged structure/Assets: **a) 19 units** are concerning the risk of damage to the private buildings/structures due to the planned Project construction works in the particular section. Therefore, these 19 grievances are forwarded to the construction contractor to survey the pre-construction condition of the private buildings/structures in order to carry out monitoring during the construction works. The survey is in progress; **b) 4 grievances** are concerning the already damaged or the risk of damage to the infrastructure/assets, which are forwarded to the Contractor for further remedial/preventive actions; **c) 1 grievance** is related to the destroyed pasture area by the Project alignment, which is forwarded to RD for further discussion; **d) 6 units** are under the Engineer's review to investigate the matter and afterward to forward it to the Contractor or RD accordingly.
93. Among the 12 unresolved grievances related to Inclusion in LARP: **a) 10 units** are related to design issues and pose the risk of adverse impact on the households at the operational stage. Hence, these grievances are forwarded to RD for further discussion; **b) 2 grievances** are about the possible adverse impacts at the construction stage and at the operational stage, hence the households demanded inclusion in LARP. The RD was informed about the issues in detail, but these grievances were forwarded to the Contractor for instrumental monitoring of the environment. The monthly instrumental monitoring is ongoing.
94. Out of the 10 unresolved grievances related to Restriction or Loss of Access: **a) 3 grievances** are about the design issue and they are under the RD review; **b) Among 6 grievances** forwarded to the Contractor, 5 units are about the design issue and the Contractor along with the Engineer are working to prepare and submitted design and estimated costs of the alternative accesses for RD's approval. The remaining 1 grievance was forwarded to CC to improve the deteriorated access road; **c) 1 grievance** is under the Engineer's investigation.
95. Complaints regarding the increased noise and dust levels at BP# 2 was filed from three residents living near the Batching plant 2 during the year 2021. RD forwarded these complaints to the Contractor and the operation of BP# 2 has been suspended. To reduce the impact of the noise on the residential house, the Contractor has to arrange the 5 meters high metal barrier alongside the construction (from Pk82+40 to Pk85+50) between the construction site and the residential houses (Please see Annex-5 complaint log # 51, 56 for detail).
96. The 3 unresolved grievances are about the possible adverse impact on the households with noise/vibration/dust due to the ongoing construction activities. Therefore, the grievances are forwarded to the Contractor for instrumental monitoring of the environment. The monthly instrumental monitoring is ongoing.
97. The remaining 1 unresolved grievance is about the local residents' demand to construct additional structures, which is under the Engineer's review.
98. The Contractor implements monthly community meetings. However, the Contractor has not kept records for community meetings as defined and required in EIA including minutes of meetings, list of participants with signatures, photos of each event with timestamps. Hence, the Engineer issued NCR in this regard on 20th August 2021 with the letter 0523-CSAE60F4-UBM-GE.

5. FUNCTIONING OF SSEMP

5.1 SSEMP Review

99. To ensure that all of the potential mitigation measures are applied during the construction phase, the Contractor shall be responsible in the pre-construction phase for the preparation

of his Specific Environmental Management Plans (SEMP). The approved SEMPs shall include the following plans:

(i) Topic Specific Plans:

- Waste Management Plan
- Spoil Disposal Plan for Arrangement of Spoil Disposal Area
- Re-cultivation Plan
- Traffic Management Plan
- Occupational Health and Safety Plan
- Community Health and Safety Plan
- Emergency Preparedness and Response Plan
- Air Quality Plan
- Spill Response Plan
- Vibration Monitoring Plan
- Clearance, Re-vegetation and Restoration Management Plan
- Groundwater Management Plan
- Tunnel Blasting Plan
- Noise Management Plan
- Biodiversity Action Plan
- Topsoil Stripping and Storage Plan
- Chance Find Procedure
- Grievance Redress Mechanism
- H&S and E&S Training Plan
- Bridge Construction Plan
- Community Liaison Management Plan

(ii) Site Specific Plans:

- Construction Camp Management Plan
- Asphalt Plant Plan
- Rock Crushing Plant Plan
- Concrete Batching Plant Plan.
- Site Specific Method Statement for Working in the Area above the Railway Line at KM 6.3 and at Bridge BR 4.0.1. AT/TA
- Detailed Method of Working in the Water and Workplan
- Contaminated Spoil Treatment Plan

100. SEMPs were developed by the Contractor and submitted to the Engineer for review and approval (January, 27, 2021-Ref:20210127-0090-GHEC-UBM, February, 19, 2021-Ref:20210219-00108-GHEC-UBM, March, 2, 2021-Ref:20210302-0118-GHEC-UBM, March, 15, 2021-Ref: 20210315-0129-GHEC-UBM and May, 28, 2021- Ref 20210528-

0148). SEMP was approved in June, 7,2021 with Engineer's letter no 0333-CSAE60-F4-UBM-GE.

6. GOOD PRACTICES

6.1 Good Practices

101. Following best practices are being adopted by the contractor due to site inspections, issuance of inspection reports and discussions during construction progress meetings headed by the Engineer:
- CC placing the oxygen cylinder in the special cage for oxygen cylinders
 - CC arranged the washout pits
 - CC installing the ventilation system at the tunnel portals and switching On while workers working inside the tunnel
 - CC maintained/ rehabilitated the access bridges on the river
 - CC provided the safety signs of solid material
 - CC paved the access road to bridge# 2 and provided the tyre washing facility so that mud should not be carried by vehicles to the main highway
 - CC stabilizing the slopes
 - CC providing the necessary PPES

7. SUMMARY AND RECOMMENDATION

7.1 Summary

102. A sum of 77 nonconformities and corrective action requirements accordingly were issued to the Contractor through inspection reports during the project life . Out of seventy-seven (77) issues, seventy-three (73) issues were closed and there are four (4) corrective action requirements are transferred to next semi-annual report to follow up.
103. CC has provided the PPEs, revolving lights for the heavy vehicles and provided the fire extinguishers at the site
104. Contractor has hired a certified laboratory, DG Consulting LTD, and carried out instrumental monitoring during the reporting period.
105. Analyzing the contractor environmental management system reveals that contractor pay less attentions to preparation of management system documentation.
106. Taking in to account the emergency due to spread of pandemic COVID-19 worldwide, the Contractor prepared a "Protective Action Plan against COVID-19" outlining the measures to be taken to prevent the spread of the COVID-19 virus. Contractor showed prompt action to take measures to fight against COVID-19.

7.2 Recommendations & Follow-up Actions for the next Monitoring Period

107. 109. All issues/non-compliances identified during Jul-Dec 2021 reporting period and pending issues from the previous report(s) with target dates for improvement are presented in the table 19 below.

Table 19: Issues identified during the monitoring period (including the pending issues from the previous report(s))

Issue	Required Action	Responsibility	Timing (Target Dates)
1. There are lots of street dogs on site, it is not allowed for dogs to be on the construction site;	Street dogs should not be allowed to enter in the batching plant	CC	Q1 2022
2. Fencing of the deep excavation posing the risk of fall	All deep excavation should be fenced	CC	immediately
3. Personnel do not use special personal protective equipment	CC to provide the complete PPES and enforce to wear	CC	Q 1 2022
4. Unpaved access road for machinery parking	Access road used for heavy machinery parking must be graveled at BP#1	CC	Q1 2022
5. Spill on ground	Contaminated land to be removed and provide the drip trays for secondary containment.	CC	ASAP
6. Disturbance to the residents near BP# 2	CC to stop operation and install the noise barriers	CC	Q1 2022 Operations stopped at BP2
7. HIV Aid Awareness programm	CC to provide HIV aid awareness trainings	CC	Q1 2022
8. Mobilization of the Doctor at the site	CC to hirie the doctor for full time basis at the site	CC	Q 1 2020

108. Table 20 summarize the recommended mitigation measures which contractor is required to apply in the 1st and 2nd quarter of 2022 to meet the requirements furnished in the EMP and conditions of the contract at this stage of the project:



Table 20: Summary of recommendations and responsibilities

Recommendations for 1 st and 2 nd Quarter of Year 2022	Responsibility
Housekeeping needs to be improved and the site should look celan and tidy Q1-Q2 2022	CC to implement and CSC to monitor

Provision of drip trays for all the on-site generators and oil contained facilities Q1-Q2 2022	CC to implement and CSC to monitor
Slope stabilization for weak slopes Q1-Q2 2022	CC to implement and CSC to monitor
Deep trenches must be barricaded to avoid the risk of fall Q1-Q2 2022	CC to implement and CSC to monitor
All the access road to main highway should be gravelled Q1-Q2 2022	CC to implement and CSC to monitor
All the workplace should have the safe access Q1-Q2 2022	CC to implement and CSC to monitor
Electrical cables need to be hanged properly Q1-Q2 2022	CC to implement and CSC to monitor
Goal post should be provided where ever required Q1-Q2 2022	CC to implement and CSC to monitor
All the workers should be provided with PPES and strict enforcement to wear required Q1-Q2 2022	CC to implement and CSC to monitor
All the temporary facilities need to be fenced Q1-Q2 2022	CC to implement and CSC to monitor
Ventilation fans must be switched on while workers working inside the tunnel Q1-Q2 2022	CC to implement and CSC to monitor
Engineer to mobilize International Environmental specialist ASAP Q1-Q2 2022	CC to implement and CSC to monitor
Setting up a spoil disposal monitoring system in the balance sheet Q1-Q2 2022	CC to implement and CSC to monitor
Arrangements of concrete washout pits and drainings to be provided to the drivers Q1-Q2 2022	CC to implement and CSC to monitor
Tunnels water should be treated prior to discharge in to the water bodies Q1-Q2 2022	CC to implement and CSC to monitor
Speed limits signs to be installed at the site Q1-Q2 2022	CC to implement and CSC to monitor
CC to establish the hazardous material storage area Q1-Q2 2022	CC to implement and CSC to monitor
Spill kits must be at the site all the time and CC to train spill collection team Q1-Q2 2022	CC to implement and CSC to monitor
Security persons to restrict the entry of street dogs in the batching plant and camp site Q1-Q2 2022	CC to implement and CSC to monitor
Installation of security cameras , where required, at the site Q1-Q2 2022	CC to implement and CSC to monitor

ANNEXES

Annex 1: Project Photos

 A photograph showing several construction workers at a site. They are wearing high-visibility yellow safety vests, hard hats, and other protective gear. They are standing on a dirt path next to a building under construction. Green metal posts are visible in the foreground, likely for a fence or structure.	<p>Workers wearing PPE</p>
 A photograph showing various pieces of personal protective equipment (PPE) stored in cardboard boxes. Visible items include a pair of black safety boots, a pair of blue safety shoes, and a pair of blue safety glasses. The boxes are stacked, and some have shipping labels.	<p>PPE at the site</p>



Safety Goal Post required



Flash becon lights to be installed on heavy vehicles

	<p>Opening must be filled and lighting must be proper inside the tunnel</p>
	<p>Scaffolding required guard rails</p>



Electrical Cables laid at the ground



First aid safety training



First aid training at site



Missing safe pathway to reach at the site



Waste Containers labelled for domestic waste



Waste Containers
labelled for domestic
waste



Drip Tray provided for
the Generator



CC started the
manufacturing the drip
trays at the site. And
started providing for
secondary containment
under generators.

Annex 2: HS&E Inspection Reports and NCRs

Project:	Construction of Shorapani-Argveta Section (E60 Highway Route) Lot F4
Subject:	On Site Inspection
Inspection Date:	December 17, 2020
Issue Date:	December 20, 2020
Occupational Safety Specialist:	Zaal Giorgadze

Detailed Description of Activities

On the December 17th, 2020 Company of - Hunan road and bridge construction group Health and Safety Supervisor implemented inspection of the Construction of Shorapani-Argveta Section Lot F4. Site inspection revealed safety violations and good observations. Also, corrective actions taken against violations revealed in the last inspection report has been inspected.

Below are the list of the violations and good observations revealed during onsite inspection. Each of the listed violation must be corrected in the following week.

Supporting Photos with Descriptions



Photo 1. Good Observation: Occupational Safety main inductions regarding the construction process for the personnel arrived from China were conducted outside, in an open space.

Concrete Plant №1 and Camp №3



Photo 1. Concrete Plant №1 and Camp №3: **Good Observation:** Accommodation camp fencing procedure is in the progress;



Photo 2. Concrete Plant №1 and Camp №3: **Good Observation:** Camp territory is appropriately illuminated;



Photo 3. Concrete Plant №1 and Camp №3: **Good Observation:** Excavation area has been enclosed with protective guardrails;



Photo 4. Concrete Plant №1 and Camp №3: **Non-Conformance:** Fire extinguishers must be placed in special, protective boxes;



Photo 5. Concrete Plant №1 and Camp №3: **Non-Conformance:** Territory used for heavy machinery parking must be graveled;



Photo 6. Concrete Plant №1 and Camp №3: **Non-Conformance:** Electrical cable must be raised at appropriate, safe height;

Camp №6



Photo 1. Camp №6: **Non-Conformance:** Electrical cable is placed on the wet ground and also sharp piece of metal plate is placed on top;




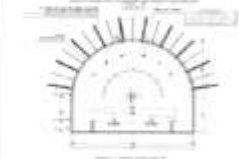






Photo 2. Camp №6: **Non-Conformance:** Electrical switches and relays must be put in a special box. Box must have lock and safety sign;



Photo 1. Concrete Plant №1: **Non-Conformance:** Excavated area/opening must be enclosed with protective guardrails;

					
NON CONFORMANCE REPORT/შეუსაბამობის ანგარიში (NCR)					№ 4
Construction of the E60 Highway F4 Shorapani-Argveta Project/ E60 გზატკეცილის F4 შორაპანი-არგვეთა პროექტი SARP/CS/QCBS-01					
Location/ადგილ-მდებარეობა:	Project Overall		Section/Km სექცია/კმ :		
Tech. Spc./ტექნიკ. სპეცი:			Description/დახასიათება:	Contractor has not constructed hazardous waste area(s) yet.	
Ref. Criteria/შით. კრიტერიუმები	Hazardous Waste Area(s)		Reference/შეიძლება №:	EIA, pg 382- Hazardous Waste, and and Waste Management Plan	
Description of Non-conformance/შეუსაბამობის აღწერა:	Contractor has not started construction of hazardous waste storage area(s).				
Site Responsible that Cause Incompliance/ადგილზე პასუხისმგებელი პირი	Mr David Kurdadze				
Category/კატეგორია	<input type="checkbox"/> Minor Non-Conformance/მცირე შეუსაბამობა (Reporting shall be done for information and remedial action implemented) <input checked="" type="checkbox"/> Major Non-Conformance/მნიშვნელოვანი შეუსაბამობა (Remedial action to be implemented after Engineer's written acceptance for CAR)				
Disposition/შეგონაჩვენება	<input type="checkbox"/> Use-As/როგორც არის <input type="checkbox"/> Repair/შეკეთება <input type="checkbox"/> Rework/ხელახლა <input type="checkbox"/> Improve/აღუმჯობესება <input type="checkbox"/> Remove/შენიშნა <input type="checkbox"/> Reconstruct/თავიდან აწყობა <input type="checkbox"/> Reject/არ-მიღება				
Progress/პროგრესი	<input type="checkbox"/> Not Allowed <input checked="" type="checkbox"/> Allowed <input type="checkbox"/> After Acceptance of CAR <input type="checkbox"/> After Close of CAR.				
Disposition Proposal/ აღმოფხვრის გეგმა:	<p>According to EIA and Waste Management Plan; Hazardous wastes shall be collected and temporarily stored separately in specialized containers and place in safe and fire-free areas with impervious floors roofs, at a safe distance from fire sources and according to the requirements of their MSDS. Those area(s) shall be located away from residential and office areas and containers with hazardous waste will be marked with appropriate warning signs, storage area shall be marked with appropriate warning signs.</p>				
Picture, Sketch/ ფოტო, სკეჩი					
Attachment/შანსუდე ფაილი:					
Section/განყოფილება	Name/სახელი	Title/თანამდებობა	Date/თარიღი:	Signature/ხელმოწერა	
Engineer	Bidzina Peradze	Environmental Specialist	19/08/2021		
Engineer Team Leader	Sefer Oz	Team Leader			

					
NON CONFORMANCE REPORT (NCR)				No	8
Construction of the E60 Highway F4 Shorapani - Argenta Project SARP/CS/QCBS-01					
Location :	TUN 4002 AT-T	Section/Km :	9+00.0 (approx) 9+10.0 and continuing		
Tech. Spc. Item :	GD-BD-4000-GE-TS-0075_TS Appendix, Clause 208 and MA.TUN.4000.GE.RP.0001	Description :	1) Ignoring completion of the specified advance cycle of tunnelling, 2) Installation of shorter rock bolts than specified in the design, 3) Neglecting the Engineer's instructions and continuing working without inspections		
Ref. Criteria :	Rockbolts	Ref. No. :	N/A		
Description of Non-conformance:	At TUN 4002 AT-T, 1) After the selection of the tunnel support type A1, the Contractor is blasting and continuing advances without fully supporting of the previous sections of the tunnel (without completion of the specified advance cycle - not installing the necessary amount of the rock bolts and last layer of shotcrete), 2) Despite the Engineer's warning the Contractor is continuing shorter rock bolts installation (4.8 m instead of 6 m) and using unapproved material for rock bolts encapsulation (not by grout W/C 0.3-0.35 as described in the Contractor's MoS Rev 4), 3) Neglecting the Engineer's instructions and continuing working without (advances for A1 section) inspections.				
Site Responsible that Cause Incompliance					
Category	<input type="checkbox"/> Minor Non-Conformance (Reporting shall be done for information and remedial action implemented) <input checked="" type="checkbox"/> Major Non-Conformance (Remedial action to be implemented after Engineer's written acceptance for CAR)				
Disposition	<input type="checkbox"/> Use-As <input type="checkbox"/> Repair <input checked="" type="checkbox"/> Rework <input type="checkbox"/> Improve <input type="checkbox"/> Remove <input type="checkbox"/> Reconstruct <input type="checkbox"/> Reject				
Progress	<input type="checkbox"/> Not Allowed <input type="checkbox"/> Allowed <input type="checkbox"/> After Acceptance of CAR <input checked="" type="checkbox"/> After Close of CAR				
Disposition Proposal:					
Picture, Sketch					
Attachment :					
Section	Name	Title	Date:	Signature	
Engineer	George Gogochashvili	Tunnel Engineer	24.11.2021		
Engineer Team Leader	Sefir Oz	Team Leader	24.11.2022		
					



ENVIRONMENTAL MONITORING REPORT
WATER, AMBIENT AIR QUALITY, NOISE AND VIBRATION
BASELINE MONITORING

F4, SECTION OF E-60 HIGHWAY

PREPARED BY
SDSC LLC

DIRECTOR: GIORGI GULIASHVILI

A handwritten signature in blue ink, appearing to read "Giorgi Guliashvili".



September, 2021

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1. Introduction

1.1. Project description

The Government of Georgia is endeavoring to make Georgia a regional and logistics hub and more attractive for businesses. The East West Highway (EWH), stretching 410 km from Sarpi on the Black Sea, at the border with Turkey, through the center of the country to the capital Tbilisi and on to the border with Azerbaijan, is the main inter-regional and international route between western and eastern Georgia, as well as its neighboring.

In light of the traffic growth on EWH, the high percentage of truck traffic, and the difficult terrain and resulting geometric profiles, capacity expansion of the current 2-lane mountainous section between Chumateleti and Argveta is crucial to realizing full potential of the EWH with improvements to the highway either completed or underway on each side of this section.

Therefore, the Government has requested the Asian Development Bank (ADB) and several other development partners to finance the remaining bottleneck sections (Chumateleti - Argveta) on the EWH.

The Project involves construction of a new road section of the E-60 highway located in Imereti Region of central Georgia (see Figure 1-1). Section F4 forms the Shoropani – Argveta portion of the Khevi-Ubisa-Shorapani-Argveta section of the E-60. The length of the Project Road is as follows:

- Right lane (TA – meaning Tbilisi – Argveta direction) - 14.778 km;
- Left lane (AT – meaning Argveta – Tbilisi direction) - 14.726 km.

Figure 1-1 Road Location Map



1.2. Purpose of the monitoring

As per contract LTD SDSC was requested to conduct regular surface water, Noise, Vibration, air quality and dust monitoring along the F4 section of highway construction.

The purpose of the monitoring was to collect monitoring data of surface water, Air quality, Dust, Noise and Vibration and compare with baseline monitoring results as well as with project specified standards based on EIA.

2. Monitoring locations

2.1. Water Monitoring Locations

Water monitoring locations proposed by the client are reflected in Table 2-, and in Figures 2-1. The monitoring was undertaken 50m up and downstream from each location.

Table 2-1 Surface water monitoring locations

Monitoring Locations	Coordinates	Monitoring Date
River Kvirila (Bridge N4)	340316.57 4663074.32	27/06/21
River Borimela (bridge N3)	342153.91 4661762.47	27/06/21
River Dzirula (bridge N2)	343185.48 4662005.84	27/06/21

Figure 2-1 Surface water monitoring locations



2.2. Noise, Vibration and Ambient air quality monitoring locations

There are 12 monitoring points along F4 section of the E-60 highway, on which dust, noise, vibration and air quality measurements were performed. GPS Coordinates of monitoring points are shown in the Table 2-1 and general overview on satellite map (Figure 2-1).

Table 2-1 Noise, Vibration and Ambient air quality monitoring locations

#	Point	X	Y	Conducted work/measurement
1	Puti road	341661.50	4661536.33	vibration, dust, noise
2	KM 4.4	341323.49	4661735.23	NO _x , SO _x , dust
3	KM 5.8	340323.98	4662868.69	NO _x , SO _x , dust, noise
4	KM 6.4	339493.72	4663649.74	NO _x , SO _x , noise, dust
5	Batch plant 2	338617.08	4664404.19	NO _x , SO _x , noise, dust, vibration
6	Near BP_2 (1)	338896.97	4664445.93	vibration
7	Near BP_2 (2)	338855.12	4664424.67	vibration
8	Near BP_2 (1) - opposite	338914.56	4664415.78	vibration
9	KM 12.6 AT	336852.00	4665151.00	NO _x , SO _x , dust, vibration
10	KM 12.6 TA	336881.01	4665342.12	NO _x , SO _x
11	KM 13.3	333856.00	4666662.00	NO _x , SO _x , noise, dust, vibration

Figure 2-1 Noise, Vibration and Ambient air quality monitoring locations



3. Monitoring parameters and methodologies

3.1. Surface Water monitoring

Monitoring parameters for surface water monitoring were provided by Client based on EIA requirements. List of parameters to be monitored and test methods are reflected in Table 3-1. National Maximum Allowable Concentrations (MAC) in surface waters have been used as a reference.

Table 3-1 Surface water monitoring parameters

Chemical Parameters	Measuring Unit	Test Method	National MAC
pH	-	SST ISO 10523:2010	6.5-8.5
BOD ₅	mg/l O ₂	SST ISO 5815-2:2003/2020	6
COD	mg/l O ₂	SST ISO 6060:2010	30
TSS	mg/l	SST ISO 11923: 2007	Increase by no more than 0.75
Total N	mg/l	GD 52.24.364-95	N/A
Total P	mg/l	SST ISO 6878:2004/2020	2
Nitrates (NO ₃)	mg/l	SST ISO 7890-3 : 2008	40
phosphates (PO ₄)	mg/l	SST ISO 6878:2004/2020	3.5
Oil & Grease	mg/l	EPA 413.1	0.3
Microbiological Parameters			
Total coliforms	MPN in 100 ml	SST ISO 9308 -1:2014/2014	400

The water samples are taken by the certified monitoring technicians, which are specially trained for the water sampling activities. The analysis of the water samples was conducted in the accredited DG Consulting Laboratory with ISO 17025 standard and if necessary, samples are sent to SYN LAB (Germany).

3.2. Ambient air quality

Air Quality monitoring methodology

Air monitoring - NO_x and SO_x sampling was conducted via passive sampler/concentrating tubes using English Company Gradko International standard certified tubes. The detailed information regarding method and model is provided in table below

Table 3-2 monitoring tubes model and methodology

Parameter	NOx	SOx
Manufacturer/Model	Gradko International Ditrax 100 RAM	Gradko International Ditrax 600 RAM
Integration period	No less 7-day Exposure	No less 7-day Exposure
Sampling Frequency	Continuous	Continuous
MDL/Target	1.4 µg/m ³	0.2 µg/m ³
Sampling and Analytical Method	Sorbent impregnated diffusion/ion chromatography	Sorbent impregnated diffusion/UV Spectrophotometry

PM10 and PM2.5 monitoring methodology

Dust monitoring was conducted according to the EU standards. The equipment, which was used during the measurement are Dust Trak DRX Desktop aerosol monitor, which is installed in the Environmental Enclosure 8535, which allows the aerosol to measure dust concentration in ambient air in the field conditions.

Before starting the measurements, Zero Calibration was done to the aerosol, which calibrates the device to zero level in order, not to get correct results

The photos below show the used equipment for Dust monitoring and Zero Calibrator.

Figure 3-1 Dust Monitoring equipment



Figure 3-2 Zero calibrator



3.3. Noise Monitoring Methodology and Equipment

The noise level measurements were implemented in accordance with the British Standard BS 7445-2:2003 'Description and measurement of environmental noise'. The dust concentration measurements in the ambient air were conducted in accordance to the EU standards.

The monitoring points were selected, so as to represent the impact of the construction on local population as realistically as possible.

According to the above-mentioned standard, the following equipment was used during the noise level measurement activities:

- Rion NL-52, First class noise measurement device;
- Windscreen, WS-16;
- Tripod;
- SD Card;

Figure 3-3 Noise monitoring equipment



Noise measurement range: 0-133 dB

Noise measurements were done for one 30-minute session for each monitoring points.

3.4. *Vibration monitoring methodology and equipment*

The vibration level measurements are conducted using the InstanTel Minimate Plus Device. It records the waveform data to the integrated memory. After the monitoring activities, the recorded data is processed in the PC Program Blastware, which is also created by the company InstanTel.

The vibration measurement is conducted using Transducer (Geophone), which is connected to the InstanTel Minimate Plus device. Three ground spikes are attached to the bottom of the transducer, pushed to the ground covering the attached spike fully. The geophone shall be directed towards the vibration source using the directional arrow, which is engraved on the Geophone itself. After this, the sandbag is put on top of the transducer for solid compaction.

After the correct installation of the Geophone, sensorcheck program is launched on the Minimate Plus device for further correct vibration measurements. In order to start vibration monitoring, the tests for sensor check program shall be Passed, which is displayed on the Minimate Plus device. After the mentioned activities, recording of the vibration waveform is starting.

As it was already described above, after recording the Vibration Waveform session, the device saves the session to the integrated hard drive. After what, the session is transferred to the Personal Computer and processed using special program called Blastware, which is also created by the Company InstanTel. The program created event report, which includes vibration waveform graphs, timing and other detailed information about the recorded session.

Figure 3-4 Vibration monitoring equipment



4. Laboratories

Water and air quality samples taken during field activities were sent to DG consulting laboratory (Georgia) and SYN LAB (Germany) for analyses. Samples were analyzed in accordance analytical suites and test methods proposed in chapter

5. Sampling activities

5.1. Surface Water Monitoring field activities

Sampling activities were undertaken on 8th of September 2021. The field team included Lasha Bibichadze and Giorgi Guliashvili. As per initial request from the Client, monitoring plan was included 3 bridge construction sites up and down stream monitoring.

All of the proposed sampling points were sampled successfully during the field visit.

Figure 5-1 Bridge N4 up stream (Kvirila River)



Figure 5-2 Bridge N4 downstream (Kvirilla river)



Figure 5-3 Bridge N3 upstream (Borimela River)



Figure 5-4 Bridge N3 downstream (Borimela River)

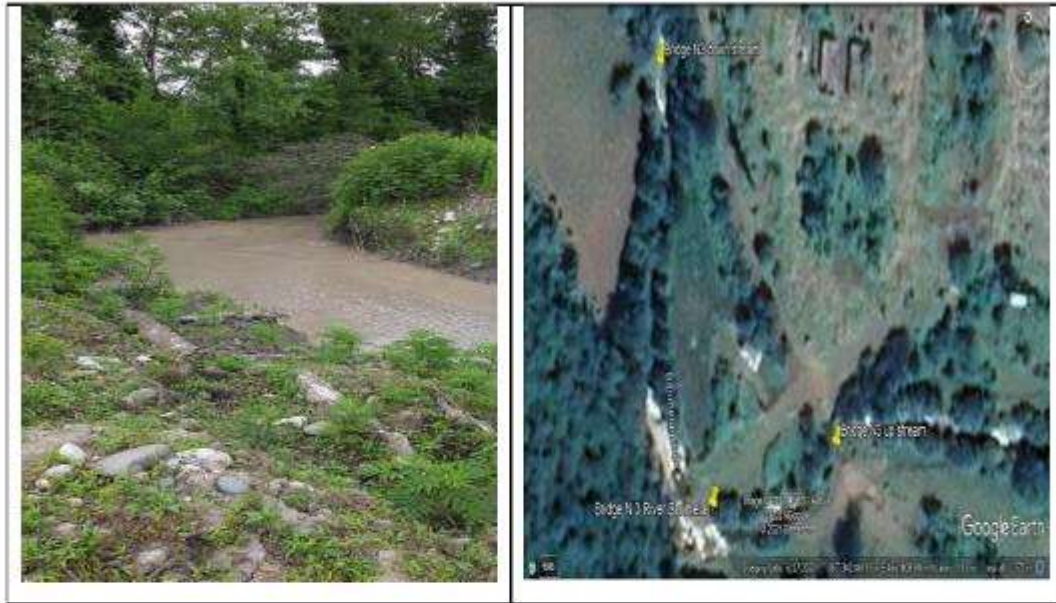


Figure 5-5 Bridge N2 upstream (Dzirula River)



Figure 5-6 Bridge N2 downstream (Dzirula River)



5.2. Air quality, Noise and Vibration monitoring field activities

Work on all existing monitoring points within the project was carried out in one day. This chapter provides photographs of the work process and the location of points on the satellite map. A description of the work performed and the current condition is provided as well.

There are 11 monitoring points along F4 section of the E-60 highway, on which dust, noise, vibration, and air quality measurements were performed.

Monitoring activities were conducted on 10th of September 2021. The weather was suitable, with temperature 27-30°C and the average wind speed did not exceed 5 m/s, so it would not affect the measurement results.

All instruments were calibrated and tested according to standard procedures prior to monitoring.

Work on all existing monitoring points within the project was carried out in one day. This chapter provides photographs of the work process and the location of points on the satellite map. A description of the work performed and the current condition is presented on photos below.

Figure 5-7 Point N1 Puti Road



The construction of a rural road is planned on this monitoring point. No construction or other works were carried out in the area during the monitoring process. The point is close to a narrow driveway where rare movement of cars and cattle were observed. Vibration, noise levels and dust concentrations in the air were measured.

Figure 5-8 Point N2 KM 4.4



No construction work was carried out at the monitoring point, however, the point is located on the existing E-60 highway, on the side of the road, therefore, in the vicinity, there is heavy traffic, and the project transport is moving. Air monitoring tubes were replaced and dust concentration in the air was measured on the spot.

Figure 5-9 Point N3 KM 5.8



Air quality monitoring tubes were replaced, dust concentration in the air and noise level were measured at the point. While the monitoring team was on site, the construction works were in an active phase: The equipment was working and the bridge parts were in the process of being built.

Figure 5-10 Point N4 KM 6.4



This monitoring point is located away from the road. Air quality monitoring tubes were replaced on site and noise level and dust concentration in the air were measured. During the monitoring, some construction noise was heard at the measurement point.

Figure 5-11 Point N5 Batching Plant N2



Air quality monitoring tubes were replaced at the monitoring point. Noise, dust, and vibration levels were measured. Only one JCB type special equipment worked in the monitoring process. Other construction works were not observed during the on-site monitoring.

Figure 5-12 Point N6 near Batching Plant N2 (1)



This point is located near the access road of the Batch Plant #2 and Workers' Camp #3. Vibration was measured at the monitoring point. No active works were carried out near the sampling point, no construction equipment was moving. It should be noted that the monitoring point is a few meters away from the road, on which both cars and trucks are actively moving.

Figure 5-13 Point N7 Near Batching Plant N2 (2)



At the monitoring point, vibration was measured. As in the previous case, the point is located near the road and therefore traffic is frequent.

Figure 5-14 Point 8 Near Batching Plant N2 (1) Opposite



Vibration was measured at the monitoring point. No construction work was carried out in the vicinity, although active traffic was observed on the road.

Figure 5-15 Point 9 KM 12.6 AT



The monitoring point is located near the Ferroalloy Plant, where a road interchange is planned for the future. No construction works were carried out in the area. Air quality monitoring tubes have been replaced and dust concentration and vibration level were determined.

Figure 5-16 Point N10 KM 12.6 TA



The monitoring point is located near the Ferroalloy Plant, where a road interchange is planned for the future. No construction works were carried out in the area. Air quality (NOx and Sox) monitoring tubes have been replaced.

Figure 5-17 Point 11 KM 12.6 TA



Air quality monitoring tubes were replaced at the monitoring point. No traffic or any kind of construction work were observed in the vicinity of the area.

Figure 5-18 Point 12 KM 13.3



Dust, noise, and vibration levels were measured and air quality monitoring tubes were replaced at this point. No work was carried out during the monitoring.

6. Analytical results and conclusions

6.1. Surface water monitoring

The results of surface water monitoring are indicated in the tables below:

Table 6-1 Bridge N2 (Dzirula river) up and down stream monitoring results

Parameters	EIA Standards (National MAC)	Baseline results (June 2021)	Upstream	Downstream
pH	6.5-8.5	8.12	8.11	8.12
BOD	6mg/l	<3	<3	<3
COD	30mg/l	28	34	40
TSS	Increase no more than 0.75mg/l	15	9	7
Total N	N/A	<0.5	<0.5	<0.5
Total P	2mg/l	0.083	0.085	0.083
Nitrates	40mg/l	2	<1	<1
Phosphates	3.5mg/l	0.25	0.26	0.24
Oil and Grease	0.3mg/l	<0.1	<0.3	<0.3
Total Coliforms	400MPN	ND	4500	5800

As indicated from the table above COD and total coliforms in downstream results are higher than EIA standards and higher than baseline and upstream results as well.

Table 6-2 Bridge N3 (Barimela River) up and down stream monitoring results

Parameters	EIA Standards (National MAC)	Baseline results (June 2021)	Upstream	Downstream
pH	6.5-8.5	8.16	8.06	8.07
BOD	6mg/l	<3	<3	<3
COD	30mg/l	32	26	30
TSS	Increase no more than 0.75mg/l	20	6	5
Total N	N/A	1.5	<0.5	<0.5
Total P	2mg/l	0.15	0.24	0.27
Nitrates	40mg/l	4	<1	<1
Phosphates	3.5mg/l	0.45	0.8	0.83
Oil and Grease	0.3mg/l	<0.1	<0.3	<0.3
Total Coliforms	400MPN	ND	23750	24000

Laboratory results indicated that Total P and Phosphates in up-stream and down-stream samples are higher than EIA standards. To take in consideration the fact that there is no significant difference between up-stream and down-stream results for above mentioned parameters, the cause of the elevated concentrations could be the human activities.

Table 6-3 Bridge N4 (Kvirila River) up and down stream monitoring results

Parameters	EIA Standards (National MAC)	Baseline results (June 2021)	Upstream	Downstream
pH	6.5-8.5	8.12	8.14	8.15
BOD	6mg/l	<3	<3	<3
COD	30mg/l	30	29	30
TSS	Increase no more than 0.75mg/l	2085	115	128
Total N	N/A	<0.5	<0.5	<0.5
Total P	2mg/l	0.092	0.17	0.17
Nitrates	40mg/l	2	<1	<1
Phosphates	3.5mg/l	0.28	0.52	0.53
Oil and Grease	0.3mg/l	<0.1	<0.3	<0.3
Total Coliforms	400MPN	250000	3800	4400

Downstream monitoring results indicated the slight increasing of the TSS and total coliforms in comparison with upstream sample. But the results are within the baseline analyses results. The cause of the above mentioned increase is the high turbulence and high flow of the river at the downstream sampling point.

6.2. Dust and Air Quality Monitoring

Dust monitoring

Dust Trak DRX Desktop aerosol monitor was used to monitor the dust concentrations in the ambient air. The device is specifically designed to perform dust monitoring and has own calibrator device, auto zero adjustment, sampling preheater and all tools required by the standard document used to undertake the measurement. Standards have been identified based on UBM Air Quality Plan

Table 6-4 PM10 and PM2.5 concentrations 1hr average ($\mu\text{g}/\text{m}^3$)

Point	PM ₁₀			PM _{2.5}		
	Avg	Min	Max	Avg	Min	Max
Batch Plant 2	12	11	15	12	11	15
KM 4.4	25	21	34	25	20	34
KM 5.8	18	15	22	18	15	22
KM 6.4	16	13	26	15	13	25
KM 12.6 AT	13	11	14	12	11	13
KM 13.3	11	10	12	11	10	12
Puti Road	15	15	16	15	15	16

According to Georgian legislation, the permissible limit of dust concentration is 150 micrograms. According to Table 6-4, the amount of dust in the air is low and fully complies with the legal requirements. From the listed points, active construction works were observed only near KM 5.8 and KM 6.4, and only one JCB was working at BP 2.

Air Quality monitoring

In order to determine Nitrogen oxide and Sulphur Dioxide levels in ambient air, two passive sampler tubes from Gradko Environmental (England) were installed, One for NO_x and one for SO_x for long term monitoring, according to the ordinance N38/n of Minister of Labor, Health and Social Affairs of Georgia, which determined maximum permissible concentration levels.

The exact time is written when tubes are installed and after their removal. Total hours recorded are calculated as a result of these exact times. Table 6-5 shows the exposure time of the tubes, the maximum permissible concentration (MPC) according to the legislation of Georgia and the results of the analysis.

Table 6-5 Air Quality Monitoring Results

Monitoring Point	Exposure Time	*MPC – Average Daily for NO ₂ -mg/m ³	*MPC – Average Daily for SO ₂ -mg/m ³	Results of Measurements For NO ₂ , mg/m ³	Results of Measurements For SO ₂ , mg/m ³
Point #2 – KM 4.4	698	0.04	0.05	0.002	<0.002
Point #3 – KM 5.8	699	0.04	0.05	<0.002	<0.002
Point #4 – KM 6.4	699	0.04	0.05	0.002	<0.002
Point #5 – Batch plant 2	696.5	0.04	0.05	0.002	<0.002
Point 10 - KM 12.6 AT	700.2	0.04	0.05	<0.002	<0.002
Point 11 - KM 12.6 TA	699.5	0.04	0.05	0.002	<0.002

Point 12 – KM 13.3	699.5	0.04	0.05	0.003	<0.002
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*Maximum permissible concentrations (MPC) of atmospheric air pollutants in populated areas hygiene norms 2.1.6. 002 -01.

The laboratory test results show that the concentrations on NO2 and SO2 in atmosphere air is lower than maximum allowable limits.

6.3. Noise Monitoring Results

Noise monitoring works were carried out at five points according to the customer's request. At the points of KM 5.8 and KM 6.4 noise, monitoring works were carried out during construction works. The results obtained are given below, both in the form of graphs and in a table.

Table 6-6 Noise Monitoring Results

	BP 2	KM 5.8	KM 6.4	KM 13.3	Puti Road
LAeq	55.6	58.4	49.9	48.6	48.0
LAmx	76.2	72.1	67.6	64.2	71.3
LAmin	40.7	47.6	45.3	41.0	37.8
LA10	59.1	61.5	50.9	51.1	50.0
LA90	45.5	52.7	48.3	45.1	41.2

As it was mentioned above, Only one JCB was operating near BP 2. At KM 6.4 there was a slight noise, away from the monitoring point.

Active construction works were in a process only at KM 5.8 and it is likely that due to this the high rates are given.

Exceeding of the permissible noise level is observed at points BP 2 and KM 5.8, so it is important to plan and implement appropriate mitigation measures.

No working process was observed at the other points. It should be noted that during the monitoring works near the village Puti (Puti road), cattle were moving near the monitoring point and some peaks may be caused by the noise of a cow bell. Noise measurement diagrams are given below:

Figure 6-1 Batching Plant N2



Figure 6-2 KM 5.8

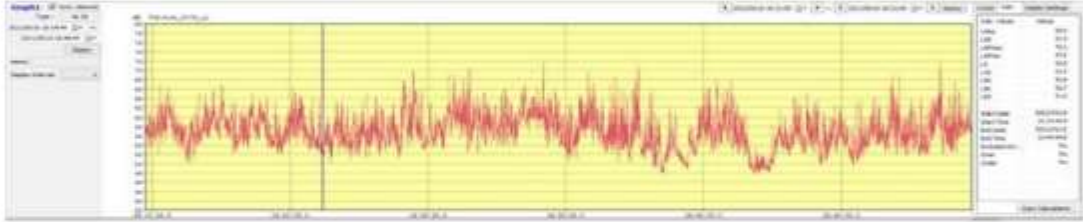


Figure 6-3 KM 6.4



Figure 6-4 KM13.3

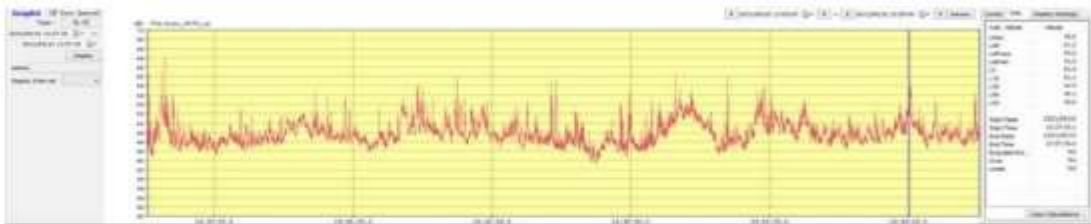


Figure 6-5 Pulli Road



6.4. *Vibration Monitoring Results*

Vibration was monitored at 7 points. During the monitoring process, no construction works were carried out on the territory, except for point BP 2. The monitoring results are given in the form of tables and graphs

Table 6-7 Vibration results for point 5 Batching Plant 2

Geophone	Tran	Vert	Long	Unit
PPV	0.142	0.126	0.173	mm/s
ZC Freq	N/A	<1.0	19	Hz
Time (Rel. to Trig)	6.864	45.576	361.076	sec
Peak Acceleration	0.007	0.007	0.007	g
Peak Displacement	1.862	1.473	1.077	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.5	7.5	7.5	Hz
Overswing Ratio	3.8	4.2	4.4	

Peak Vector Sum 0.218 mm/sec, at 361.081 sec.

Table 6-8 Vibration results for KM 12.6 AT

Geophone	Tran	Vert	Long	Unit
PPV	0.213	0.158	0.292	mm/s
ZC Freq	11	<1.0	14	Hz
Time (Rel. to Trig)	313.792	928.715	314.811	sec
Peak Acceleration	0.010	0.011	0.007	g
Peak Displacement	2.893	1.973	1.285	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.3	Hz
Overswing Ratio	3.9	4.1	4.4	

Peak Vector Sum 0.305 mm/sec, at 314.811 sec

Table 6-9 Vibration results for KM 13.3

Geophone	Tran	Vert	Long	Unit
PPV	0.158	0.150	0.126	mm/s
ZC Freq	5.6	5.3	28	Hz
Time (Rel. to Trig)	279.424	275.202	9.181	sec
Peak Acceleration	0.007	0.007	0.007	g
Peak Displacement	1.060	1.215	1.083	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.3	Hz
Overswing Ratio	3.9	4.2	4.5	

Peak Vector Sum 0.196 mm/sec, at 279.424 sec

Table 6-10 Vibration results for Near Batching Plant 2 (1) opposite

Geophone	Tran	Vert	Long	Unit
PPV	0.765	1.230	0.449	mm/s
ZC Freq	15	19	16	Hz
Time (Rel. to Trig)	441.426	441.490	441.297	sec
Peak Acceleration	0.009	0.029	0.007	g
Peak Displacement	1.617	1.015	0.891	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.3	Hz
Overswing Ratio	3.9	4.2	4.5	

Peak Vector Sum 1.317 mm/sec, at 441.518 sec

Table 6-11 Vibration results for point 6 Near Batching Plant 2 (1)

Geophone	Tran	Vert	Long	Unit
PPV	0.654	0.954	0.820	mm/s
ZC Freq	17	19	18	Hz
Time (Rel. to Trig)	711.098	711.234	711.198	sec
Peak Acceleration	0.011	0.019	0.012	g
Peak Displacement	0.673	0.330	0.528	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.5	Hz
Overswing Ratio	3.9	4.2	4.5	

Peak Vector Sum 1.058 mm/sec, at 711.234 sec

Table 6-12 Vibration results for point 7 Near Batching Plant 2 (2)

Geophone	Tran	Vert	Long	ጊጥጥ.
PPV	0.315	0.891	0.567	mm/s
ZC Freq	8.5	17	9.3	Hz
Time (Rel. to Trig)	353.371	320.721	352.787	sec
Peak Acceleration	0.008	0.012	0.011	g
Peak Displacement	1.693	0.734	0.852	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.5	7.5	7.5	Hz
Overswing Ratio	3.8	4.2	4.4	

Peak Vector Sum 0.930 mm/sec, at 320.722 sec

Table 6-13 Vibration results for point 1 Puti Road

Geophone	Tran	Vert	Long	ጊጥጥ.
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PPV	0.134	0.252	0.173	mm/s
ZC Freq	32	13	30	Hz
Time (Rel. to Trig)	30.587	1142.379	127.059	sec
Peak Acceleration	0.007	0.011	0.009	g
Peak Displacement	0.258	0.140	0.137	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.5	Hz
Overswing Ratio	3.8	4.1	4.4	

Peak Vector Sum 0.262 mm/sec, at 1142.379 sec

The Georgian legislation defines limits of peak vector values, which represent sum of vectors parallel to each axis. The device used for the survey provides data on maximum peak values measured for further analysis of findings of vibration measurements. During the survey standard project values were applied. The project standards define the following requirements:

The Georgian vibration standards are established on the basis of human comfort levels. The Georgian legislation does not provide standards that ensure avoidance of impacts on buildings. The standard establishes the permissible vibration levels in residential buildings, hospitals and holiday houses (ref: Sanitary norms and regulations- 2001).

Table 6-14 Permissible Vibration Levels According to the Georgian Legislation

Mean Geometric Frequencies of Octave Bands	Permissible Values			
	Vibration Acceleration		Vibration Speed	
	m/sec ²	dB	m/sec 10 ⁻⁴	dB
2	4.0	72	3.2	76
4	4.5	73	1.8	71
8	5.6	75	1.1	67
16	11.0	81	1.1	67
31.5	22.0	87	1.1	67
63	45.0	93	1.1	67
Corrected and equivalently corrected values and levels	4.0	72	1.1	67

Source: EIA for Khevi-Ubisa and Shorapani-Argveta road sections

The data provided in the above-mentioned table shows that if vibration lasts for a specific period of time, permissible vibration levels can be exceeded by 5 dB. When vibration is not constant, exceedance by 10 dB is allowable; in this case the absolute vibration value is multiplied by coefficient of 0.32. Moreover,

according to the regulation, permissible vibration levels in hospitals and other healthcare facilities should be reduced by 3dB.

The device used for monitoring of vibration levels measures vibration speed. Consequently, measured values are presented in m/sec not db. The formula below shows how to calculate measured values in dB:

Value of transverse vibration provided in dBV can be calculated on the basis of data on speed (mm/sec) using following formula:

$$Lv = 20 * \lg(V/Vref)$$

Lv = speed levels in decibels, mm/sec (dBV)

V = rms speed amplitude

Vref = reference for speed amplitude, mm/sec (Vref=0.00005 mm/sec)

Results of measured vibration at construction area:

Table 6-15 Vibration measurement results and legislation limits

Point	Peak vector max values		Legislation limits	
	mm/sec	Db	mm/sec	Db
Batch Plant #2	0.218	72.78973	1.1	67 (+10)
KM 12.6 AT	0.305	75.7066	1.1	67 (+10)
KM 13.3	0.196	71.86572	1.1	67 (+10)
Near BP2 (1) – opposite	1.317	88.41232	1.1	67 (+10)
Near BP2 (1)	1.058	86.51031	1.1	67 (+10)

Near BP2 (2)	0.930	85.39026	1.1	67 (+10)
Puti Road	0.262	74.38663	1.1	67 (+10)

Table 6-16 British and German standards for Vibration

High risk of damage	PPV < 5 mm/s
Risk of cosmetic damage	PPV 5 to 15 mm/s
Risk of structural damage	PPV > 15 mm/s

source: British Standard BS 6472 and are German Standards DIN 4150-3:1999

The vibration results meet German and British standards. Slight excesses are observed in relation to Georgian legislation. According to the Georgian legislation, there was an exceeding at the points adjacent to the 2nd batch plant (BP 2 (1), BP 2 (2) and BP 2 (2) - opposite). It should be noted that at these points, the vibration is measured near the existing vehicle road, where often move trucks, and minibuses.

Annex 4: Training Records and Attendance Sheets

<p>ვადასტურებ რომ, უსაფრთხოების ინსტრუქტაჟის თემა გაგაცანი და ავებსენი დამსწრე პერსონალს, რომელიც დამტკიცებულა მათი ხელმოწერით. I certify that the attached safety meeting information was read and explained to personnel in attendance indicated by their signature below.</p>	
<p>ძირითადი თემა/Subject: მედროშს მიერ დასაცავი შრომის უსაფრთხოების პროცედურა, მოთხოვნები და რეკომენდაციები. Maintain HSE requirements of flagman</p>	<p>თარიღი/Date: 28.10.2021</p>
<p>ჯგუფი/Crew: მედროშები/ Flagmen</p>	
<p>ინსტრუქტორი/Instructor: გიორგი ხაჩეიძე / Giorgi Karelidze</p>	
<p>თემის შემადგენლობა/The Subject of training:</p> <p>მედროშის საცადელბული ადპურვილობა: მაღალი გარშეადობის ვილუტი, ჩაფხუტი, ფეხსაცმელი, რადიო გადამცემი (საჭიროების შემთხვევაში), მარჯვენელი ნიშანი (დამის მანითხელი ნიშანი საჭიროების შემთხვევაში). მედროშის ვალდებულებაა ნებისმიერი მანქანის ან მძიმე ტექნიკის გზიდან იხიექტზე შესვლა/გამოხელოს უსაფრთხოების უზრუნველყოფა. საგზაო მოძრაობის რეგულირებისას მედროშები უნდა განლაგდნენ გზის ორივე მხარეს ისე რომ ერთმანეთთან იქონიონ ვიზუალური კავშირი. გზაზე მოძრაობის საკეტვა/გახსნა უნდა განხორციელდეს ორგანიზებულად, მონაცვლითით რათა არ მოხდეს საპირისპირო მიმართულებით მოძრაი მანქანების წაკადების ერთმანეთში შერევა. მედროშე ვალდებულაა აქტურად ხელის მითითებით და დროითი ნიშნით აკონტროლოს მოძრაობა. მედროშე პასუხისმგებელია: უზრუნველყოს საგზაო მოძრაობის უსაფრთხოება როგორც იხიექტის ტერიტორიაზე, ასევე გზაზე გაკონტროლოს მძიმე ტექნიკის მოძრაობა, მიუთითოს მძღოლს და მგზავრებს მოძრაობის გაგრების და გაგრების შესახებ. მედროშე არ უნდა იყოს დაკავებული სხვა საქმიანობით. მედროშებს არ აქვთ უფლება გამოიყენონ ისეთი ხელსაწყოები რომელიც სმენას ხედვას ხედვას შეაფერებს მშობილური ტელეფონი, ცურ/სამსმენები. მითითების გაყენის დროს მედროშე არ უნდა იდგეს გზის საჯალ ნაწილზე ტექნიკის პირდაპირ და არ ჩაიგდოს თავი სადრობებში. მედროშე არ უნდა დაუდგეს ტექნიკას უკან, დაიცავით მინიმალური დისტანცია - 5 მეტრი. სამაშ არ დარწმუნდებით უსაფრთხო გარემოს არსებობაში, არ გასცეთ მითითება მოძრაობის ალდერის შესახებ. მედროშემ უნდა შეინარჩუნოს თვალის კონტაქტი მძღოლთან და ოპერატორთან.</p> <p>Flagman necessary personal protective equipment: reflective vest, helmet, safety shoes, radio transmitter (if needed), Go/Stop sign (night illuminated sign if needed). Flagman is responsible for ensuring the safe entry / exit of any vehicle or heavy equipment from the road. During traffic regulation, flagmen should be located on both sides of the road so, that they will visible to each other. Locking / unlocking of traffic on the road should be organized, alternately so as not to mix the flows of vehicles moving in the opposite direction. Flagman is response to actively control the movement with Go/Stop sign or a flag.</p> <p>The flagman is responsible for: to control the movement of heavy equipment both in the area of the facility and on the road; to inform the driver and passengers to stop or continue moving. Flagman should not be engaged in other activities.</p> <p>Flagmen are not allowed to use devices that can impair their vision: cell phone, headphones. During inductions, flagman should not stand directly at the equipment and not endanger himself. Flagman should not stand behind the equipment; keep the minimum distance - 5 meters. Do not precede command to continue movement until you are sure of a safe environment. Flagman should maintain eye contact with the driver and operator.</p>	
<p>კომენტარები, გადაწყვეტილებები და კითხვები/Comments, Complaints and Suggestions:</p> <ul style="list-style-type: none"> • ყველა თანამშრომელი ვალდებულია უპირობოდ დაემორჩილოს მედროშის მოთხოვნას • მოძრაობის დაწყებამდე მძღოლმა / ოპერატორმა უნდა შემოეყაროს მანქანს დარწმუნდეს რომ მის ქვეშ არაფერია და მანქანა ტექნიკურად გამართულია • ყოველივეს დათვით გზა ფეხით მოსიარულეს • ალკოჰოლის და ნარკოტიკული საშუალებების მიღება მუშაობის დროს აკრძალულია, • გადაადგილების დროს წუ დაყენებით ადამიანს მძიმე ტექნიკაზე გარუდას. <ul style="list-style-type: none"> • All employees are required to obey flagman's request. • Before start the movement, the driver / operator must walk around the car to make sure that no one is under it and the car is technically in good condition. • Always give way to pedestrians. • Alcohol and drugs are prohibited while working. • Do not place a person on heavy equipment from the outside while moving. 	

შრომის უსაფრთხოების და გარემოს დაცვის ტრენინგი #
HSE DEPARTMENT TRAINING #
职业安全与环境培训 #

ლოკაცია: Tunnel N2
 LOCATION:
 位置
 ტრენინგის თემა და ნომერი:
 SUBJECT & REF No:
 培训主题和编号
 ტრენინგის ტუტორი:
 TRAINING TUTOR:
 培训导师
 თარიღი:
 DATE:
 日期: 28.10.2021




	სახელი და გვარი NAME 名称	კომპანია NAME OF EMPLOYER 公司	პოზიცია position 职位	ხელმოწერა Signature 签名
1	გიორგი ნიჭიანი	GHEC	მენეჯერი	გიორგი ნიჭიანი
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ავტომობილის მართვის უნარზე.

- The vehicle must be in working condition and reliable, with seat belts on each of them.
- The number of passengers and cargo should not exceed the norms set by the manufacturer.
- Cargo must be safely fastened and its weight must not exceed the norms set by the manufacturer.
- Drivers should not use a mobile phone or other two-way communication device while driving.
- Persons in the vehicle must have their seat belts fastened at all times of the journey.
- Drivers should not be exposed to alcohol, drugs or any other substance that may affect their ability to drive.

მრომის უსაფრთხოების და გარემოს დაცვის ტრენინგი #
HSE DEPARTMENT TRAINING #
职业安全与环境培训 #

ლოკაცია: GHEC office
 LOCATION:
 位置
 ტრენინგის თემა და ნომერი: Driving safety
 SUBJECT & REF No:
 培训主题和编号
 ტრენინგის ტუტორი: Giorgi Karelidze
 TRAINING TUTOR:
 培训导师
 თარიღი: 8.11.2021
 DATE:
 日期:

	სახელი და გვარი NAME 名称	კომპანია NAME OF EMPLOYER 公司	პოზიცია position 职位	ხელმოწერა Signature 签名
1	საბურთაძო ვახტანგ	GHEC	მენეჯერი	
2	მუხომბე მამუკა	GHEC	მენეჯერი	
3	ბერიძე ნათელა	GHEC	მენეჯერი	
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ყოველდღიური ინსტრუქტაჟი Toolbox Talk 班前讲话

ლოკაცია: Location: 位置:	Bridge N24	თარიღი: Date: 01.11.21 日期:	წარადგინა/Presented by/提出者 Georgi Kimeridze
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სამუშაოს მოკლე აღწერილობა/Short Description of Activities/计划活动的简短说明

Working at height. Lifting Operation. Housekeeping. Electrical Power tools.

სამუშაოს ნებართვა/Permit to work/ 工作许可	ცხელი სამუშაოები/Hot work activities/热门工作活动	აღჭურვილობის წინასწარი დათვალიერება/Equipment pre-use Check/设备使用前检查
ინდივიდუალური დამცავი აღჭურვილობა/PPE/个人防护装备	სიმაღლეზე მუშაობა/Working at Height/高空工作	უსაფრთხო მართვა/Driving Safety/ 行车安全
ორმოები და ფეხის წამოკერის სამიშროება/Slips and trips/ 滑倒和绊倒危险	საგნების ვარდნის სამიშროება/ Falling Objects/坠落物体	ტერიტორიის წესრიგი/Housekeeping/ 家政
ხელის ინსტრუმენტები /Hand tools/ 手动工具	სახიფათო ნივთიერებების გამოყენება/Handling of Hazardous material/危险品处理	სახანძრო უსაფრთხოება/Fire Hazard/ 火灾隐患
ელექტრო ხელსაწყოები/Electrical Equipment/电子设备	ელექტრო საფრთხე/Electrical Hazard/触电危险	პირველადი დახმარება/First Aid/急救
ქრა ხეხვითი სამუშაოები/Grinding and Cutting/研磨和切割	მიწის სამუშაოები/Ground Disturbance/地面干扰	საევაკუაციო გასასვლელები/Evacuation Exits/ 疏散出口
აწევითი სამუშაოები/Lifting Operations/运营提升	მძიმე ტექნიკის მძრაობა/Heavy Equipment Movement/重型装备运动	სხვა/Other/其他

№	სახელი და გვარი/Name/名称	პოზიცია/Position/职位	ხელმოწერა/Signature/签名
1	Leabauer	Leabauer	
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4			
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10			
11			
12			
13			
14		Operator	
15			
16		Supervisor/Site manager	

ყოველდღიური ინსტრუქტაჟი Toolbox Talk 班前讲话

17	გველია ზეილი	Leabeurer	გ. ბერიძე
18	მუშაობს ჯამაყა	" — "	გ. ბერიძე
19	ქსელი შიშვანი	" — "	გ. ბერიძე
20	გუნდა ზიგული	" — "	გ. ბერიძე
21	მუშაობს ზეილი	operator	გ. ბერიძე
22	გუნდა ჯამ	" — "	გ. ბერიძე
23	სპეციალური გუნდი	Supervisor / IT manager	გ. ბერიძე
24	მუშაობს გუნდი		გ. ბერიძე
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"Guizhou Highway Engineering Group Co." Ltd

Order #202111-01

Date: 10.11.2021

"Guizhou Highway Engineering Group Co." Ltd (I/C 405373750)
About Rights and duties of the engineer responsible for the construction site

I order

1. To be appointed as responsible engineers in charge for the F4 section of the E60 highway at the following construction sites;
2. To be in charge of supervising the safety of the employees and the current construction works:

2.1. Tunnel №1 and Tunnel №2:

JIAN XIANG (p/n: 60391002047)
SERGO BEJHANISHVILI (p/n: 57001054335)

2.2. Bridge №1:

JIAN ZHAO (p/n: PE1987466)
GENO BAKHTIDZE (p/n:09001028035)

2.3. Bridge №2:

JIANJUN ZHAO (p/n: 60491001822)
GIORGI BEBIASHVILI (p/n:18001052204)

2.4. Interchange №1, Bridge №3 and Tunnel №3:

ZAIHUA YANG (p/n: 60791002036)
SABA SARALIDZE (p/n:18001068425)

2.5. Interchange №2 and Bridge №4:

TAO XIE (p/n: 604191002070)
GIORGI PERANIDZE (p/n: 18001005263)

Guizhou Highway Engineering Group Co Ltd and China National Technical Import & Export Corporation Joint.

2.6. Tunnel №4:

WEI YANG (p/n: 60291002045)
OTAR DZIDZAVA (p/n: 58001032242)

2.7. Tunnel №5:

YANGZHONG WEI (p/n: 60691002044)
LUKA KELENJERIDZE (p/n: 18001067818)

2.8. Bridge №6:

XIAOBING WU (p/n: EJ2447062)
ROMAN VARDUKADZE (p/n: 18001066160)

2.9. Interchange №3:

CHENGZHENG JIANG (p/n: 60591001824)

2.10. Interchange №4:

YU LUO (p/n: 60291002145)

3. The order enters into force upon signing.

"Guizhou Highway Engineering Group Co." Ltd

Company Representative



Annex 5: Complaints Log

#	Project	Recipient	Date Received	Soc/Env&HSE	Name & contact of Complainant	Complaint Category	Complaint Description	Resolution Description	Resolution	Resolution Date	Substantiated	Status	Days open	Comments
1	F4	Government	05.11.20	Env&HSE	NGO "Green World" represented by Mr. Nugzar Meladze (PK110+00)	Damage to Infrastructure / Assets	NGO "Green World" stated that the groundwater well so-called "Gurulebis Tskaro" located in village Kveda Sakara may be dried up owing to the planned construction works.	On 05.11.2020 the Engineer and the Contractor received the complaint through the Employer's letter (N 2-05/12578); On 30.11.2020 the Employer was replied through the letter (021-CSAE60F4-UBM-GE) that a meeting has been held with attendance of the Contractor, the Engineer, the local settlers of the area, Municipality of Zestafoni and the initiative group of NGO "Green Earth" on November 11, 2020. Then, it has been agreed that before starting to work, the Contractor shall install fences on surrounding that area of it with radius of 30 m from the protective isolation, to prevent any negative impact on the groundwater well "Gurulebis Spring". (Note: The nearest project tunnel is located within approximately 1260 meters for the groundwater well "Gurulebis Tskaro". Hence, it shall not be dried up owing the planned construction work).	Forwarded to CC	11.11.20	Pending	Open	434	The Contractor shall install fences on surrounding that area of it with radius of 30 m from the protective isolation, to prevent any negative impact on the groundwater well "Gurulebis Spring".
2	F4	RD	25.12.20	Social	1) Nino Saralidze ID: 18001017145 Mob N: 599635061 2) Ramaz Qurcikidze ID: 18001016	Inclusion in LARP	The state acquired the part of Ms.Nino's and Mr.Ramaz's land plots and then they stated that the remaining parts (C/C	On 25.12.2020 the Engineer received the complaint through the Employer's letter (N 2-12/14764); On 20.01.2021 the Employer was informed through the formal letter (093-CSAE60F4-UBM-GE) that the complainants' land plots will be provided with the designed Local Road N12, after commissioning of the Project Highway. Besides, it was noted that, in order to avoid a temporary blocking for the existing access road of the mentioned land	Rejected	20.01.21	Unsubstantiated	Closed	26	

				998 Mob N: 55541627 5 (PK90+00)		32.09.43.9 60 & C/C 32.09.43.9 64) became useless as access to the land plots are impossible. Hence, the land owners demand inclusion in LARP.	plots, the Contractor shall firstly carry out the construction of the designed Local Road N12 and then - the Project Highway (PK90+00);							
3	F4	Government	20.01. 21	Social	Nani Gorgadze ID: 18001009 233 Mob N: 55726889 6 (PK95+00)	Inclusion in LARP	She stated that, the apartment block is in danger as Project tunnel should be excavated under the residential building within 13 meters from the ground level. Hence, the residents of the apartment block demand that the risk should be evaluated by the appropriate commission, and finally -	On 20.01.2021 the Engineer received the complaint through the Employer's letter (N 2-05/476); On 21.01.2021 the joint meeting was implemented with the local residents in purpose to investigate the complaint matter and inform them the Project related information; On 10.02.2021 the Contractor was instructed to hire an authorized third-party company(s) to carry out the pre-construction condition survey of buildings/structures, the blasting vibration monitoring and the groundwater level monitoring of the wells around the Project tunnels, prior to start construction activities, which may cause a negative impact on the private or public properties. Besides, it was recommended to implement the pre-construction condition survey of the buildings/structures within 500 m from the blasting points, within 50 meters from the RoV and within 250 m from the project tunnels which shall be excavated only with entrance to tunnel. Also, it was emphasized that it is substantial to survey the pre-construction condition of the existing railway tunnel located approx. 160 m for	Forwarded to RD	Pending	Open	358		

					<p>Inclusion in LARP.</p> <p>the project Tunnel #2 (0117-CSAE60F4-UBM-GE); On 19.02.2021 the Employer was informed that the three-story apartment block is located on the hill, where the Project tunnel #6 shall be excavated with a tunnel excavation machine (roadheader). Also, it was informed, that the depth between the top of Tunnel #6 AT and the ground level at PK95+00 is approximately 11.5 meters. Whereas, the basement of the apartment block is located about 1.5 meters below the ground level. Respectively, the distance from the arch of Tunnel #6 to the basement of the apartment block is approx. 10 meters. According to the geological designs, the type of ground stratum has been fixed at the related location as follows: • From 1 m to 5 m - Silty clay, sandy and slightly gravelly; • From 5 m to 11.9 m - Medium sand with gravel, slightly weathered sandstone, cavity, filled with silty and medium sand. Consequently, it was stated that, there is a risk because of slim soil layer over the tunnel. In view all of above, (Option A) it was recommended to remove the residents of that apartment to the temporary residential area while the excavation works of Tunnel #6; (Option B) the Engineer is unable to estimate the risks of impact on that apartment building. However, observing any potential damage during the construction of Tunnel #6, which about the Employer will be additionally informed in writing (0142-CSAE60F4-UBM-GE); On 15.03.2021 the Contractor proposed LTD ``Beijing Gelin Insurance Appraisal Co.`` as the third-party candidate subcontractor to carry out the pre-construction condition survey of the existing</p>				
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						<p>arrange Workers Camp #3 and the motorway access for Batching Plant #2. Consequently, the possible disturbance on the local residents during the mentioned works had been completed. Besides, it found out, that the distance between the edge of the motorway access of Batching Plant #2 and the aforementioned residential house is approximately 22.5 m. But, in case of the edge of the existing Sachkhere-Chiatura road - approx. 14 m;</p> <p>On 04.03.2021 the Contractor was instructed to hire an authorized third-party company in purpose to carry out impartial and objective noise monitoring at the above-mentioned residential house during night construction activities (from 6 PM to 8 AM), as soon the Contractor starts night construction works (0168-CSAE60F4-UBM-GE);</p> <p>On 09.03.2021 the Employer was informed regarding the above findings. Besides, it was noted that, before the start of construction work, the residential area was under some impact of noise caused by the movement of a vehicles on the existing Sachkhere-Chiatura road. Whereas, in the process of construction works, in case of movement of trucks during the night on the access road of the Batching Plant #2, it is expected to increase the impact of noise on the mentioned house. Hence, the Contactor was instructed to hire an authorized third-party company to carry out noise monitoring at the above-mentioned residential house during night construction activities, as soon the Contractor starts night construction works (0169-CSAE60F4-UBM-GE);</p> <p>On 10.03.2021 the Contactor stated that once he has the construction</p>				
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						<p>activities during the night, he will carry out the related monitoring and mitigation measures set forth in the Environmental Impact Assessment and Environmental Management Plan. These activities will be carried out by the Contractor's Environmental engineer and officer on site and the monitoring responsibility should be carried out according to EMP of EIA (20210310-0125-GHEC-UBM);</p> <p>On 15.03.2021 the Contractor proposed LTD ``Beijing Gelin Insurance Appraisal Co.`` as the third-party candidate subcontractor to carry out the pre-construction condition survey of the existing buildings/structures (20210315-0128-GHEC-UBM);</p> <p>On 19.03.2021 the Contractor was required to submit the additional information regarding the proposed third-party candidate subcontractor, as follows: - Company profile, - Method of statement, - Working experience in foreign countries, - The experience list and contract sample of the similar works, - Clarification about standart of the Company Certificate (0177-CSAE60F4UBM-GE);</p> <p>On 22.03.2021 the Contractor was instructed to follow the Clause 4.18 of PCC and hire a certified third-party laboratory to carry out impartial and objective instrumental monitoring of noise for the residential area of Ms. Khijakadze, in purpose to assess the impact and implement further mitigation measures (0176-CSAE60F4UBM-GE);</p> <p>On 22.03.2021 the Contractor was instructed to provide at least 3 meters high metal barrier along the area between Ms. Khijakadze's residential area and the motorway access of Batching Plant #2, in</p>				
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						<p>purpose to mitigate noise impact (0178-CSAE60F4-UBM-GE); On 16.04.2021 the Contractor stated through the formal letter (20210416-0167-GHEC-UBM) that he arranged 3 meters high noise suppressor barricade between the residential house of Ms. Khijakadze and along the access road of Batching Plant N2. (That is confirmed with the site inspection by the Engineer); On 19.04.2021 the Employer submitted the letter (N 2-05/5861) directly to the Contractor, requesting implementation of the Engineer's instruction stated through the Engineer's formal letter (0169-CSAE60F4-UBM-GE Dated: 09.03.2021); On 27.04.2021 the Contractor proposed the company SDSC Ltd (I/C 405335025) to carry out the pre-construction survey of the existing buildings (20210427-0184-GHEC-UBM); On 07.05.2021 the Engineer replied the Contractor through the formal letter (0272-CSAE60F4-UBM-GE) as follows: "We have reviewed the company profile of LTD SDSC as proposed to carry out Pre-construction Housing Investigation accordingly and in this regard, we do not have any objection."; On 21.06.2021 the Contractor formally submitted the baseline technical survey report of the private buildings (183 units of the private properties), which includes the residential house the AP (20210621-0306-GHEC-UBM); On 14.07.2021 the Engineer issued comments regarding the deficiencies observed in the baseline technical survey report of the buildings, along with the necessary corrective actions, for the Contractor's further remedial</p>			
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						<p>actions (0449-CSAE60F4-UBM-GE);</p> <p>On 14.07.2021 the baseline survey report of the buildings submitted by the Contractor was forwarded to the Employer, with informing the Engineer's observations on its deficiencies and necessary corrective actions to be implemented by the Contractor (0450-CSAE60F4-UBM-GE);</p> <p>On 31.07.2021 the Contractor submitted the Method Statement of Crack Monitoring Using Gyps Plaster for the Engineer's approval (20210731-0374-GHEC-UBM);</p> <p>On 06.08.2021 the Engineer approved the Method Statement of Crack Monitoring Using Gyps Plaster (0497-CSAE60F4-UBM-GE);</p> <p>On 09.12.2021 the Employer required from the Engineer with the letter (N 2-08/20310) to: 1) Submit the monitoring plan of houses being surveyed within 250 meters of the Tunnels indicating the intervals and other details of monitoring. 2) Submit the report describing the current situation and suggesting actions to be taken for the complaint (transferred to Tech-hold) of citizen Phatima Khijakadze. 3) Prepare the communication plan and ensure its proper fulfillment by improving communication with the locals. Please also take into consideration the sensitive social environment and frequent complaints of citizens on site (especially near Tunnel No 5), most commonly resulted in by lack of communication;</p> <p>On 10.12.2021 the Employer required submission of the relief plan, project drawings, and Cross-sections with indicating distances between the buildings/land plots (C/C 32.10.32.234 & C/C</p>				
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						<p>32.10.32.237) and the Project highway. Also, the Employer required the vibration monitoring results conducted in the vicinity of the aforementioned building (N 2-08/20384);</p> <p>On 13.12.2021 the Contactor was instructed to submit the relief plan, project drawings, and Cross-sections with indicating distances between the buildings/land plots (C/C 32.10.32.234 & C/C 32.10.32.237) and the Project highway (0855-CSAE60F4-UBM-GE);</p> <p>On 15.12.2021 the Contractor submitted the required relief plan, project drawings, and Cross-sections with indicating distances between the building/land plots (C/C 32.10.32.234 & C/C 32.10.32.237) and the Project highway (20211215-0658-GHEC-UBM);</p> <p>On 16.12.2021 the relief plan, project drawings, and Cross-sections with indicating distances between the buildings/land plots (C/C 32.10.32.234 & C/C 32.10.32.237) and the Project highway was submitted to the Employer by the Engineer, along with the vibration instrumental monitoring results. According to the Environmental Monitoring Reports, the results of the vibration monitoring conducted in the vicinity of the aforementioned buildings (C/C 32.10.32. 234 & C/C 32.10.32.237) exceed the allowed norms established by the Georgian legislation. (Note: Vibration instrumental monitoring results meet German and British standards. However, it exceeds Georgian standards. The Georgian legislation does not provide standards that ensure avoidance of impact on buildings, but establishes</p>				
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								human comfort levels in buildings.) ---In this regard, the monitoring company SDSC LTD notes in the reports that the result most likely reflects the existing environmental conditions rather than the impact of the Project, as the measurements were conducted in the vicinity of the existing Sachkhere-Chiatura road, where vehicles frequently move (0862-CSAE60F4-UBM-GE);						
5	F4	Government	13.03.21	Env&HSE	Naziko Svanidze ID: 18001006879 Mob N: 555230978 (PK93+00)	Damage to Infrastructure / Assets	She stated that her residential house (C/C 32.10.33.811) is in danger due to the planned construction work. Hence, she demands that the situation shall be investigated.	On 12.03.2021 the Engineer received Ms. Naziko Svanidze's concern through the Employer's letter (N 2-12/3406); On 19.03.2021 the complaint letter was forwarded to the Contractor and it was required to submit the additional information regarding the proposed third-party candidate subcontractor, as follows: - Company profile, - Method of statement, - Working experience in foreign countries, - The experience list and contract sample of the similar works, - Clarification about standard of the Company Certificate (0177-CSAE60F4UBM-GE); On 27.04.2021 the Contractor proposed the company SDSC Ltd (I/C 405335025) to carry out the pre-construction survey of the existing buildings (20210427-0184-GHEC-UBM); On 07.05.2021 the Engineer replied the Contractor through the formal letter (0272-CSAE60F4-UBM-GE) as follows: "We have reviewed the company profile of LTD SDSC as proposed to carry out Pre-construction Housing Investigation accordingly and in this regard, we do not have any objection.";	Forwarded to CC		Pending	Open	306	Construction work of Tunnel 4006 is not carried out. Tunnel 4006 is subject to design variation to construct a highway instead of the tunnel. Hence, the Engineer and the Contractor are working to prepare a proper vibration proposal for the Employer's approval. Hence, when the design variation will be approved by the Employer, the aforementioned residential house will be subject of acquisition.
6	F4	RD	22.03.21	Social	1) Iuri Museridze	Restriction or	They stated, that	On 22.03.2021 the Engineer received the complaint of Mr. Iuri	Accepted	13.04.21	Substantiated	Closed	22	

			<p>ID: 18001028 822 Mob N: 59817055 7 2) Maka Meseridze ID: 18001003 998 Mob N: 59817058 7 (PK81+50)</p>	<p>loss of access</p>	<p>the access of the agricultural land plots (C/C 32.09.43.3 12 & C/C 32.09.43.9 66) is blocked due to the ongoing constructio n activities and he is unable to carry out land cultivation with a tractor. Eventually, they demands that the access road shall be restore, as soon as possible.</p>	<p>Meseridze through the Employer's letter (N 2-05/4094); On 23.03.2021 the Engineer received the complaint of Ms. Maka Meseridze through the Employer's letter (N 2-05/4193); On 24.03.2021 the joint site inspection was implemented and endorsed that the pre-existing motorway access of the aforementioned land plots is blocked due to the arrangement of the motorway access for the batching Plant #2, but an alternative access can be provided; On 01.04.2021 the Contractor was instructed to provide the alternative motorway access for the mentioned land plots, then sign a consensual agreement with the complainants and submit to the Engineer, ASAP (0207-CSAE60F4-UBM-GE); On 05.04.2021 the Employer was informed about the above- mentioned findings of the joint site inspection. Also, it was noted, that the aforementioned land plots will be provided with the project Local Road N11, after completion of the construction work (0211- CSAE60F4-UBM-GE); On 13.04.2021 the site inspection was implemented and it found out that the alternative access is provided by the Contractor; On 29.04.2021 the Contractor submitted the agreement signed by the both parties, stating that the alternative access for the land plots are provided and the land owners no longer have claim against the Contractor (20210429-0193-GHEC- UBM); On 24.05.2021 the above- mentioned agreement signed between the Contractor and Mr. & Ms. Meseridzes was forwarded to the Employer through the formal letter (0307-CSAE60F4-UBM-GE);</p>				
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7	F4	Government	29.03.21	Social	<p>Naziko Chankotadze ID: 18001041007 Mob N: 593417076 (PK81+20)</p>	Inclusion in LARP	<p>She stated that her homestead land plot (C/C 32.10.32.4 45) is puddled due to changed terrain at the adjacent area and the wire mesh fence of her homestead land plot is damaged.</p> <p>Also, she stated that a living condition is deteriorated with a noise caused by the Contractor's construction activities near to her residential area.</p> <p>Moreover, she stated that there is existing landslide in the area where her residential house is located</p>	<p>On 15.03.2021 the site inspection was implemented, as a result it found out that the Workers' Camp #3 arranged in the elevated place compared to the nearby homestead land plot results that a rain water goes to the mentioned land plot and it is puddled;</p> <p>On 22.03.2021 the Contractor was instructed to carry out remedial actions to resolve the flooding issue (0178-CSAE60F4-UBM-GE);</p> <p>On 29.03.2021 the Engineer received the complaint through the Employer's letter (N 2-05/4582);</p> <p>On 30.03.2021 the site inspection was implemented and it found out that the fence of the homestead land plot is recovered, but the puddling issue still remains unresolved;</p> <p>On 16.04.2021 the Contractor was reminded to submit the additional information regarding the proposed third-party candidate subcontractor for the pre-construction survey of the existing buildings, as follows: - Company profile, - Method of statement, - Working experience in foreign countries, - The experience list and contract sample of the similar works, - Clarification about standard of the Company Certificate (0225-CSAE60F4-UBM-GE);</p> <p>On 16.04.2021 the Contractor replied that the concrete drain channel has been arranged between Ms. Chankotadze's land plot and Worker's Camp N3 (20210416-0167-GHEC-UBM);</p> <p>On 27.04.2021 the Contractor proposed the company SDSC Ltd (I/C 405335025) to carry out the pre-construction survey of the existing buildings (20210427-0184-GHEC-UBM);</p> <p>On 28.04.2021 the Contractor was informed that the drain channel arranged by the Contractor is not</p>	Forwarded to RD	Pending	Open	290	<p>On 21.06.2021 the Contractor submitted the pre-construction survey report of the buildings/structures, which includes the applicant's residential house.</p>
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					<p>and the project construction work worsen the situation. Hence, she demands inclusion in LARP.</p> <p>On 03.12.2021 the Employer forwarded another application of the local resident by which she stated that the residential house getting new cracks due to the ongoing Project construction works. Also, he expressed concern regarding the operation of the Batching Plant N2 without the relevant permissions. Moreover, he added that she</p>	<p>sufficient to prevent flooding of the mentioned homestead land plot. Therefore, it was instructed once again to arrange the channel in that way to prevent flooding for the homestead land plot of Ms. Chankotadze (0250-CSAE60F4-UBM-GE);</p> <p>On 28.04.2021 the Employer was informed that the numerous structural cracks are on the walls of the mentioned residential house, which should be the result of the existing landslide. According to construction drawings of Tunnel #5, the excavation works will be carried out within approx. 88 meters from the house of Ms. Chankotadze. This poses a potential for further damage to the residential house, the works will worsen the existing landslide (0251-CSAE60F4-UBM-GE);</p> <p>On 07.05.2021 the Engineer replied the Contactor through the formal letter (0272-CSAE60F4-UBM-GE) as follows: "We have reviewed the company profile of LTD SDSC as proposed to carry out Pre-construction Housing Investigation accordingly and in this regard, we do not have any objection.";</p> <p>On 18.05.2021 the Contractor forwarded the signed agreement between him and Ms. Chankotadze. According to the agreement, the flooding of the construction camp N3 and the area owned by the Ms. Chankotadze was eliminated after the arrangement of a drainage channel between them (20210518-0224-GHEC-UBM);</p> <p>On 21.05.2021 the above signed agreement was forwarded by the Engineer to the Employer through the formal letter (0302-CSAE60F4-UBM-GE);</p> <p>On 21.06.2021 the Contractor formally submitted the baseline</p>			
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					<p>has not received the copy of the technical condition survey documentation of her residential houses.</p>	<p>technical survey report of the private buildings (183 units of the private properties), which includes the residential house the AP (20210621-0306-GHEC-UBM); On 14.07.2021 the Engineer issued comments regarding the deficiencies observed in the baseline technical survey report of the buildings, along with the necessary corrective actions, for the Contractor's further remedial actions (0449-CSAE60F4-UBM-GE); On 14.07.2021 the baseline survey report of the buildings submitted by the Contractor was forwarded to the Employer, with informing the Engineer's observations on its deficiencies and necessary corrective actions to be implemented by the Contractor (0450-CSAE60F4-UBM-GE); On 20.07.2021 the Contractor was instructed with the Engineer's letter (0465-CSAE60F4-UBM-GE) to properly arrange the drainage channel and the sewage channel located between the Workers' Camp #3 and Ms. Naziko Chankotadze's residential house to prevent the leaking of the sewage water and disturbance with the unpleasant odor; On 31.07.2021 the Contractor submitted the Method Statement of Crack Monitoring Using Gyps Plaster for the Engineer's approval (20210731-0374-GHEC-UBM); On 06.08.2021 the Engineer approved the Method Statement of Crack Monitoring Using Gyps Plaster (0497-CSAE60F4-UBM-GE); On 15.09.2021 the Employer forwarded the letter of the Office of Public Defender of Georgia with the Employers letter (N 2-08/15270) concerning Ms. Naziko</p>			
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Chankotadze's issue. The Employer required to discuss the raised issues and inform him in this regard. The issues were raised by Ombudsman as follows: " 1. Whether the Contractor has submitted the documentation prepared as a result of the technical survey of the residential houses located in Zestafoni, Uznadze st. (including the residential house of Ms. Naziko Chankotadze). Please, submit the survey documentation of Naziko Chankotadze's house; 2. Whether monitoring has been implemented for the residential house of Ms. Naziko Chankotadze after the start of the construction works and whether it is confirmed that the land plot and the building/structure located on it are under some impact due to the ongoing construction; 3. In case of a positive answer to the question given in the second paragraph, please provide us with documentation of this and inform us about what kind of measures have been implemented/planned to prevent the violation of Naziko Chankotadze's property rights. And in case of a negative answer, explain the reason and provide information on when and how often the above monitoring is planned in the future."

On 21.09.2021 the Employer was replied with the Engineer's letter (0604-CSAE60F4-UBM-GE) as follows: " We would like to inform you, that the Contractor doesn't carry out the excavation of Tunnel 4005 with blasting, but rather - with using of a hydraulic hammer. ---In connection with the above, the Contractor was instructed with the letters (0510-CSAE60F4-UBM-GE Dated: 11.08.2021 & 0603-CSAE60F4-UBM-GE Dated: 21.09.2021) letters to: -->Cease

excavation work with a hydraulic hammer for Tunnel 4005 until the Tunnel Excavation Plan is approved for Tunnel 4005; ---Cease excavation work with a hydraulic hammer for Tunnel 4005 until the pre-construction condition survey of the buildings/structures is finalized within at least 250 meters from Tunnel 4005, with considering the **Method Statement of Crack Monitoring Using Gyps Plaster** and the comments issued with the Engineer's letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021). --- Despite the above instruction, the Contractor still periodically excavates Tunnel 4005 with a hydraulic hammer. ---As you are aware, in accordance with Article 801 of EIA, it is recommended to use a road header to reduce the possible impact on the surrounding buildings (including Naziko Chankotadze's house) during the excavation of the last portion of Tunnel 4005. ---In this regard, the Contractor was instructed with the letters (0529-CSAE60F4-UBM-GE Dated: 23.08.2021 & 0603-CSAE60F4-UBM-GE Dated: 21.09.2021) to resubmit the Tunnel Excavation Plan for Tunnel 4005 with considering the mitigation measures set out in **Article 801 of the EIA**. ---Also, according to the Bill of Quantity (BoQ, Bill 6, TUN 4005) the excavation of Tunnel 4005 is fully provided with a tunnel boring machine and not with the methodology of explosion. ---It should be noted, that at Pk 81+40 the depth between the top of Tunnel 4005-AT and the basement of Ms. Naziko Chankotadze's residential house is approximately 19 meters. ---Accordingly, during the planned tunnel excavation work to be carried out at Pk 81+40 of

Tunnel 4005-AT, it is recommended to temporarily relocate Ms. Naziko Chankotadze's household to an alternative residential place. ---As you are aware, the technical condition of citizen Naziko Chankotadze's residential house was surveyed on 15th May 2021, by SDSC LTD (I/C 405335025) hired by the Contractor, which about the Engineer has already submitted the documentation to the Employer with the letter (0450-CSAE60F4-UBM-GE Dated: 14.07.2021). With the same letter, the Employer was informed regarding the Engineer's instruction to the Contractor to improve the survey methodology. ---On 16th September 2021, the Engineer and the Contractor jointly checked the tapes put across the cracks of the residential house provided by SDSC LTD. **As a result, it found out, that the tapes are not snapped.** ---Besides, the Contractor was reminded with the letter (603-CSAE60F4-UBM-GE Dated: 21.09.2021) to: ---

- Resubmit the pre-construction condition survey report of buildings/structures located in Zestafoni D.Uznadze street (including Naziko Chankotadze's residential house) with considering the Engineer's comments issued with the Engineer's letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021); ---•Properly arrange the drainage channel and the sewage channel located between the Workers' Camp #3 and Ms. Naziko Chankotadze's residential house to prevent the leaking of the sewage water and disturbance with the unpleasant odor, up to 26th September 2021. ---After implementation of the actions to be taken by the Contractor, the

					<p><i>Employer will be additionally informed in writing."</i></p> <p>On 13.12.2021 the Contractor was reminded to properly arrange the drainage channel and the sewage channel located between the Workers' Camp #3 and Ms. Naziko Chankotadze's residential house to prevent the leaking of the sewage water and disturbance with the unpleasant odor. Finally, provide the consensual agreement with Ms. Naziko Chankotadze's household to formally resolve the above issue and submit it to the Engineer. Besides, the Contractor was recommended once again to provide a temporary alternative residential place for the households of Ms. Naziko Chankotadze (P/N 18001041007) during the planned tunneling work of Tunnel 4005-AT between Pk 81+00 and Pk 82+00, as the depth between the basements of the mentioned citizens' residential house and the top of Tunnel 4005-AT are approximately 19 meters. (0852-CSAE60F4-UBM-GE);</p> <p>On 03.12.2021 the Employer forwarded the local resident's application to the Engineer with the letter (N 2-08/19920). The Employer required to discuss the issue and inform him about the Engineer's position;</p> <p>On 25.12.2021 the Employer replied as follows: <i>"As you are aware, the technical condition of citizen Naziko Chankotadze's residential house was surveyed on 15th May 2021, by SDSC LTD hired by the Contractor, which about the Engineer has already submitted the documentation to the Employer letter (0450-CSAE60F4-UBM-GE Dated: 14.07.2021). With the same letter, the Employer was informed regarding the Engineer's instruction</i></p>			
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to the Contractor to improve the survey methodology. ---
Additionally, please be informed, that on 6th September 2021, the same company marked some cracks in the walls of the above-mentioned residential house, which the Contractor hasn't officially submitted the necessary documentation to the Engineer yet. ---On 24th December 2021, the Engineer checked the tapes and the plasters put across the cracks of the residential house provided by SDSC LTD. ---As a result, it was found out, that the tapes are not snapped. However, one of the plasters is partially removed from the wall (please see attachment N4 for detailed information). ---As you are aware, the Contractor was instructed with the letters (0510-CSAE60F4-UBM-GE Dated: 11.08.2021, 0603-CSAE60F4-UBM-GE Dated: 21.09.2021, 0710-CSAE60F4-UBM-GE Dated: 27.10.2021) to: ---Resubmit the pre-construction condition survey report of buildings/structures located in Zestafoni D.Uznadze street (including Naziko Chankotadze's residential house) with considering the Engineer's comments issued with the Engineer's letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021); ---
•Deliver the copy of the structure/building technical survey reports to the structures/building owners with signing acceptance-delivery acts and report to the Engineer; ---•Cease excavation work with a hydraulic hammer for Tunnel 4005 until the Tunnel Excavation Plan is approved for Tunnel 4005; ---•Cease excavation work with a hydraulic hammer for Tunnel 4005 until the pre-construction condition survey of the

buildings/structures is finalized within at least 250 meters from Tunnel 4005, with considering the Method Statement of Crack Monitoring Using Gyps Plaster and the comments issued with the Engineer's letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021); ---

- Resubmit the Tunnel Excavation Plan for Tunnel 4005 with considering the Engineer's comments issued through the Engineer's letter (0529-CSAE60F4-UBM-GE Dated: 23.08.2021). ---

Additionally, please be informed, that the Contractor is continuing the excavation with a hydraulic hammer for TUN-4005, despite the that the Tunnel Excavation Plan for TUN-4005 is not approved and the pre-construction condition survey of buildings/structures within 250 meters from TUN-4005 is not finalized per the Engineer's comments issued with the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021). ---It should be noted, that at Pk 81+40 the depth between the top of Tunnel 4005-AT and the basement of Ms. Naziko Chankotadze's residential house is approximately 19 meters. --

Accordingly, during the planned tunnel excavation work to be carried out at Pk 81+40 of Tunnel 4005-AT, it is recommended to temporarily relocate Ms. Naziko Chankotadze's household to an alternative residential place. The Contactor was recommended in this regard with the Engineer's letter (0603-CSAE60F4-UBM-GE Dated: 21.09.2021). --(Note: Naziko Chankotadze's household isn't provided with a temporary alternative house yet. Also, as of today, 8 meters of Tunnel 4005-AT is excavated from the Argveta side (up to Pk82 + 92). Accordingly, the

distance from the excavated part of Tunnel 4005-AT to Naziko Chankotadze's house is about 142 meters. In the case of Violeta Getasade's residential house (C/C 32.10.32.526), the distance is approx. 114 meters.)" ---Besides, the Employer was informed regarding the monthly instrumental monitoring results of vibration conducted in the vicinity of the applicant's residential house. According to the monthly monitoring results of vibration conducted from July up to November of 2021, noise exceeds the permissible norms. (Note: Vibration instrumental monitoring results meet German and British standards. However, it exceeds Georgian standards. The Georgian legislation does not provide standards that ensure avoidance of impact on buildings, but establishes human comfort levels in buildings.) ---In this regard, the monitoring company SDSC LTD notes in the reports that the result most likely reflects the existing environmental conditions rather than the impact of the Project, as the measurements were conducted in the vicinity of the existing Sachkhere-Chiatura road, where vehicles frequently move. -- -However, it should be noted, that the exit road of the Contractor's Worker's Camp N3 joins the existing Sachkhere-Chiatura motorway road. Accordingly, to ensure road safety near the Worker's Camp N3, the Contractor has arranged the speed bumps on the section of the existing Sachkhere-Chiatura road. Thus, vibration caused by moving trucks on these speed bumps to some extent deteriorates the existing background of the area, as it was before the start of the project



							<p>construction activities. --- Additionally, the Employer was informed as follows: "As you are well aware, as per (EIA, Section H.2) Table 138: Environmental Management Plan - Detailed Design / Pre-construction Phase of EIA, at the pre-construction phase the Contractor is responsible for the following: -Air Quality- --- •Locations for concrete batching plants require approval from the Engineer and MoEPA and all necessary permits. ---All of the above facilities will also have the appropriate GoG permits and licenses. ---No batching plant shall be located within 500 meters of any urban area or sensitive receptor. ---Should be noted, that the Batching Plant N2 does not operate since 10th December 2021. ---Besides, as you know, the Contractor was repeatedly instructed with the letters (0465-CSAE60F4-UBM-GE Dated: 20.07.2021, 0603-CSAE60F4-UBM-GE Dated: 21.09.2021, & 0852-CSAE60F4-UBM-GE Dated: 13.12.2021) to properly arrange the drainage channel and the sewage channel located between the Workers' Camp N3 and Ms. Naziko Chankotadze's residential house to prevent the leaking of the sewage water and disturbance with the unpleasant odor. However, the issue is still unresolved. ---Please discuss the above issues and inform us regarding the Engineer's and the Contactor's further necessary actions." (0878-CSAE60F4-UBM-GE);</p>							
8	F4	RD	02.04.21	Social	Jambul Matsaberi dze ID: 18001011 071	Inclusion in LARP	They stated that there is existing landslide in the area	On 02.04.2021 the Engineer received the statement through the Employer's letter (N 2-12/5017); On 16.04.2021 the Contractor was reminded to submit the additional information regarding the proposed	Forwarded to RD		Pending	Open	286	On 21.06.2021 the Contractor submitted the pre-

			<p>& Maia Getsadze ID: 01013000 219 represented by Eteri Talakhadze ID: 18001001 149 Mob N: 59910172 7 (PK 82+00)</p>	<p>where their residential houses (C/C 32.10.32.1 44 & C/C 32.10.32.5 16) are located. Hence, these houses getting damage (cracks) due to existing landslide and the ongoing construction work accelerate the landslide process and damaging of the houses. Eventually, they demanded that the issue shall be investigate d and the houses shall be acquired.</p> <p>On 06.10.2021 they added that the paper tapes put across on</p>	<p>third-party candidate subcontractor for the pre-construction survey of the existing buildings, as follows: - Company profile, - Method of statement, - Working experience in foreign countries, - The experience list and contract sample of the similar works, - Clarification about standart of the Company Certificate (0225-CSAE60F4-UBM-GE); On 16.04.2021 the Employer was informed there are numerous structural cracks on the walls of the mentioned residential houses, which appear to be result of the existing landslide. Also, it was noted, that according to construction drawings of Tunnel #5, the excavation works will be carried out within approx. 54 meters from the house of Mr. Matsaberidze and approx. 57 meters from the house of Ms. Getsadze. This poses a potential for further damage to the residential homes. The works will worsen the existing landslide (0226- CSAE60F4-UBM-GE); On 27.04.2021 the Contractor proposed the company SDSC Ltd (I/C 405335025) to carry out the pre-construction survey of the existing buildings (20210427-0184- GHEC-UBM); On 07.05.2021 the Engineer replied the Contactor through the formal letter (0272-CSAE60F4-UBM-GE) as follows: "<i>We have reviewed the company profile of LTD SDSC as proposed to carry out Pre- construction Housing Investigation accordingly and in this regard, we do not have any objection.</i>"; On 21.06.2021 the Contractor formally submitted the baseline technical survey report of the private buildings (183 units of the private properties), which includes the residential house the AP (20210621-0306-GHEC-UBM);</p>			<p>construction survey report of the buildings/stru ctures, which includes the applicant's residential house.</p>
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					<p>the cracks of their house walls are snapped. Hence, in their opinion, living in such conditions is unsafe. Also, they stated that the Contractor has not delivered the technical condition survey documentation of their residential houses to them. Hence, they demanded a copy of the documentation.</p> <p>Besides, they are concerned regarding the Contractor's construction activities at the non-working hours.</p> <p>Moreover,</p>	<p>On 14.07.2021 the Engineer issued comments regarding the deficiencies observed in the baseline technical survey report of the buildings, along with the necessary corrective actions, for the Contractor's further remedial actions (0449-CSAE60F4-UBM-GE);</p> <p>On 14.07.2021 the baseline survey report of the buildings submitted by the Contractor was forwarded to the Employer, with informing the Engineer's observations on its deficiencies and necessary corrective actions to be implemented by the Contractor (0450-CSAE60F4-UBM-GE);</p> <p>On 31.07.2021 the Contractor submitted the Method Statement of Crack Monitoring Using Gyps Plaster for the Engineer's approval (20210731-0374-GHEC-UBM);</p> <p>On 06.08.2021 the Engineer approved the Method Statement of Crack Monitoring Using Gyps Plaster (0497-CSAE60F4-UBM-GE);</p> <p>On 06.10.2021 the Employer forwarded the APs' joint application to the Engineer with the letter (N 2-08/16693). The Employer required to discuss the issue in detail and inform him regarding the Engineer's position;</p> <p>On 27.10.2021 the Contractor was reminded with the Engineer's letter (0710-CSAE60F4-UBM-GE) to deliver the copy of the buildings/structures technical survey reports to the buildings/structures owners (including citizen Jambul Matsaberidze and Maia Getsadze) with signing acceptance-delivery acts and to report it to the Engineer;</p> <p>On 27.10.2021 the Employer was informed with the Engineer's letter (0714-CSAE60F4-UBM-GE)</p>				
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					<p>they stated that Batching Plant #2 located near their residential houses causes an adverse impact on their health due to air pollution. They searched for operation permit documentation for Batching Plant #2, but could not find it in the Public Registry. Hence, they are concerned about this issue.</p> <p>Finally, they demanded inclusion in LARP.</p>	<p>regarding the Engineer's above instruction on the Contractor. With the same letter, the Employer was informed as follows: <i>"Please be informed, that on 6th September 2021, the company SDSC LTD marked some cracks of the walls of the above-mentioned residential houses, which about the Contractor hasn't officially submitted the necessary documentation to the Engineer yet. ---On 19th October 2021 the Engineer inspected the tapes and plasters put on the cracks of the residential houses, provided by the SDSC LTD. ---As a result, it revealed that some tapes and plasters are damaged. Please see attachment N2 for detailed information. ---It should be noted, that the walls of the residential houses of citizens Jambul Matsaberidze and Maia Getsadze had numerous structural cracks even before the start of construction of the Project road, which appears to be the result of the existing landslide processes. Whereas, the implementation of the Project construction poses a potential for further damage to the residential houses with worsening the existing landslide process, which about the Employer was already informed with the letter (0226-CSAE60F4-UBM-GE Dated: 16.04.2021)."</i></p> <p>On 09.12.2021 the Employer required from the Engineer with the letter (N 2-08/20310) to: 1) Submit the monitoring plan of houses being surveyed within 250 meters of the Tunnels indicating the intervals and other details of monitoring. 2) Submit the report describing the current situation and suggesting actions to be taken for the complaint (transferred to Tech-hold) of citizen Jambul Matsaberidze and</p>				
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					<p>Maia Getsadze. 3) Prepare the communication plan and ensure its proper fulfillment by improving communication with the locals. Please also take into consideration the sensitive social environment and frequent complaints of citizens on site (especially near Tunnel No 5), most commonly resulted in by lack of communication;</p> <p>On 10.12.2021 the Employer forwarded the joint application of the local residents regarding the damage to their residential houses and the required copy of the structure/building technical survey report. The Employer required the Engineer's position in this regard. Also, the applicants expressed their interest regarding the distance between their residential houses and the Project tunnel (N 2-08/20348);</p> <p>On 13.12.2021 the Contractor was reminded with the Engineer's letter (0852-CSAE60F4-UBM-GE) to deliver the copy of the structure/building technical survey report to the structures/buildings owners (including citizen Jambul Matsaberidze and Maia Getsadze) with signing acceptance-delivery acts and report it to the Engineer;</p> <p>On 29.12.2021 the Employer was replied with the Engineer's letter (0891-CSAE60F4-UBM-GE) as follows: <i>"We would like to inform you the Contractor has not implemented the tunneling of Tunnel 4005 with blasting. The tunneling of Tunnel 4005 is underway with a hydraulic hammer. ---As you are aware, the technical conditions of the aforementioned residential houses were surveyed on 15th May 2021, by SDSC LTD hired by the Contractor, which about the Engineer has already submitted the documentation to the</i></p>				
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Employer with the letter (0450-CSAE60F4-UBM-GE Dated: 14.07.2021). With the same letter, the Employer was informed regarding the Engineer's instruction on the Contractor to improve the survey methodology. ---
Additionally, please be informed, that on 6th September 2021, the same company marked some cracks of the walls of the above-mentioned residential houses, which about the Contractor hasn't officially submitted the necessary documentation to the Engineer yet. ---On 24th December 2021 the Engineer inspected the tapes and plasters put on the cracks of the residential houses, provided by the SDSC LTD. ---As a result, it revealed that some tapes and plasters are damaged. (Please see attachment N3 for detailed information.) ---It should be noted, that the walls of the residential houses had numerous structural cracks even before the start of construction of the Project road, which appears to be the result of the existing landslide processes. Whereas, the implementation of the Project construction poses a potential for further damage to the residential houses with worsening the existing landslide process. ---
Also, as you are aware, the Contractor was instructed with the Engineer's letters (0603-CSAE60F4-UBM-GE Dated: 21.09.2021, 0710-CSAE60F4-UBM-GE Dated: 27.10.2021 & 0852-CSAE60F4-UBM-GE Dated: 13.12.2021) to: ---Resubmit the pre-construction condition survey report of buildings/structures with considering the Engineer's comments issued with the Engineer's letter (0449-CSAE60F4/UBM-GE Dated:

							14.07.2021); ---Deliver the copy of the structure/building technical survey reports to the structures/building owners (including Jambul Matsaberidze and Maia Getsadze) with signing acceptance-delivery acts and report to the Engineer. ---However, as of today, the Contractor: ---Hasn't submitted the pre-construction condition survey report of buildings/structures with considering the Engineer's comments issued with the Engineer's letter (0449-CSAE60F4/UBM-GE Dated: 14.07.2021); ---Hasn't delivered the copy of the structure/building technical survey reports to the structures/building owners with signing acceptance-delivery acts. - --Besides, please be informed, that: ---The distance between the highest elevation of the arch of TUN-4005-AT (at Pk 81+80) and the elevation of the basements of the aforementioned houses is approx. 18 meters; ---The longitudinal distance between Jambul Matsaberidze's residential house and TUN-4005-AT is approx. 11 meters. In case of Maia Getsadze's residential house - the distance is 31 meters; ---The shortest distance between TUN-4005-AT and the foundation of Jambul Matsaberidze's house is approx. 23 meters. In case of Maia Getsadze's house – the distance is 37 meters (please see attachment N2 for detailed information).";							
9	F4	Government	22.04.21	Env&HSE	Zaza Kiknavidze ID: 18001036784 Mikheil Mchedlidz	Damage to Infrastructure / Assets	They stated that the pasture, near to their living area, is destroyed	On 22.04.2021 the Engineer received the statement through the Employer's letter (N 2-12/6124); On 10.05.2021 the Employer was informed the pasture area is located within the RoW where the Project highway shall be constructed. Consequently, the mentioned	Forwarded to RD		Pending	Open	266	

				<p>e ID: 18001013255 Mirian Mchedlidze e ID: 18001055529 Mob N: 557580328 Lia Kezevadze e ID: 21001025632 Mob N: 557580328 (PK 87+00)</p>		<p>due to ongoing construction works. Hence, they demand compensation.</p>	<p>pasture area has to be destroyed permanently. Also, it was informed, that the local residents were informed, that the Project provides construction of the Local Road N12 and the Reinforced Concrete Culvert (PK86+65) to access to the private land plots and the remaining pasture areas. However, the local residents stated that the remaining pasture area will not be enough to feed their livestock properly, which will reduce income. Eventually, they demanded compensation (0277-CSAE60F4-UBM-GE); On 25.05.2021 the Employer forwarded Ms. Lia Kezevadze's application concerning the same issue (N 2-08/8141); On 01.07.2021 the Employer was replied with the Engineer's letter (0414-CSAE60F4-UBM-GE), that the Employer was already informed in this regard;</p>						
10	F4	RD	22.04.21	Social	<p>Mamuka Peranidze ID: 18001052194 Mob N: 597 77 98 17 (PK 83+50)</p>	Inclusion in LARP	<p>He stated that his household's (C/C 32.10.32.250) living condition is deteriorated with air pollution and noise (also worsened view) caused by the ongoing Project construction works. Also, in his opinion, his household's living</p>	<p>On 22.04.2021 the Employer forwarded Mr. Peranidze's statement to the Engineer through the formal letter (N 2-12/6125) and requested - to survey the pre-construction condition of the residential house; - to carry out continuous monitoring during construction works in purpose to find out what kind of impact may have place to Mr. Peranidze's family by noise, vibration and excessive emission. And, also it was requested to investigate whether the Project impacts to the mentioned residential house and inform the Employer in this regard; On 13.05.2021 the joint site investigation was implemented and it revealed that the distance from the Mr. Peranidze's residential house to Tunnel N5 and Batching Plant N2 are approx. 48 meters and approx. 137 meters respectively. Also, the distance between the</p>	Forwarded to RD	Pending	Open	266	<p>On 21.06.2021 the Contractor submitted the pre-construction survey report of the buildings/structures, which includes the applicant's residential house.</p>

					<p>conditions will be permanently deteriorated the Project at the operational stage. Hence, he demands inclusion in LARP.</p> <p>On 7th and 10th December of 2021, the Employer forwarded another application of the local resident by which he stated once again that the household's living condition is deteriorated due to the Contractor's construction works. Also, he expressed concern regarding the close location of the Batching Plant N2,</p>	<p>residential house and the edge of the carriageway is approx. 47 meters;</p> <p>On 13.05.2021 Contractor was instructed through the formal letter (0285-CSAE60F4-UBM-GE) to comply with Article 4.18 of PCC as per the following: - Regular instrumental monitoring of environment along with necessary mitigation measures for the targeted residential areas, during the construction work, and report to the Engineer on a monthly basis; - The pre-construction survey of the existing buildings, including the house of Mr. Peranidze, and accordingly, submit the report to the Engineer at the earliest; - Tunnel blasting vibration instrumental monitoring and regular reporting to the Engineer, as soon the planned blasting work is started on Tunnel N5. Therefore, please prepare and submit the Tunnel Blasting Plan as per the requirement of Technical Specifications (article 5.6 of Appendix X);</p> <p>On 17.05.2021 the Employer was informed through the formal letter (0291-CSAE60F4-UBM-GE) regarding the findings of the above-mentioned joint investigation of the site, along with the Engineer's above instructions on the Contractor, and it was added that instrumental monitoring reports to be submitted by the Contractor, will be periodically forwarded to the Employer by the Engineer. Besides, it was informed as follows: "Environmental Impact Assessment (clause D.7), the distance between the residential area and the edge of the carriageway must be not less than 50 meters, in case noise barriers are provided – 25 meters. To protect residential area from noise and emission impact, 10m</p>				
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					<p>Workshop and Workers' Camp N3 to his residential house. Moreover, he added that the Project highway is close to his house, which will result permanent impact on the household's living condition and demanded inclusion in LARP.</p>	<p>wide green barrier must be arranged. However, the distance between the aforementioned residential house (C/C 32.10.32.250) and the edge of the carriageway is approximately 47 meters, but the Project doesn't provide any noise/emission barrier." Finally, the Employer was recommended to discuss the issue with the commission;</p> <p>On 21.06.2021 the Contractor formally submitted the baseline technical survey report of the private buildings (183 units of the private properties), which includes the residential house the AP (20210621-0306-GHEC-UBM);</p> <p>On 14.07.2021 the Engineer issued comments regarding the deficiencies observed in the baseline technical survey report of the buildings, along with the necessary corrective actions, for the Contractor's further remedial actions (0449-CSAE60F4-UBM-GE);</p> <p>On 14.07.2021 the baseline survey report of the buildings submitted by the Contractor was forwarded to the Employer, with informing the Engineer's observations on its deficiencies and necessary corrective actions to be implemented by the Contractor (0450-CSAE60F4-UBM-GE);</p> <p>On 31.07.2021 the Contractor submitted the Method Statement of Crack Monitoring Using Gyps Plaster for the Engineer's approval (20210731-0374-GHEC-UBM);</p> <p>On 06.08.2021 the Engineer approved the Method Statement of Crack Monitoring Using Gyps Plaster (0497-CSAE60F4-UBM-GE);</p> <p>On 12.10.2021 the Employer forwarded the letter of the Office of Public Defender of Georgia with the</p>				
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					<p>Employers letter (N 2-08/17011) regarding Mr. Mamuka Peranidze's issues. The Employer required the Engineer to reply him and submit information as it was required in the Ombudsman's letter. One of the issues was concerning the submission of the information regarding distances between the residential house and Tunnel 4005. Also, necessary preventive/mitigation measures which are provided within the Project to avoid adverse impacts on the household. Besides, the Employer required from the Engineer to issue an instruction on the Contractor who shall act as follows: ---Carry out periodical instrumental monitoring of noise and dust at the residential house of Mr. Mamuka Peranidze and submit its results within 10 (ten) working days. ---Prepare and submit drawing (cross-sections) showing distance and difference between the elevations of Tunnel 4005 and the applicant's residential house; - --Submit information, regarding the mitigation and protective measures which are carried out by the Contractor (for example, arrangement of protective wall, also mitigation measures as per EIA); On 18.10.2021 the Contractor was instructed with the Engineer's letter (0679-CSAE60F4-UBM-GE) to act according to the Employer's above requirement and submit the relevant information/documentation to the Engineer up to 25th October 2021; On 18.10.2021 the Employer was informed regarding the Engineer's above instruction on the Contractor. Also, the Employer was informed about the project defined mitigation measures as per Section H.2 of EIA (Air Quality, Noise). Additionally,</p>				
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the Employer was informed that the distance between the residential house and Tunnel 4005-AT is approximately 51.5 meters. Moreover, the Employer was informed that on 7th September of 2021, the company SDSC LTD has marked the cracks with plaster in the aforementioned residential house, which about the Contractor hasn't officially submitted the necessary documentation to the Engineer yet (0680-CSAE60F4-UBM-GE);

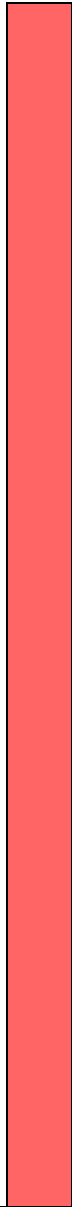
On 23.11.2021 the Contractor submitted the formal letter (20211123-0101-GHEC) directly to the Employer with stating as follows: *"We wrote this letter about the construction blockage problem at the PK83+00-PK89+00 section at the exit of the Tunnel No.5. During our construction, there have been three occurrences of local residents preventing us from constructing on site. They brutally prevented our equipment from carrying out construction activities on the land that has been handed over, and they tried to force our on-site workers to drive away, and sit on the construction equipment to prevent the equipment from constructing. After, communicating with them, we found that the residents who prevented the construction were the following three households (C/C 32.10.32.019 Aza Brregvadze, C/C 32.10.32.250 Mamuka Peranidze and C/C 32.10.32.226 Neli Mchedlidze). The land and houses of these three households are very close to our site, on the top of the slope of the excavation roadbed of our project. They believe that there will be safety hazards to their houses after the construction, and they require their land and houses*

to be requisitioned and resettlement. We here kindly ask the Road Department to consider the request of the residents of the three households. We here send you location maps of the residents of these three households as information for your consideration of land acquisition and resettlement. We also want to remind you that if this problem cannot be resolved, the three residents will continue to block on-site construction. Accordingly to the Contract Sub-Clause 2.1 Right of access to site and 8.4 Extension of time for completion and 20.1 Contractor's claim, if the blockage event continues, it may cause us to file a claim and request the extension of the construction period. We request the Road Department seriously consider the requirements of these three households to resolve related demolition and resettlement issues as soon as possible."

On 06.12.2021 the Contractor submitted noise/dust/vibration instrumental monitoring results contacted near at the residential house of Mr. Mamuka Peranidze by the third-party company SDSC (20211206-0624-GHEC-UBM);

On 07.12.2021 and on 10.12.2021 the Employer forwarded the local resident's joint application to the Engineer with the letters (N 2-08/20130 & N 2-08/20358). The Employer required to discuss the issues raised in the application and inform him regarding the Engineer's position;

On 09.12.2021 the Employer required from the Engineer with the letter (N 2-08/20310) to: 1) Submit the monitoring plan of houses being surveyed within 250 meters of the Tunnels indicating the intervals and other details of monitoring. 2)



					<p>Submit the report describing the current situation and suggesting actions to be taken for the complaint (transferred to Tech-hold) of citizen Mamuka Peranidze . 3) Prepare the communication plan and ensure its proper fulfillment by improving communication with the locals. Please also take into consideration the sensitive social environment and frequent complaints of citizens on site (especially near Tunnel No 5), most commonly resulted in by lack of communication;</p> <p>On 09.12.2021 the Employer required from the Engineer with the letter (N 2-08/20310) to: 1) Submit the monitoring plan of houses being surveyed within 250 meters of the Tunnels indicating the intervals and other details of monitoring. 2) Submit the report describing the current situation and suggesting actions to be taken for the complaint (transferred to Tech-hold) of citizen Neli Mchedlidze. 3) Prepare the communication plan and ensure its proper fulfillment by improving communication with the locals. Please also take into consideration the sensitive social environment and frequent complaints of citizens on site (especially near Tunnel No 5), most commonly resulted in by lack of communication;</p> <p>On 23.12.2021 with the letter (0873-CSAE60F4-UBM-GE) the Employer was informed regarding the monthly instrumental monitoring results conducted in the vicinity of the applicant's residential house. According to the monthly monitoring results conducted from July up to November of 2021, noise and vibration exceed the permissible norms. (Note: Vibration instrumental monitoring results</p>				
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					<p>meet German and British standards. However, it exceeds Georgian standards. The Georgian legislation does not provide standards that ensure avoidance of impact on buildings, but establishes human comfort levels in buildings.) Additionally, the Employer was informed as follows: "To mitigate the impact on the living conditions of the above-mentioned household, the Contactor was instructed with letters (0779-CSAE60F4-UBM-GE Dated: 12.11.2021 & 0824-CSAE60F4-UBM-GE Dated: 30.11.2021) to: ---•Carry out minimum 2 days continuous monitoring; ---•Carry out mitigation measures to decrease noise and vibration; ---•Decrease the number of trucks or moving heavy equipment at sensitive times and conduct training for drivers to operate the trucks at lower RPM. - --However, as of today, the Contractor has not carried out the above actions instructed by the Engineer. The Contractor has not submitted his position to the Engineer regarding the above measures to be taken. ---As you are well aware, as per (EIA, Section H.2) Table 138: <u>Environmental Management Plan - Detailed Design / Pre-construction Phase of EIA</u>, at the pre-construction phase the Contractor is responsible for the following: - Air Quality- ---•Locations for concrete batching plants require approval from the Engineer and MoEPA and all necessary permits. ---•All of the above facilities will also have the appropriate GoG permits and licenses. ---•No batching plant shall be located within 500 meters of any urban area or sensitive receptor. ---It should be noted, that the location of Batching Plant N2</p>				
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						<p>does not meet the requirements of the EIA as it is located less than 500 meters from the urban area and sensitive receptor. -- Accordingly, the Contractor was instructed with the Engineer's letter (0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to relocate the Batching Plant N2. ---However, as of today: ---The Contractor has not relocated the Batching Plant N2; ---The Contractor has not obtained approval for the location of the Batching Plant N2 from MoEPA. ---The Contractor has not obtained all necessary permits and licenses for the Batching Plant N2. --- <u>Should be noted, that the Batching Plant N2 does not operate since 10th December 2021.</u> ---As you are well aware, as per (EIA, Section H.2) Table 138: Environmental Management Plan - Detailed Design / Pre-construction Phase of the EIA, at the pre-construction phase the Contractor is responsible for the following: - Construction Camps- ---</p> <ul style="list-style-type: none"> •<i>Construction camps shall not be located within one kilometer of an urban area and at least 50 meters from any surface watercourse and not within 2 kilometers of a protected area.</i> ---Also, as per Section B.13.1 of EIA (article 205 & 206): --205.Camp sites will be selected keeping in view the availability of an adequate area for establishing campsites, including parking areas for machinery, stores and workshops, access to communication and local markets, and an appropriate distance from sensitive areas in the vicinity. The final locations of the camps will be selected by the Contractor after the approval from the RD and the Engineer. --206.The area requirement for construction camps 				
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will depend upon the workforce deployed and the type and quantity of machinery mobilized. For example, the camps may include rock crushing plant and concrete batching facilities. In view of the area required, it will not be possible to locate campsites within the RoW and the contractors will have to acquire land on lease from private landowners. The construction camp will also have facilities for site offices, workshop and storage yard, and other related facilities including fuel storage. ---It should be noted, that the locations of the Workers' Camp #3 and the Workshop do not meet the requirements of Environmental Impact Assessment, as they locate close to the urban area. --Accordingly, the Contractor was instructed with the Engineer's letter (0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to relocate the Workers' Camp #3 and the Workshop. --However, as of today, the Contractor has not relocated the above-mentioned facilities. --- Please note that it is possible to reduce the impact of noise on the above-mentioned residential house during the Contractor's construction activities by arranging a noise barrier instead of relocating the above-mentioned facilities (Batching Plant N2, Workshop and Workers' Camp N3), which means to arrange 5 meters high metal barrier alongside the construction site (from Pk82+40 to Pk85+50), between the construction site and the residential houses. --However, in case of arranging this noise barrier, it will be necessary to continue instrumental monitoring of the environment to assess the obtained result. ---Besides, as you are aware, the Contractor was instructed with the letters (0497-

						<p>CSAE60F4-UBM-GE Dated: 06.08.2021 & 0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to: --</p> <p>-Cease excavation work with a hydraulic hammer for TUN-4005 until the TEP is approved for TUN-4005; ----Cease excavation work with a hydraulic hammer for TUN-4005 until the pre-construction condition survey of buildings/structures is finalized within at least 250 meters from TUN-4005, with consideration of the Method Statement of Crack Monitoring Using Gyps Plaster and the comments issued with the Engineer's the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021). ---Additionally, please be informed, that the Contractor is continuing the excavation with a hydraulic hammer for TUN-4005, despite that the TEP for TUN-4005 is not approved and the pre-construction condition survey of buildings/structures within 250 meters from TUN-4005 is not finalized per the Engineer's comments issued with the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021). ---In connection with all the above, please discuss the above issues and inform us regarding the Engineer's and the Contactor's further necessary actions.";</p> <p>On 27.12.2021 the Contractor was instructed with the Engineer's letter (0879-CSAE60F4-UBM-GE) to: --</p> <p>-Carry out minimum 2 days of continuous monitoring; ----Carry out mitigation measures to decrease noise and vibration; ---</p> <p>•Decrease the number of trucks or moving heavy equipment at sensitive times and conduct training for drivers to operate the trucks at lower RPM. ---In purpose to reduce the impact of noise on the</p>				
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							residential houses (C/C 32.10.32.250, C/C 32.10.32.019 & C/C 32.10.32.226) of Mamuka Peranidze (P/N 18001052194), Aza Bregvadze (P/N 18001022030), and Neli Mchedlidze (P/N 18001022287) during the Contractor's construction activities, the Contractor is recommended to arrange 5 meters high metal barrier alongside the construction site (from Pk82+40 to Pk85+50), between the construction site and the residential houses. After arranging the noise barrier, the instrumental monitoring of the environment at the aforementioned residential houses shall be continued to assess the obtained result;					
1 1	F4	Government	23.04.21	Env&HSE	Malkhaz Vacharadze ID: 18001015233 Mob N: (PK 6+00)	Damage to Infrastructure / Assets	The local resident of village Kveda Tseva represented by Mr. Malkhaz Vacharadze asked to maintain the drinking spring water in use of them, which is located near the construction site. On 23.04.2021 the Employer forwarded the local residents concern to the Engineer through the formal letter (N 2-05/6218) and requested to investigate the matter along with representatives of the local municipality and the local residents and inform him regarding the findings; On 24.05.2021 the Employer was informed through the Engineer's formal letter (0306-CSAE60F4-UBM-GE) as follows: "The site was inspected on April 26, 2021, along with representatives of the local residents and local municipality. As a result, it found out that the spring water outflows from the hill, nearby the existing Tbilisi-Senaki-Leselidze road, through the underground pipe, which is located approximately 4 meters below from the Project elevation level. According to the Project documentation, the construction of the west portal of Tunnel N1 shall be carried out on the same hill, which shall be reinforced with a micropiles, to approx. 8 meters	Forwarded to CC	24.05.21	Pending	Open	265

								depth from the Project elevation level. The above-mentioned construction work poses the risk of damage for the water pipe and lose of the spring water. It should be noted, that it is technically impossible to relocate the spring water. However, during the construction work, the spring water will be monitored and maintained as much as possible." On 08.06.2021 the Employer required the Contractor that prior to the construction work, to ensure that the water debit is measured in order to maintain the same amount of water after the completion of the works and to avoid the dissatisfaction of the population (N 2-06/9004);					
1 2	F4	Government	29.04.21	Social	Marceta Maglakelidze ID: 18001035310 Mob N: 577 30 0156 (PK 47+00)	Restriction on or loss of access	She stated that only access of her residential house (C/C 32.19.32.572) and drinking water source have to be canceled on a permanent basis due to the Project. Hence, he demands that these issues shall be resolved. Also, she verbally stated that	On 29.04.2021 the Employer forwarded Ms. Maglakelidze's concern to the Engineer through the formal letter (N 2-06/6695) and requested to investigate the issue on the site and inform him regarding the findings; On 27.05.2021 the Employer was informed through the formal letter (0314-CSAE60F4-UBM-GE) as follows: " <i>The mentioned only access of the residential house will be blocked permanently due to the planned construction works within the Project. The Project doesn't provide any alternative access for the residential house. According to the Project documentation and the site inspection, it is possible to arrange the alternative transport access for the aforementioned residential house, for which it is necessary to connect the existing local concrete transport road to the entrance of the yard. It gives access from the residential house to Interchange N2. However, the distance of the road between the residential house and the central</i>	Forwarded to RD		Pending	Open	259

					<p>the gap of the existing crack of her cattle shed wall is increased, due to the Project construction works. Hence, she demands compensation.</p>	<p><i>motorway increases from approx. 100 meters up to approx. 2350 meters. The family of Ms. Maglakelidze expressed dissatisfaction with the above-mentioned alternative access. According to them, the road becomes too long. Also, in the absence of private transport, they often use public transport, for which they walk from the house at the central motorway. To resolve the mentioned pedestrian access issue, it is recommended by the Engineer to arrange a pedestrian bridge over the Project highway. Also, we would like to inform you, that the groundwater collection concrete tank has to be removed, due to the Project, as the tank is located within the RoW, on the state-owned land plot (C/C 32.19.32.571), where the Project highway shall be constructed. According to the family, this tank is only supply of drinking water. Hence, they demanded arrangement of an alternative source of water supply. Please, discuss with the commission regarding the issues of arranging the alternative transport road, the pedestrian bridge and the groundwater well."</i></p> <p>On 08.10.2021 the Employer required the Engineer to issue the instruction on the Contractor regarding the following: ---</p> <ul style="list-style-type: none"> •Submission of a proposal on the arrangement of groundwater well on the land plot of Ms. Marceta Maglakelidze; --- •Implementation of the technical condition monitoring of Ms. Marceta Maglakelidze's cattle shed under the Engineer's inspection and reporting to the Employer in case of deterioration of its condition from the day of fixing the cracks (N 2-08/16791); <p>On 18.10.2021 the Contractor was</p>				
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					<p>instructed with the Engineer's letter (0682-CSAE60F4-UBM-GE) as it was required by the Employer's aforementioned letter (N 2-08/16791);</p> <p>On 20.10.2021 the Contractor replied through the letter (20211020-0540-GHEC-UBM) as follows: "---We have checked the site and made a hydrological report near the resident's house, but the report shows that it is impossible to drill a water well for the resident, because there is no water source. We kindly request the Engineer to give us advice on this issue. ---As for the buildings-structures (including Ms. Marceta Maglakelidze's cattle shed), we will carry out technical condition monitoring under the inspection of Engineer. (Note: The hydrological report was attached on the Contractor's letter);</p> <p>On 04.11.2021 the Contractor was replied with the Engineer's letter (0747-CSAE60F4-UBM-GE) as follows: "<i>The Geophysical and Hydrological Data of the Area has been reviewed by the Engineer and it found out that this document indicates general data of the area and doesn't reflect a particular condition in the case of Ms. Marceta Maglakelidze's issue. --- Therefore, the Contractor is advised to carry out a Geophysical Investigation/Electric Resistivity Survey to investigate the issue in detail and report it to the Engineer as soon as possible.</i></p> <p><i>---Please, consider that before arrangement of an alternative water source, the Contractor is advised to: ---Measure the baseline debit of the existing water source with coordination with Marceta Maglakelidze's household and report its results to the Engineer; --</i></p>			
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						<p><i>-Research the baseline quality of the existing water source with coordination with Marceta Maglakelidze's household and report it to the Engineer. --- Besides, the Contractor is instructed to carry out the pre-construction condition survey of citizen Marceta Maglakelidze's residential house (including the cattle shed) with considering the Engineer's comments issued with the letter (0449-CSAE60F4/UBM-GE Dated: 21.06.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report it to the Engineer promptly."</i></p> <p>On 05.11.2021 the Engineer inspected the tape put on the cracks of the aforementioned cattle shed. ---As a result, it revealed that the tape placed on the crack of the cattle shed is stretched, which is caused by increasing the gap of the crack. ---The Engineer's observations regarding the causes of the impact on the aforementioned cattle shed are as follows: -1.The cattle shed is situated about 6m to 7m from the top cut edge of the Project slope, on the west; -2.It is noticed that the ground is wet due to subsurface water most of the time and the topsoil layer is susceptible to creeping due to the wetness and the steepness of the ground; -3.The activity of cutting the downhill slope for the road construction may have increased/accelerated the existing creeping process due to daylighting of the soil layer at the top of the slope cut; -4.However, it should be noted that the crack widening is towards the north as the ground immediately adjacent to the shed is steeper in this direction and the shed is built at about 1.5m from</p>				
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					<p>a steep existing slope on this side; On 10.11.2021 the Employer was informed with the letter (0764-CSAE60F4-UBM-GE) Engineer's above findings of the site inspection and the Engineer's above observations. Also, the Employer was informed as follows: <i>"The Contractor has not yet completed the excavation works for the final slope arrangement as per the project design. Hence, further slope excavation activities may have additional impacts on the condition of the cattle shed. ---Please discuss the issue and inform us regarding the Engineer's and the Contractor's further necessary actions."</i>;</p> <p>On 19.11.2021 the Contractor submitted the formal letter (20211119-0597-GHEC-UBM) to the Engineer with stating as follows: <i>"The Contractor has a proposal to arrange the individual entrepreneur Kakhaber Samkharadze (I/C: 56001000423) as a subcontractor who will make it in two steps: 1) first it will be the geophysical investigation to find the best place for water well arrangement, total cost of which is 1770 lari. 2) and the process of arrangement itself, the cost of which will be determined on the basis of the geophysical investigation, according to the type of soil and depth of a future water well. Now we are at a stage of preparation of the agreement to implement the abovementioned actions."</i></p> <p>On 20.11.2021 the Contactor was replied with the Engineer's letter (0801-CSAE60F4-UBM-GE) to speed up necessary actions and prepare and submit a proposal on the arrangement of the groundwater well on the land plot of AP, for the Engineer's review and the</p>				
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					<p>Employer's approval ASAP. Additionally, the Contactor was reminded to: ---Measure the baseline debit of the existing water source with coordination with Marceta Maglakelidze's household and report its results to the Engineer. --•Research the baseline quality of the existing water source with coordination with Marceta Maglakelidze's household and report it to the Engineer. --- Moreover, the Contractor was reminded to carry out the technical condition survey of citizen Marceta Maglakelidze's residential house (including the cattle shed) as per the Engineer's comments issued with the letter (0449-CSAE60F4/UBM-GE Dated: 21.06.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report it to the Engineer promptly;</p> <p>On 09.12.2021 the Employer required from the Engineer with the letter (N 2-08/20310) to: 1) Instruct the International Resettlement and Social Expert to conduct a social due diligence (Clause 24 of the TOR) related to the issue of the pedestrian bridge near Citizen Ms. Marceta Maglakelidze's house and reflect the findings in the report. 2) Submit the monitoring plan of houses being surveyed within 250 meters of the Tunnels indicating the intervals and other details of monitoring;</p> <p>On 13.12.2021 the Contractor was reminded: ---• To prepare and submit a proposal on the arrangement of the groundwater well on the land plot of Ms. Marceta Maglakelidze, for the Employer's approval; ---• Carry out the pre-construction condition survey of citizen Marceta Maglakelidze's residential house (including the</p>				
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							<p>cattle shed) with considering the Engineer's comments issued with the letter (0449-CSAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report it to the Engineer. Besides, the Contractor was advised once again to: ---• Measure the baseline debit of the existing water source with coordination with Marceta Maglakelidze's household and report its results to the Engineer; • Research the baseline quality of the existing water source with coordination with Marceta Maglakelidze's household and report it to the Engineer (0852-CSAE60F4-UBM-GE); On 20.12.2021 the Contractor submitted the design drawing of the pedestrian overpass at Pk 46+80 along with its BOQ for the Engineer's revision (20211220-0682-GHEC-UBM); On 24.12.2021 the Contractor submitted the new Geophysical Investigation report along with the proposal of an alternative drinking water source and estimated costs for the Engineer's review (20211223-0691-GHEC-UBM);</p>						
13	F4	RD	05.05.21	Env&HSE	<p>1) Nato Shavgulidze ID: 18001019648 (Ushangi Shavgulidze) 2) Davit Khijakadze ID: 18001050397 3) Zaira machitidz</p>	Damage to Infrastructure / Assets	<p>They stated that, there is risk of damage for their residential houses due to the planned tunnel construction works. Hence, they demanded the pre-</p>	<p>On 05.05.2021 the Employer forwarded the local residents concern through the formal letter (N 2-08/6803) and required to study the technical condition of the mentioned residential houses and inform him about the Engineer's position in this regard. Also, it was required to carry out continuous monitoring (including research of noise and vibration) during the construction works, in purpose to actually determine whether the residential houses will be under impact and inform the Employer in this regard; On 13.05.2021 the Contractor was</p>	Forwarded to CC	Pending	Open	253	<p>Awaiting the pre-construction technical survey of the building(s) (Note: Tunnel 4006 is subject of design variation to construct a highway instead of the tunnel.)</p>

			<p>e ID: 18001010 412 4) Nana Gegeshid ze ID: 18001067 304 (PK 93+00)</p>	<p>constructio n survey of their houses. 1) C/C 32.10.33.7 08, 2) C/C 32.10.33.7 09, 3) C/C 32.10.33.6 18 & 4) C/C 32.10.33.6 45).</p> <p>(Note: Constructi on work of Tunnel 4006 is not carried out. Tunnel 4006 is subject of design variation to construct a highway instead of the tunnel. Hence, the Engineer and the Contractor are working to prepare a proper vibration proposal for the Employers approval.)</p>	<p>instructed through the formal letter (0285-CSAE60F4-UBM-GE) to comply with Article 4.18 of PCC and fulfill the Employer's above requirement and carry out: - Regular instrumental monitoring of environment along with necessary mitigation measures for the mentioned residential areas, during the construction work, and report to the Engineer on a monthly basis; - The pre-construction survey of the existing buildings, including the above-mentioned residential houses and submit report to the Engineer, as soon as possible; - Tunnel blasting vibration instrumental monitoring and regular reporting to the Engineer, as soon the planned blasting work is started in Tunnel N5. Therefore, please prepare and submit Tunnel Blasting Plan as per requirement of Technical Specifications (article 5.6 of Appendix X); On 13.12.2021 the Contractor was reminded to carry out the pre- construction condition survey of the residential houses with considering the Engineer's comments issued with the letter (0449- SAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report its results to the Engineer (0852- CSAE60F4-UBM-GE); On 19.11.2021 the Employer forwarded citizen Nato Shavgulidze's household's (C/C 32.10.33.708) application to the Engineer through the letter (N 2- 08/19177) regarding the same concerns. The Employer required to discuss the issue and inform him about the Engineer's position; On 27.12.2021 the Contractor was instructed to: ----Carry out the pre- construction condition survey of the</p>			
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							residential house (C/C 32.10.33.708) with considering the Engineer's comments issued with the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report it to the Engineer; --- •Carry out regular vibration instrumental monitoring of environment (air quality, noise, vibration) near the house, during active construction works of Tunnel 6/Open excavation in the vicinity of the mentioned house and report its results to the Engineer (0884-CSAE60F4-UBM-GE); On 27.12.2021 the Employer was informed that the residential house (C/C 32.10.33.708) is located approx. 42 meters from the slope of the variation highway/Tunnel 4006/Open excavation (at Pk 93+20) and the residential house is within 50 meters of the variation RoW. Also, the Employer was informed regarding the Engineer's above instruction on the Contractor (0885-CSAE60F4-UBM-GE);					
14	F4	RD	07.05.21	Social	The land owners represented by Mr. Avtandil Svanidze ID: 18001005189 Mob N: 557603023, 599647763 (PK 147+00)	Restriction on or loss of access	They stated that there is the transport access problem for their agricultural land plot, since the Contractor arranged the drainage channel. Hence, they require to resolve the issue.	On 07.05.2021 the Employer forwarded the land owners joint statement through the formal letter (N 2-06/7016) and required to investigate the issue at the site and inform him in this regard; On 23.06.2021 the Employer was replied with the Engineer's letter (0389-CSAE60F4-UBM-GE) as follows: " <i>The Contractor has arranged a drainage ditch in accordance with the project, the drainage ditch construction required partial demolition of the existing access road to the private agricultural land plots. Subsequently, the east side road access to the agricultural land plots is blocked, but from the west side, land plots have road access.</i> "	Forwarded to RD	Pending	Open	251

								<i>However, on the east side, there is sufficient space left between the drainage ditch and the agricultural land plots, in this space, there is a possibility to provide alternative road access. The alternative road construction will require the construction of the drainage pipes located at the junction between the proposed alternative road and the village road. The private landowners are requesting that their handmade ditches be connected to the highway's drainage ditch with the drainage pipes with the purpose of not interfering with the road access construction. As you are aware that the above-mentioned works are not a part of the Project, therefore the next step has to be discussed with the relevant parties."</i>						
1 5	F4	RD	21.05.21	Social	Rezo Kiknavelidze ID: 18001005357 Mob N: Pk 86+50	Restriction on or loss of access	He stated that the access road for his agricultural land plot (C/C 32.09.43.511) is blocked and demands resolving the issue.	On 21.05.2021 the Employer forwarded the application through the formal letter (N 2-06/7886) to the Engineer and the Contractor; On 29.06.2021 the Contractor informed the Engineer on the provision of the alternative access road, which was confirmed with the signed consensual agreement (20210629-0322-GHEC-UBM); On 02.07.2021 the signed consensual agreement on resolving the issue was forwarded to the Employer with the Engineer's letter (0420-CSAE60F4-UBM-GE);	Accepted	21.06.21	Substantiated	Closed	31	The consensual agreement was signed on 21.06.2021
1 6	F4	Government	24.05.21	Social	Zurab Nishnianidze ID: 18001060093 Mob N: 599788550 Pk 4+00	Restriction on or loss of access	He stated that the tractor access for his agricultural land plot (C/C 32.16.38.375) is blocked due to the Project	On 24.05.2021 the Employer forwarded the application and required to inform him regarding the situation at the site (N 2-06/7928); On 08.07.2021 the Employer was replied that the mentioned land plot has the pedestrian access, which is not impacted neither at the construction stage nor at the operational stage. Also, the tractor access road is not canceled by the Project. It is canceled by long-term non-use, as it is covered with	Rejected	08.07.21	Unsubstantiated	Closed	45	

						constructio n work.	impassible vegetation (with trees and bushes) (0439-CSAE60F4-UBM-GE);						
17	F4	Government	24.05.21	Env&HSE	The local residents of the village Phuti represented by Ms. Lela Managadze ID: 55001005991 Mob N: 571101284 Pk 40+00	Damage to Infrastructure / Assets	The local residents of village Phuti are concerned regarding the risk of adverse impact on their private properties by the planned Project tunnel construction;	On 24.05.2021 the Employer forwarded the application and required to inform him regarding the situation at the site (N 2-06/7931); On 30.06.2021 the Contractor was instructed to prepare and submit the Project defined Tunnel Blasting Plan and Groundwater Management Plan, before the planned tunneling works is started, for the Engineer's review and approval (0411-CSAE60F4-UBM-GE); On 30.06.2021 the Employer was informed with the Engineer's letter (0412-CSAE60F4-UBM-GE) as follows: "The joint meeting was held with the aggrieved local residents and the representatives of the Engineer, the Contractor and the local municipality, in purpose to study the issue in details. During the meeting, the local residents required the EIA and Geomechanical Report of the Tunnel N3 prepared within the Project, of which only the EIA was handed over to them, as the Geomechanical Report is dedicated for internal use only. In addition, we would like to inform you, that the Contractor is carrying out the survey of the pre-construction condition of the private buildings and groundwater levels in the wells, for the village Phuti. After the completion of the survey, the Contactor will submit a relevant report in this regard. Besides, the Contractor was instructed to prepare and submit the Project defined TBP and GMP, in order to carry out complete monitoring during the planned tunneling works. After implementation of the above actions to be taken by the	Forwarded to CC	Pending	Open	234	Awaiting the pre-construction technical survey of the building(s)

						<i>Contractor, the Employer will be updated in writing."</i>					
18	F4	Government	27.05.21	Social	<p>The residents of the residential block are concerned about the close distance between the Project highway and their residential block. Hence, they demand inclusion in LARP.</p> <p>The residents of the residential block located at Z.Peradze st. #4, Shorapani (contact person Mr. Koba Gochaleishvili, Mob N: 599917730) Pk 55+50</p>	Inclusion in LARP	<p>On 27.05.2021 the Employer forwarded the local residents' application with the formal letter (N 2-08/8239) and required: - To Carry out the pre-construction technical condition survey of the residential block; - The Engineer's opinion regarding how dangerous is to live in the residential block, at the construction stage and at the operational stage; - The Engineer's opinion regarding how dangerous is to travel near to the residential block, at the construction stage and at the operational stage;</p> <p>On 08.07.2021 the Contractor was instructed to carry out the pre-construction survey of the mentioned residential block and submit its results to the Engineer (0435-CSAE60F4-UBM-GE);</p> <p>On 08.07.2021 the Employer was informed with the letter (0436-CSAE60F4-UBM-GE) about the Engineer's above instruction on the Contractor. Besides, the Employer was replied with the Engineer's same letter as follows: "<i>To prevent a temporary restriction of the road access for the residential block at the construction stage, it is necessary to first construct the local road, that is in the Project, which passes through the private land plot (C/C 32.19.32.313) of Holding LTD (I/C 404397274). -- In order to ensure the traffic safety of the Project highway passing near the residential block, the Project includes the installation of the safety barriers along the highway. -- As you are aware, pre EIA (clause D.7), the distance between the residential area and the edge of the carriageway must be on less than 50 meters, if nose barriers are provided the distance decreases to</i></p>	Forwarded to RD	Pending	Open	231

					<p>vicinity of the residential block.</p> <p>25 meters. To protect the residential area from noise and emission impact, a 10 m wide green barrier must be arranged. -- However, the distance between the aforementioned residential block and the edge of the carriageway is approximately 22 meters and the Project doesn't provide any noise/emission barrier. -- Please, discuss the mentioned non-compliance with the commission";</p> <p>On 09.12.2021 the Employer required from the Engineer with the letter (N 2-08/20310) to: 1) Submit the monitoring plan of houses being surveyed within 250 meters of the Tunnels indicating the intervals and other details of monitoring. 2) Submit the report describing the current situation and suggesting actions to be taken for the complaint (transferred to Tech-hold) of Peradze street residents. 3) Prepare the communication plan and ensure its proper fulfillment by improving communication with the locals. Please also take into consideration the sensitive social environment and frequent complaints of citizens on site (especially near Tunnel No 5), most commonly resulted in by lack of communication;</p> <p>On 10.12.2021 the Employer forwarded the local residents concern regarding the same issue. The Employer required to submit the Engineer's position in this regard (N 2-08/20367);</p> <p>On 13.12.2021 the Contractor was reminded to carry out the pre-construction condition survey of the residential block with considering the Engineer's comments issued with the letter (0449-SAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring</p>				
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						<p>Using Gyps Plaster and report its results to the Engineer (0852-CSAE60F4-UBM-GE);</p> <p>On 27.12.2021 the Employer forwarded another joint application of the local residents. The Employer required to discuss the issue and inform him about the Engineer's position;</p> <p>On 28.12.2021 the Employer was replied with the Engineer's letter (0886-CSAE60F4-UBM-GE) as follows: <i>"We would like to inform you, that the distance between the aforementioned residential block and the edge of the Project highway is 22 meters. ---As you are aware, according to the National Technical Regulations Relevant to the Project (Section D.7 of EIA): ---</i></p> <p><i>i. International and national importance roads should be built bypassing the settlements. Access roads to the settlements should be provided. To allow modernization, the distance between the residential area (settlement) and the edge of the carriageway must be not less than 200m, distance to agricultural land – 50m. If because of technical or economical purposes the road is to cross the settlement, minimum distance to the residential area must be 50m, in case noise barriers are provided – 25m. For local roads minimum distance to residential area must be 50m, distance from agricultural land – 25m. ---ii. To protect residential area from noise and emission impact, 10m wide green barrier must be arranged. --- Besides, as you know, the Project doesn't envisage a noise/emission barrier between the above-mentioned residential block and the Project highway. ---Therefore, please discuss the above non-compliance with the commission."</i></p>				
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19	F4	RD	01.06.21	Env&HSE	<p>Iuza Machitidze ID: 18001028133 Mob N: 574052880 Pk 76+00</p>	Damage to Infrastructure / Assets	<p>He stated that there is risk of damage for his drinking groundwater collection tank, due to the planned tunneling work of Tunnel 4005. Hence, he demanded to consider the issue and carry out relevant preventive measures;</p>	<p>On 01.06.2021 the Employer forwarded the application to the Engineer, and required to inform him regarding the risk assessment (N 2-08/8553); On 21.06.2021 with the formal letter (20210621-0305-GHEC-UBM), the Contractor submitted the pre-construction condition survey report of the groundwater collection concrete tank (Structure Examination Card and Photos); On 15.07.2021 the Contractor was reminded to prepare and submit the Project defined Tunnel Blasting Plan, Vibration Monitoring Plan and Groundwater Management Plan, for the Engineer's review and approval, in order to manage the risk and impact on the private buildings/structures and groundwater sources, during the planned tunneling works (0454-CSAE60F4-UBM-GE); On 15.07.2021 the pre-construction technical survey report of the groundwater collection concrete tank was forwarded to the Employer. Also, the Employer was informed as follows: "The mentioned water collection tank is located on top of the hill, under this hill, the construction of the Tunnel N5 shall be carried out. Consequently, there are the following risks as a result of the planned tunneling works: - Cracking of the mentioned concrete groundwater collection tank due to vibration generated during the tunnel excavation process; - Temporary depletion or drying up of the groundwater during the construction of the Tunnel N5; - Permanent depletion or drying up of the groundwater due to the construction of the Tunnel N5;" ---- Finally, the Employer was informed regarding the Engineer's above</p>	Accepted	21.06.21	Substantiated	Closed	20	<p>On 21.06.2021 the Contractor submitted the pre-construction survey report of the buildings/structures, which includes the applicant's groundwater collection tank.</p>
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							instruction on the Contractor (0455-CSAE60F4-UBM-GE); On 09.12.2021 the Employer required from the Engineer with the letter (N 2-08/20310) to: 1) Submit the monitoring plan of houses being surveyed within 250 meters of the Tunnels indicating the intervals and other details of monitoring. 2) Submit the report describing the current situation and suggesting actions to be taken for the complaint (transferred to Tech-hold) of citizen luza Machitidze. 3) Prepare the communication plan and ensure its proper fulfillment by improving communication with the locals. Please also take into consideration the sensitive social environment and frequent complaints of citizens on site (especially near Tunnel No 5), most commonly resulted in by lack of communication;								
20	F4	RD	22.06.21	Social	Merab Talakhadze ID: 01024000158 Mob N: 577119005 Pk 39+50	Inclusion in LARP	He stated that the part of his land plot (C/C 32.18.31.162 & C/C 32.18.31.163) is located with the boundaries of the RoW. Hence, he demands compensation;	On 22.06.2021 the Employer forwarded the land owner's application to the Engineer with the letter (N 2-08/9962) and required to investigate the issue at the site and inform him about the findings; On 30.08.2021 the joint site inspection revealed that the actual boundary of the aforementioned land plot does not match the boundary registered in the National Agency of Public Registry for the same land plot. Also, the wire mesh fence and the auxiliary building for the agricultural purposes located within the actual boundary of the land plot are subject to be impacted by the Project. Additionally, it was revealed that as per the registered boundary of the land plot, the small part (6 sq.m) of the land plot falls within the Right of Way; On 02.09.2021 the Employer was informed in writing (0559-CSAE60F4-UBM-GE) regarding the	Forwarded to RD		Pending	Open	205		

																		above findings and advised as well, to discuss the issue and inform the Engineer regarding the Engineer's and the Contractor's further necessary actions;						
2 1	F4	RD	29.06. 21	Social	<p>Irma Abramishvili ID: 18001001604 Lili Davituliani ID: 18001009450 Eliza Buadze ID: 04001000272</p> <p>Mob N: 557229339, 555498881, 599677250 Pk 80+50</p>	Inclusion in LARP	<p>They stated that the gaps of the existing cracks on their residential block are increased due to the movement of heavy vehicles.</p> <p>Also, they expressed concern regarding the risk of damage to their residential block due to the planned tunneling work of Tunnel 4005. Eventually, they demanded inclusion in LARP.</p> <p>On 08.10.2021 Ms. Lili Davituliani stated that the paper tapes and the</p>	<p>On 29.06.2021 the Employer forwarded the application to the Engineer and required to investigate the issue and inform him regarding the findings (N 2-08/10346);</p> <p>On 23.07.2021 the Employer forwarded the joint application of the local residents with the letter (N 2-08/12013), concerning the same issues. The Employer required to study the issue and inform him regarding the existing situation and the Engineer's position in this regard;</p> <p>On 27.08.2021 the Employer was replied with the Engineer's letter (0537-CSAE60F4-UBM-GE) as follows: "The distance between the aforementioned residential block and the edge of the carriageway of the existing Sachkhere-Chiatura motorway is approximately 9 meters. It should be noted that, before the start of the construction activities, the technical condition of the residential block was under some impact owing to the vibration caused by the movement of vehicles on the existing Sachkhere-Chiatura motorway. --- The technical condition of the residential block co-owned by the applicants was surveyed on 16th May 2021, by SDSC LTD (I/C 405335025) hired by the Contractor, which about the Engineer has already submitted the documentation to the Employer with the letter (0450-CSAE60F4-UBM-GE Dated: 14.07.2021). With the same letter, the Employer was informed regarding the Engineer's instruction to the Contractor to improve the</p>	Forwarded to RD	Pending	Open	198	On 21.06.2021 the Contractor formally submitted the baseline technical survey report of the private buildings (183 units of the private properties), which includes the residential house the AP (20210621-0306-GHEC-UBM);											

					<p>plasters placed on the crack of her apartment's walls are damaged, because the residential block is getting damages.</p>	<p>survey methodology. --- In order to investigate the issue raised in the above-mentioned citizens' application, on 16th August 2021 the Engineer and the Contractor jointly checked the tapes put across the cracks of the residential block provided by SDSC LTD. As a result, it found out, that tree tapes are snapped put on the cracks of the walls in citizen Viacheslav Davitulaini's family-owned flat. --- As you are well aware, in order to control the disturbing impact (vibration, noise and dust) during the construction activities in the vicinity of the residential block, the Contractor was instructed with the letter (0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to submit the daily instrumental monitoring plan for the Engineer's review, which about the Employer was directly informed through the letter (0531-CSAE60F4-UBM-GE Dated: 24.08.2021). --- Also, we would like to inform you, that the residential block is located on the hill, where the TUN 4005 TA-AT shall be excavated. --- As you are well aware, the Project envisages excavating TUN 4005 TA-AT using a road header and a hydraulic hammer. Before the excavation of TUN 4005 TA-AT is started, the Tunnel Excavation Plan (TEP) shall be approved. TEP shall include the risk assessment of damage to the surrounding buildings that may be caused during the tunnel excavation work and instrumental monitoring plan, which about the Contractor was instructed with the letter (0529-CSAE60F4-UBM-GE Dated: 23.08.2021). --- After implementation of the actions to be taken by the Contractor, the Employer will be additionally informed in writing."</p>				
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						<p>On 08.10.2021 the Employer forwarded Ms. Lili Davituliani's application with the letter (N 2-08/16817) to the Engineer. The Employer required to discuss the issue in detail and inform him regarding the Engineer's position; On 12.10.2021 the Employer was replied with the Engineer's letter (0666-CSAE60F4-UBM-GE) as follows: "Please be informed, that on 4th May and 16th May of 2021, the company SDSC LTD has marked the cracks with plaster in the aforementioned three apartments out of the four, which about the Contractor hasn't officially submitted the necessary documentation to the Engineer yet. ---In particular, the cracks were marked in the apartments of Lili Davituliani, Irma Abramishvili, and Eliza Buadze. ---Based on the Employer's above letter and the verbal application of the citizens living in the above-mentioned residential block, on 9th October 2021 the Engineer inspected the tapes and plasters put on the cracks of the apartments located in Zestafoni D. Uznadze st. N132, provided by the SDSC LTD. ---As a result, it revealed that some tapes and plasters are damaged in the apartments of Lili Davituliani, Irma Abramishvili, and Eliza Buadze. Please see attachment N2 for detailed information. ---It should be noted, that at Pk80+35-TA the distance between the top of Tunnel 4005-TA and the basement of the residential block is approximately 27,2 meters. Whereas, at Pk80+60-AT the distance between the top of the Tunnel 4005-AT and the basement of the residential block is approx. 27,6 meters. ---Therefore, during the planned tunnel excavation work</p>			
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					<p>to be carried out between Pk80+00 and Pk81+00 of Tunnel 4005-TA-AT, it is recommended to temporarily relocate the households living in the aforementioned residential block to an alternative residential place.”</p> <p>On 28.10.2021 the Employer required submission of the Engineer's position on how long it will take to carry out the planned tunneling work of Tunnel N5-TA and Tunnel N5-AT in the section Pk80 + 00 to Pk81 + 00, for the department to discuss the temporary relocation of citizens living in the residential block (N 2-08/17914);</p> <p>On 10.12.2021 the Employer required submission of the relief plan, project drawings, and Cross-sections with indicating distances between the building (C/C 32.10.04.168) and the Project highway. Also, the Employer required the vibration monitoring results conducted in the vicinity of the aforementioned building (N 2-08/20384);</p> <p>On 13.12.2021 the Contactor was instructed to submit the relief plan, project drawings, and Cross-sections with indicating distances between the building (C/C 32.10.04.168) and the Project highway (0855-CSAE60F4-UBM-GE);</p> <p>On 15.12.2021 the Contractor submitted the required relief plan, project drawings, and Cross-sections with indicating distances between the building (C/C 32.10.04.168) and the Project highway (20211215-0658-GHEC-UBM);</p> <p>On 16.12.2021 the relief plan, project drawings, and Cross-sections with indicating distances between the building (C/C</p>				
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				<p>19) unbearable . She added, that she has the complexity of health conditions (cardiac asthma, shortness of breath, high blood pressure, goiter). Also, she added that the Project highway and tunnel are very close to her residential house.</p> <p>Finally, she demanded that an adequate, fair, and necessary decision on the problem to solve the issue.</p> <p>On 17th September 2021, she additionally stated the access road is restricted</p>	<p>per (EIA, Section H.2) Table 138: <u>Environmental Management Plan - Detailed Design / Pre-construction Phase</u> of the EIA, at the pre-construction phase the Contractor is responsible for the following:</p> <p>Construction Camps ---</p> <p><i>•Construction camps shall not be located within one kilometer of an urban area and at least 50 meters from any surface watercourse and not within 2 kilometers of a protected area. As per (EIA, Section H.2) Table 139: <u>Environmental Management Plan – Construction Phase</u> of the EIA, during the construction phase the Contractor is responsible for the following: Air Quality ---</i></p> <p><i>•All trucks used for transporting materials to and from the site will be covered with canvas tarpaulins. ---</i></p> <p><i>•Carry out watering for dust control at least 3 times a day: in the morning, at noon, and in the afternoon during dry weather with temperatures of over 25C, or in windy weather. Avoid overwatering as this may make the surroundings muddy. ---</i></p> <p><i>•Earthwork operation to be suspended when the wind speed exceeds 20 km/h in areas within 500 m of any community. Noise ---</i></p> <p><i>•Time and Activity Constraints, i.e., operations will be scheduled to coincide with periods when people would least likely be affected; work hours and workdays will be limited to less noise-sensitive times. Hours-of-work will be approved by the Engineer having due regard for possible noise disturbance to the local residents or other activities. Construction activities will be strictly prohibited between 10 PM and 6 AM in the residential areas. <u>When operating close to sensitive areas (within 250 meters) such as residential, nursery, or medical</u></i></p>				
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					<p>for her backyard, due to the Contractor's construction works.</p> <p>On 7th and 10th December of 2021, the Employer forwarded another application of the local resident by which she stated once again that her household's living condition is deteriorated due to the Contractor's construction works. Also, she expressed concern regarding the close location of the Batching Plant N2, Workshop and Workers' Camp N3 to her residential house.</p>	<p><u>facilities, the Contractor's hours of working shall be limited to 8 AM to 6 PM;</u> --- •Give notice as early as possible to sensitive receptors for periods of noisier works such as excavation. Describe the activities and how long they are expected to take. Keep affected neighbors informed of progress. --- •Within normal working hours, where it is reasonable to do so: - schedule noisy activities for less sensitive times. - provide periods of respite from noisier works (for example, periodic breaks from jackhammer noise). --- •The weekend/evening periods are important for community rest and recreation and provide respite when noisy work has been conducted throughout the week. Accordingly, work should not usually be scheduled during these times. ---Besides, as per the Engineer's instruction issued with the letter (0497-CSAE60F4-UBM-GE Dated: 06.08.2021), the Contractor is responsible to: ---</p> <ul style="list-style-type: none"> •Cease excavation work with a hydraulic hammer for TUN-4005 until the Tunnel Excavation Plan is approved for TUN-4005; --- •Cease excavation work with a hydraulic hammer for TUN-4005 until the pre-construction condition survey of the buildings/structures is finalized within at least 250 meters from TUN-4005, with consideration of the Method Statement of Crack Monitoring Using Gyps Plaster and the comments issued with the Engineer's letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021). --- <p>Given all of the above, we would like to inform you, that the Contractor was instructed with the letter (0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to comply with his obligations in accordance with Article 4.18 of GCC/PCC and</p>				
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					<p>Morover, she added that the Project highway is close to the residential house, which will result permanent impact on the household's living condition and demanded inclusion in LARP.</p>	<p>Section H.2 of EIA. Especially, the Contractor was instructed to: --- •Limit his working hours from 8 AM up to 6 PM at the west portal of TUN-4005; --- •Provide canvas tarpaulins for all trucks used for transporting materials; --- •Carry out effective watering of the site at the west portal of TUN-4005; --- •Relocate the Workshop located near Batching Plant N2; --- •Relocate the Workers' Camp N3; -- - •To prepare and submit the daily instrumental monitoring plan of the environment during the construction activities at the west portal of TUN-4005. --- Finally, the Contractor was instructed to reply to the Engineer up to 22nd August 2021, on how and when they will fulfill the Engineer's above instructions. --- As of today, please be informed, that despite the Engineer's aforementioned instruction to the Contractor issued with the letters (0497-CSAE60F4-UBM-GE Dated: 06.08.2021 & 0510-CSAE60F4-UBM-GE Dated: 11.08.2021), the Contractor doesn't comply neither the Engineer instructions nor his obligation undertaken within the Contract. In particular, the Contractor: --- •Doesn't limits his working hours to 8 AM up to 6 PM at the west portal of TUN-4005. --- •Continues the excavation work with a hydraulic hammer at the west portal of the TUN-4005, in the light the pre-construction condition survey of the buildings/structures is not finalized and the Tunnel Excavation Plan of TUN-4005 is not approved. --- Moreover, according to the Contractor's letter (20210820-0414-GHEC-UBM Dated: 20.08.2021) letter submitted to the Engineer, the Contractor: --- •Is not intended to limit his working hours to 8 AM up to 6 PM at the west</p>			
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						<p>portal of TUN-4005; --- •Doesn't specify the particular deadline for the provision of canvas tarpaulins for all trucks used for transporting materials; --- •Is not intended to relocate the Workshop located near Batching Plant N2; --- •Is not intended to relocate the Workers' Camp N3; --- •Doesn't state his position on the preparation and the submission of the daily instrumental monitoring plan of the environment during the construction activities at the west portal of TUN-4005. ---The above-mentioned non-compliances increase the dissatisfaction of the local residents living near the western portal of TUN-4005, which threatens the peaceful and uninterrupted operation of the construction process. --- Considering the sensitivity of the issue, the Engineer asks the Employer's support as soon as possible, in pushing the Contactor to act according to the Engineer's instruction and the Contract obligations."</p> <p>On 17.09.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-06/15429). The Employer required to study the issue and reply him in this regard;</p> <p>On 13.10.2021 the joint site inspection revealed that the Contractor has arranged the temporary metallic fence and the temporary wooden fence within the RoW, which restricts the transport access of the backyard of Aza Bregvadze;</p> <p>On 11.11.2021 the Contractor was recommended with the Engineer's letter (0770-CSAE60F4-UBM-GE) to arrange the aforementioned fences in such way to avoid restriction of the transport access for the backyard and to report it to</p>				
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						<p>the Engineer along with the signed consensual agreement. Besides, the Contractor was instructed to carry out regular instrumental monitoring of the environment along with the necessary mitigation measures, at the residential house of Aza Bregvadze, during the construction works and report its results to the Engineer monthly.; On 11.11.2021 the Employer was informed with the Engineer's letter (0771-CSAE60F4-UBM-GE) regarding the above findings of the joint site inspection and the Engineer's above instruction on the Contractor;</p> <p>On 23.11.2021 the Contractor submitted the formal letter (20211123-0101-GHEC) directly to the Employer with stating as follows: <i>"We wrote this letter about the construction blockage problem at the PK83+00-PK89+00 section at the exit of the Tunnel No.5. During our construction, there have been three occurrences of local residents preventing us from constructing on site. They brutally prevented our equipment from carrying out construction activities on the land that has been handed over, and they tried to force our on-site workers to drive away, and sit on the construction equipment to prevent the equipment from constructing. After, communicating with them, we found that the residents who prevented the construction were the following three households (C/C 32.10.32.019 Aza Bregvadze, C/C 32.10.32.250 Mamuka Peranidze and C/C 32.10.32.226 Neli Mchedlidze). The land and houses of these three households are very close to our site, on the top of the slope of the excavation roadbed of our project. They believe that there</i></p>				
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will be safety hazards to their houses after the construction, and they require their land and houses to be requisitioned and resettlement. We here kindly ask the Road Department to consider the request of the residents of the three households. We here send you location maps of the residents of these three households as information for your consideration of land acquisition and resettlement. We also want to remind you that if this problem cannot be resolved, the three residents will continue to block on-site construction. Accordingly to the Contract Sub-Clause 2.1 Right of access to site and 8.4 Extension of time for completion and 20.1 Contractor's claim, if the blockage event continues, it may cause us to file a claim and request the extension of the construction period. We request the Road Department seriously consider the requirements of these three households to resolve related demolition and resettlement issues as soon as possible."

On 07.12.2021 and on 10.12.2021 the Employer forwarded the local resident's joint application to the Engineer with the letters (N 2-08/20130 & N 2-08/20358). The Employer required to discuss the issues raised in the application and inform him regarding the Engineer's position;

On 09.12.2021 the Employer required from the Engineer with the letter (N 2-08/20310) to: 1) Submit the monitoring plan of houses being surveyed within 250 meters of the Tunnels indicating the intervals and other details of monitoring. 2) Submit the report describing the current situation and suggesting actions to be taken for the complaint (transferred to Tech-hold)

						<p>of citizen Aza Bregvadze. 3) Prepare the communication plan and ensure its proper fulfillment by improving communication with the locals. Please also take into consideration the sensitive social environment and frequent complaints of citizens on site (especially near Tunnel No 5), most commonly resulted in by lack of communication;</p> <p>On 13.12.2021 The Contractor is advised once again to arrange the aforementioned fences in such a way as to avoid restriction of the transport access for the backyard and report to the Engineer (0852-CSAE60F4-UBM-GE);</p> <p>On 23.12.2021 with the letter (0873-CSAE60F4-UBM-GE) the Employer was informed regarding the monthly instrumental monitoring results conducted in the vicinity of the applicant's residential house. According to the monthly monitoring results conducted from July up to November of 2021, noise and vibration exceed the permissible norms. (Note: Vibration instrumental monitoring results meet German and British standards. However, it exceeds Georgian standards. The Georgian legislation does not provide standards that ensure avoidance of impact on buildings, but establishes human comfort levels in buildings.) Additionally, the Employer was informed as follows: "To mitigate the impact on the living conditions of the above-mentioned household, the Contractor was instructed with letters (0779-CSAE60F4-UBM-GE Dated: 12.11.2021 & 0824-CSAE60F4-UBM-GE Dated: 30.11.2021) to: ----Carry out minimum 2 days continuous monitoring; ----Carry out mitigation measures to decrease noise and</p>				
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vibration; ---Decrease the number of trucks or moving heavy equipment at sensitive times and conduct training for drivers to operate the trucks at lower RPM. - --However, as of today, the Contractor has not carried out the above actions instructed by the Engineer. The Contractor has not submitted his position to the Engineer regarding the above measures to be taken. ---As you are well aware, as per (EIA, Section H.2) Table 138: Environmental Management Plan - Detailed Design / Pre-construction Phase of EIA, at the pre-construction phase the Contractor is responsible for the following: - **Air Quality**- ---Locations for concrete batching plants require approval from the Engineer and MoEPA and all necessary permits. ---All of the above facilities will also have the appropriate GoG permits and licenses. ---No batching plant shall be located within 500 meters of any urban area or sensitive receptor. ---It should be noted, that the location of Batching Plant N2 does not meet the requirements of the EIA as it is located less than 500 meters from the urban area and sensitive receptor. -- Accordingly, the Contractor was instructed with the Engineer's letter (0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to relocate the Batching Plant N2. ---However, as of today: ---The Contractor has not relocated the Batching Plant N2; ---The Contractor has not obtained approval for the location of the Batching Plant N2 from MoEPA. ---The Contractor has not obtained all necessary permits and licenses for the Batching Plant N2. --- Should be noted, that the Batching Plant N2 does not operate since

10th December 2021. ---As you are well aware, as per (EIA, Section H.2) Table 138: Environmental Management Plan - Detailed Design / Pre-construction Phase of the EIA, at the pre-construction phase the Contractor is responsible for the following: - **Construction Camps-** ---

- Construction camps shall not be located within one kilometer of an urban area and at least 50 meters from any surface watercourse and not within 2 kilometers of a protected area. ---Also, as per Section B.13.1 of EIA (article 205 & 206): --205.Camp sites will be selected keeping in view the availability of an adequate area for establishing campsites, including parking areas for machinery, stores and workshops, access to communication and local markets, and an appropriate distance from sensitive areas in the vicinity. The final locations of the camps will be selected by the Contractor after the approval from the RD and the Engineer. --206.The area requirement for construction camps will depend upon the workforce deployed and the type and quantity of machinery mobilized. For example, the camps may include rock crushing plant and concrete batching facilities. In view of the area required, it will not be possible to locate campsites within the RoW and the contractors will have to acquire land on lease from private landowners. The construction camp will also have facilities for site offices, workshop and storage yard, and other related facilities including fuel storage. ---It should be noted, that the locations of the Workers' Camp #3 and the Workshop do not meet the requirements of Environmental Impact Assessment,

						<p>as they locate close to the urban area. --Accordingly, the Contractor was instructed with the Engineer's letter (0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to relocate the Workers' Camp #3 and the Workshop. --However, as of today, the Contractor has not relocated the above-mentioned facilities. --- <u>Please note that it is possible to reduce the impact of noise on the above-mentioned residential house during the Contractor's construction activities by arranging a noise barrier instead of relocating the above-mentioned facilities (Batching Plant N2, Workshop and Workers' Camp N3), which means to arrange 5 meters high metal barrier alongside the construction site (from Pk82+40 to Pk85+50), between the construction site and the residential houses. --However, in case of arranging this noise barrier, it will be necessary to continue instrumental monitoring of the environment to assess the obtained result. ---Besides, as you are aware, the Contractor was instructed with the letters (0497-CSAE60F4-UBM-GE Dated: 06.08.2021 & 0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to: --</u> <u>--Cease excavation work with a hydraulic hammer for TUN-4005 until the TEP is approved for TUN-4005; ---Cease excavation work with a hydraulic hammer for TUN-4005 until the pre-construction condition survey of buildings/structures is finalized within at least 250 meters from TUN-4005, with consideration of the Method Statement of Crack Monitoring Using Gyps Plaster and the comments issued with the Engineer's the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021). ---Additionally,</u></p>					
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						<p>please be informed, that the Contractor is continuing the excavation with a hydraulic hammer for TUN-4005, despite that the TEP for TUN-4005 is not approved and the pre-construction condition survey of buildings/structures within 250 meters from TUN-4005 is not finalized per the Engineer's comments issued with the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021). ---In connection with all the above, please discuss the above issues and inform us regarding the Engineer's and the Contactor's further necessary actions.";</p> <p>On 27.12.2021 the Contractor was instructed with the Engineer's letter (0879-CSAE60F4-UBM-GE) to: --</p> <ul style="list-style-type: none">-Carry out minimum 2 days of continuous monitoring; ----Carry out mitigation measures to decrease noise and vibration; ---•Decrease the number of trucks or moving heavy equipment at sensitive times and conduct training for drivers to operate the trucks at lower RPM. ---In purpose to reduce the impact of noise on the residential houses (C/C 32.10.32.250, C/C 32.10.32.019 & C/C 32.10.32.226) of Mamuka Peranidze (P/N 18001052194), Aza Bregvadze (P/N 18001022030), and Neli Mchedlidze (P/N 18001022287) during the Contractor's construction activities, the Contractor is recommended to arrange 5 meters high metal barrier alongside the construction site (from Pk82+40 to Pk85+50), between the construction site and the residential houses. After arranging the noise barrier, the instrumental monitoring of the environment at the aforementioned residential houses shall be				
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							continued to assess the obtained result;						
23	F4	Government	05.07.21	Env&HSE	The local residents living in Batonishvili street represented by Dimitri Kelenjeridze ID: 18001048917 Mob N: 555875587, 574022360 Pk 70+50	Damage to Infrastructure / Assets	They stated the drinking water collection tank is located within the RoW, where the Project construction work is ongoing. Hence, the tank is covered under the ground due to the ongoing construction works. So, there is a risk of cancellation of the drinking water supply. Eventually, they demanded necessary remedial actions.	On 05.07.2021 the Employer forwarded the APs' joint application to the Engineer with the letter (N 2-06/10721). The Employer required to study the issue at the site and inform him about the existing situation; On 15.12.2021 the Employer forwarded the local residents' joint application to the Engineer and the Contactor regarding the same concern (N 2-06/20542);	Under review		Pending	Open	192
24	F4	Government	05.07.21	Social	Residents of Shorapani represented by Majoritarian MP Mr. Koba Gocheleishvili Pk 54+00	Restriction or loss of access	The local residents demand provision of a passenger stations, access roads, underpasses and	On 05.07.2021 the Employer forwarded the local residents' concern to the Engineer with the letter (N 2-06/10735). The Employer required to study the issue at the site and inform him about the existing situation;	Under review		Pending	Open	192

						overpasses at Pk 54 and at Pk 43.							
25	F4	Government	12.07.21	Env&HSE	Manana Arabidze ID: 18001007302 Mob N: 551381100 Pk 76+00	Damage to Infrastructure / Assets	<p>She stated that her residential house along with the auxiliary buildings and the perennial (C/C 32.09.42.4 48, C/C 32.09.42.4 49, C/C 32.09.42.4 50, C/C 32.09.42.6 72 & C/C 32.09.42.6 73) are under risk to be damaged due to the planned tunneling work of Tunnel 4005; Hence, she demands that the pre-construction condition survey has to be implemented for her private property.</p> <p>On 12.07.2021 the Employer forwarded the local resident's application to the Engineer and the Contractor with the letter (N 2-08/11149). The Employer required to carry out the pre-construction condition survey and inform him regarding the Engineer's and the Contractor's position about the issue;</p> <p>On 11.08.2021 the Contractor was instructed with the letter (0510-CSAE60F4-UBM-GE) to cease excavation work of Tunnel 4005 until the pre-construction condition survey of the private buildings/structures is finalized within at least 250 meters from Tunnel 4005, with considering of the Method Statement of Crack Monitoring Using Gyps Plaster and the comments issued with the Engineer's letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021);</p> <p>On 24.08.2021 the Employer was informed with the format letter (0531-CSAE60F4-UBM-GE) regarding the Engineer's above instruction on the Contractor;</p>	Forwarded to CC	Pending	Open	185	Awaiting the pre-construction technical survey of the building(s)	

26	F4	RD	24.05.21	Social	<p>Neli Mchedlidze ID: 18001022287 Mob N: 592034992 Pk 84+30</p>	Inclusion in LARP	<p>She stated that there is an adverse impact on the living conditions of her residential house (C/C 32.10.32.26) with dust and noise caused by the Project construction works. She added that she and her husband have asthma, and they will not be able to live in such conditions for a long time.</p> <p>On 7th and 10th December of 2021, the Employer forwarded another application of the local resident by which she stated once again that her household'</p>	<p>On 24.05.2021 the Employer forwarded the applicant's statement and required the Engineer's position regarding the issue (N 2-08/8004);</p> <p>On 25.06.2021 the Contractor was instructed with the Engineer's letter (0394-CSAE60F4-UBM-GE) as follows: "In purpose to investigate the issue on a technical basis and to plan further relevant mitigation measures, the Contractor is instructed to carry out instrumental monitoring of noise and dust impression. all mitigation measures must be in place as defined in Site Specific Environmental Management Plan for Batching Plant and Workshop, including regular and frequent water spraying around the residential house of Ms. Neli Mchedlidze and inside the boundary of the facility and report to the Engineer taken actions including measurement results accordingly.";</p> <p>On 29. 06.2021 the Employer was replied with the Engineer's letter (0407-CSAE60F4-UBM-GE) as follows: " The applicant's residential house is located within approximately 114 meters from the west portal of Tunnel N5. In case of the Batching Plant N2 - within approx. 110 meters. Noise and dust are generated during the ongoing construction works for the west portal of the Tunnel N5 (drilling of micro piles) and the during operation of the Batching Plant N2, which to some extent impacts to the local population, including the residential house of Ms. Neli Mchedlide. In order to investigate the above issue on a technical basis, it is necessary to carry out regular instrumental monitoring of noise and dust, at the above-mentioned residential house, which</p>	Forwarded to CC	Pending	Open	234	<p>On 21.06.2021 the Contractor submitted the pre-construction survey report of the buildings/structures, which includes the applicant's residential house.</p>
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				<p>s living condition is deteriorated due to the Contractor's construction works. Also, she expressed concern regarding the close location of the Batching Plant N2, Workshop and Workers' Camp N3 to her residential house. Moreover, she added that the Project highway is close to her house, which will result permanent impact on the her household's living condition and demanded inclusion in LARP.</p>	<p>about the Contractor was already instructed with the Engineer's letter; On 28.07.2021 the Employer required to inform him about what kind of impact occurs for the residential house of Ms. Neli Mchedlidze due to the Project construction works. Also, the Employer required information about the instrumental monitoring results and the planned mitigation measures (N 2-08/12341); On 22.09.2021 the instrumental monitoring results of the environment was submitted to the Employer with the Engineer's letter (0608-CSAE60F4-UBM-GE). Also, with the same letter, the Employer was replied as follows: "In accordance with Article 4.18 of GCC/PCC and Section H.2 of EIA, the Contractor was instructed with letter (0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to implement necessary mitigation measures near the residential house of Neli Mchedlidze as follows: --- •Limit working hours from 8 AM up to 6 PM at the west portal of TUN-4005; --- •Provide canvas tarpaulins for all trucks used for transporting materials; --- •Carry out effective watering of the site at the west portal of TUN-4005; --- •Relocate the Workshop located near Batching Plant N2; --- •Prepare and submit the daily instrumental monitoring plan of the environment during the construction activities at the west portal of TUN-4005; --- •Prepare and submit a plan up to 22nd August 2021, on how and when the Contractor will execute the Engineer's above instructions. ---It should be noted, that according to the Contractor's letter (20210820-0414-GHEC-UBM Dated: 20.08.2021) submitted to the Engineer, the Contractor: --- •Is</p>				
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						<p>not intended to limit his working hours to 8 AM up to 6 PM at the west portal of TUN-4005; ---</p> <ul style="list-style-type: none"> •Doesn't specify the particular deadline for the provision of canvas tarpaulins for all trucks used for transporting materials; --- •Is not intended to relocate the Workshop located near Batching Plant N2; --- •Is not intended to relocate the Workers' Camp N3; --- •Doesn't state his position on the preparation and the submission of the daily instrumental monitoring plan of the environment during the construction activities at the west portal of TUN-4005. --- <p>---Except for the above-mentioned letter (20210820-0414-GHEC-UBM Dated: 20.08.2021), the Contractor has not yet submitted a plan on the execution of the instruction issued by the Engineer through the letter (0510-CSAE60F4-UBM-GE Dated: 11.08.2021);</p> <p>On 23.11.2021 the Contractor submitted the formal letter (20211123-0101-GHEC) directly to the Employer with stating as follows: <i>"We wrote this letter about the construction blockage problem at the PK83+00-PK89+00 section at the exit of the Tunnel No.5. During our construction, there have been three occurrences of local residents preventing us from constructing on site. They brutally prevented our equipment from carrying out construction activities on the land that has been handed over, and they tried to force our on-site workers to drive away, and sit on the construction equipment to prevent the equipment from constructing. After, communicating with them, we found that the residents who prevented the construction were the following three households (C/C</i></p>				
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32.10.32.019 Aza Brregvadze, C/C
32.10.32.250 Mamuka Peranidze
and C/C 32.10.32.226 Neli
Mchedlidze). The land and houses
of these three households are very
close to our site, on the top of the
slope of the excavation roadbed of
our project. They believe that there
will be safety hazards to their
houses after the construction, and
they require their land and houses
to be requisitioned and
resettlement. We here kindly ask
the Road Department to consider
the request of the residents of the
three households. We here send
you location maps of the residents
of these three households as
information for your consideration of
land acquisition and resettlement.
We also want to remind you that if
this problem cannot be resolved,
the three residents will continue to
block on-site construction.
Accordingly to the Contract Sub-
Clause 2.1 Right of access to site
and 8.4 Extension of time for
completion and 20.1 Contractor's
claim, if the blockage event
continues, it may cause us to file a
claim and request the extension of
the construction period. We request
the Road Department seriously
consider the requirements of these
three households to resolve related
demolition and resettlement issues
as soon as possible."
On 07.12.2021 and on 10.12.2021
the Employer forwarded the local
resident's joint application to the
Engineer with the letters (N 2-
08/20130 & N 2-08/20358). The
Employer required to discuss the
issues raised in the application and
inform him regarding the Engineer's
position;
On 23.12.2021 with the letter
(0873-CSAE60F4-UBM-GE) the
Employer was informed regarding

the monthly instrumental monitoring results conducted in the vicinity of the applicant's residential house. According to the monthly monitoring results conducted from July up to November of 2021, **noise and vibration exceed the permissible norms.** (**Note:** Vibration instrumental monitoring results meet German and British standards. However, it exceeds Georgian standards. The Georgian legislation does not provide standards that ensure avoidance of impact on buildings, but establishes human comfort levels in buildings.) Additionally, the Employer was informed as follows: "To mitigate the impact on the living conditions of the above-mentioned household, the Contactor was instructed with letters (0779-CSAE60F4-UBM-GE Dated: 12.11.2021 & 0824-CSAE60F4-UBM-GE Dated: 30.11.2021) to: ---Carry out minimum 2 days continuous monitoring; ---Carry out mitigation measures to decrease noise and vibration; ---Decrease the number of trucks or moving heavy equipment at sensitive times and conduct training for drivers to operate the trucks at lower RPM. - --However, as of today, the Contractor has not carried out the above actions instructed by the Engineer. The Contractor has not submitted his position to the Engineer regarding the above measures to be taken. ---As you are well aware, as per (EIA, **Section H.2) Table 138: Environmental Management Plan - Detailed Design / Pre-construction Phase of EIA**, at the pre-construction phase the Contractor is responsible for the following: - **Air Quality**- ---Locations for concrete batching plants require

approval from the Engineer and MoEPA and all necessary permits. ---All of the above facilities will also have the appropriate GoG permits and licenses. ---No batching plant shall be located within 500 meters of any urban area or sensitive receptor. ---It should be noted, that the location of Batching Plant N2 does not meet the requirements of the EIA as it is located less than 500 meters from the urban area and sensitive receptor. -- Accordingly, the Contractor was instructed with the Engineer's letter (0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to relocate the Batching Plant N2. ---However, as of today: ---The Contractor has not relocated the Batching Plant N2; ---The Contractor has not obtained approval for the location of the Batching Plant N2 from MoEPA. ---The Contractor has not obtained all necessary permits and licenses for the Batching Plant N2. --- Should be noted, that the Batching Plant N2 does not operate since 10th December 2021. ---As you are well aware, as per (EIA, **Section H.2) Table 138: Environmental Management Plan - Detailed Design / Pre-construction Phase of the EIA**, at the pre-construction phase the Contractor is responsible for the following: - **Construction Camps-** ---
• *Construction camps shall not be located within one kilometer of an urban area and at least 50 meters from any surface watercourse and not within 2 kilometers of a protected area.* ---Also, as per **Section B.13.1 of EIA** (article 205 & 206): --205. *Camp sites will be selected keeping in view the availability of an adequate area for establishing campsites, including parking areas for machinery, stores*

and workshops, access to communication and local markets, and an appropriate distance from sensitive areas in the vicinity. The final locations of the camps will be selected by the Contractor after the approval from the RD and the Engineer. --206. The area requirement for construction camps will depend upon the workforce deployed and the type and quantity of machinery mobilized. For example, the camps may include rock crushing plant and concrete batching facilities. In view of the area required, it will not be possible to locate campsites within the RoW and the contractors will have to acquire land on lease from private landowners. The construction camp will also have facilities for site offices, workshop and storage yard, and other related facilities including fuel storage. ---It should be noted, that the locations of the Workers' Camp #3 and the Workshop do not meet the requirements of Environmental Impact Assessment, as they locate close to the urban area. --Accordingly, the Contractor was instructed with the Engineer's letter (0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to relocate the Workers' Camp #3 and the Workshop. --However, as of today, the Contractor has not relocated the above-mentioned facilities. --- Please note that it is possible to reduce the impact of noise on the above-mentioned residential house during the Contractor's construction activities by arranging a noise barrier instead of relocating the above-mentioned facilities (Batching Plant N2, Workshop and Workers' Camp N3), which means to arrange 5 meters high metal barrier alongside the construction site (from Pk82+40 to Pk85+50).

between the construction site and the residential houses. --However, in case of arranging this noise barrier, it will be necessary to continue instrumental monitoring of the environment to assess the obtained result. ---Besides, as you are aware, the Contractor was instructed with the letters (0497-CSAE60F4-UBM-GE Dated: 06.08.2021 & 0510-CSAE60F4-UBM-GE Dated: 11.08.2021) to: --
--Cease excavation work with a hydraulic hammer for TUN-4005 until the TEP is approved for TUN-4005; ----Cease excavation work with a hydraulic hammer for TUN-4005 until the pre-construction condition survey of buildings/structures is finalized within at least 250 meters from TUN-4005, with consideration of the **Method Statement of Crack Monitoring Using Gyps Plaster** and the comments issued with the Engineer's the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021). ---Additionally, please be informed, that the Contractor is continuing the excavation with a hydraulic hammer for TUN-4005, despite that the TEP for TUN-4005 is not approved and the pre-construction condition survey of buildings/structures within 250 meters from TUN-4005 is not finalized per the Engineer's comments issued with the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021). ---In connection with all the above, please discuss the above issues and inform us regarding the Engineer's and the Contactor's further necessary actions.";
On 27.12.2021 the Contractor was instructed with the Engineer's letter (0879-CSAE60F4-UBM-GE) to: --
--Carry out minimum 2 days of

							continuous monitoring; ---Carry out mitigation measures to decrease noise and vibration; --- •Decrease the number of trucks or moving heavy equipment at sensitive times and conduct training for drivers to operate the trucks at lower RPM. ---In purpose to reduce the impact of noise on the residential houses (C/C 32.10.32.250, C/C 32.10.32.019 & C/C 32.10.32.226) of Mamuka Peranidze (P/N 18001052194), Aza Bregvadze (P/N 18001022030), and Neli Mchedlidze (P/N 18001022287) during the Contractor's construction activities, the Contractor is recommended to arrange 5 meters high metal barrier alongside the construction site (from Pk82+40 to Pk85+50), between the construction site and the residential houses. After arranging the noise barrier, the instrumental monitoring of the environment at the aforementioned residential houses shall be continued to assess the obtained result;						
27	F4	RD	14.07.20	Env&HSE	Badri Modebadze ID: 18001014981 Mob N: 577377322 Pk 86+00	Damage to Infrastructure / Assets	He stated that the Contractor damaged his agricultural land plot (C/C 32.10.32.491) and perennial trees located on it.	On 14.07.2020 the Employer forwarded the landowner's statement through the letter (N 2-05/7334); On 30.08.2021 the joint site inspection revealed that approx. 7 sq.m of the land plot (C/C 32.10.32.491) was excavated, which resulted in damage to the roots of the perennial trees located on the same plot of land; On 01.09.2021 the Contractor was instructed to negotiate with the landowner on the necessary corrective action to fully resolve the issue and submit a signed consensual agreement to the Engineer (0553-CSAE60F4-UBM-GE); On 01.09.2021 the Employer was	Accepted	01.10.21	Substantiated	Closed	444

							informed regarding the above-mentioned findings and the Engineer's instruction on the Contractor (0554-CSAE60F4-UBM-GE); On 20.09.2021 the submitted the formal letter (20210920-0098-GHEC) directly to the Employer, stating as follows: "The Contractor is willing to compensate for the land occupied due to construction, including the crops on the land, and restore the occupied land to its original condition. But Mr. Badri Modebadze request us to purchase the whole land which including the unoccupied by us, and he stated that legal measures will be taken. -- As a Contractor, we are willing to solve disputes by reaching an agreement-through negotiation, but the agreement shall be reasonable and acceptable. If we purchase the whole land due to the occupying only 7 sq.m, we can not accept this request. -- We will continue to communicate with Mr. Badri Modebadze, if he insist to requesting us to purchase the whole land, we will have no choice but through law to resolve this issue." Mr. Badri Modebadze's another statement demanding to acquire whole land plot was attached to the Contractor's letter; On 01.10.2021 the Employer acquired the plot of land;							
28	F4	Government	31.12.20	Env&HSE	Mikheil Mchedlidze ID: 18001013255 Mob N: 557580328 Pk 85+50	Damage to Infrastructure / Assets	He stated that his agricultural land plot (C/C 32.10.32.384 & C/C 32.10.32.311) was used by the Contractor	On 31.12.2020 the Employer forwarded the landowner's application with the formal letter (N 2-12/15024); On 03.08.2021 the Engineer and the Contractor jointly marked the land boundaries of the mentioned plot at the site. Accordingly, a verbal agreement has been reached with the landowner about the full resolution of the issues raised by him in his formal	Accepted	04.08.21	Substantiated	Closed	216	Awaiting submission of consensual agreement signed between the Contractor and the applicant

						without his consent.	statement; On 04.08.2021 the Contractor was instructed with the Engineer's letter (0487-CSAE60F4-UBM-GE) to provide a formal consensual agreement signed between the Contractor and the landowner and submit it to the Engineer as soon as possible; On 04.08.2021 the Employer was informed regarding the above site inspection and the Engineer's instruction on the Contractor (0488-CSAE60F4/UBM-GE); On 13.12.2021 the Contractor was reminded with the Engineer's letter (0852-CSAE60F4-UBM-GE) to provide a formal consensual agreement signed between the Contractor and the landowner and submit its copy to the Engineer as soon as possible, in order to formally redress the grievance raised by the Employer's formal letter;						
29	F4	Government	15.02.21	Env&HSE	Residents of Uznadze St. represented by Koba Robakidze ID: 41001004530 Mob N: Pk 81+00	Damage to Infrastructure / Assets	The local residents are concerned regarding the risk of damage to their residential houses due to the Project construction works. They stated that there is an existing landslide which will be worsened by the	On 15.02.2021 the Employer forwarded the local residents' application and required to carry out the pre-construction condition survey of the applicants residential houses (N 2-12/1714); On 19.03.2021 the local residents' concern was forwarded to the Contractor and with instruction to carry out the pre-construction survey of the local residents' buildings/structures and report its results to the Engineer (0177-CSAE60F4-UBM-GE);	Forwarded to CC	Pending	Open	332	

						constructio n works. Eventually, it will damage their residential houses.							
3 0	F4	RD	17.02. 21	Env&HSE	Mamuka Tsersvad ze ID: 18001005 990 Mob N: 59831212 9 Pk 69+00	Damage to Infrastru cture / Assets	He stated that the is a risk of damage to his residential house (C/C 32.10.31.5 87 & C/C 32.10.31.6 45) due to the planned tunnel constructio n works.	On 17.02.2021 the Employer forwarded the local resident's application through the letter (N 2- 12/1818); On 19.03.2021 the local resident's concern was forwarded to the Contractor and with instruction to carry out the pre-construction survey of his buildings/structures and report its results to the Engineer (0177-CSAE60F4-UBM- GE); On 22.07.2021 the Employer forwarded the local resident's application regarding the same concern (N 2-08/11970); On 25.09.2021 the Contractor was reminded to carry out the pre- construction condition survey of the local resident's buildings/structures and report its results to the Engineer (0617-CSAE60F4-UBM- GE); On 25.09.2021 the Employer was directly informed with the letter (0618-CSAE60F4-UBM-GE) regarding the Engineer's above instruction on the Contractor; On 13.12.2021 the Contractor was reminded to carry out the pre- construction condition survey of the residential house with considering the Engineer's comments issued with the letter (0449- SAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report its results to the Engineer (0852- CSAE60F4-UBM-GE);	Forwar ded to CC	Pending	Open	330	Awaiting the pre- construction technical survey of the building(s)

31	F4	RD	19.02.21	Env&HSE	Lia Barbakadze ID: 18001012519 Mob: 555430268 Pk 110+50	Damage to Infrastructure / Assets	She stated that her residential house (C/C 32.03.44.536) is closed to the Project highway, which will cause disturbance on her residential house. Hence, she demands inclusion in LARP. (The residential house is located in approx. 44 meters for the edge of the carriageway of the Project highway. However, the Project envisages the Provision Noise Barrier at this location, between the residential house and the Project Highway.)	On 19.02.2021 the Employer required from the Engineer to carry out regular monitoring of the residential house along with its auxiliary buildings (N 2-12/1984); On 19.03.2021 the Contractor was instructed to carry out the pre-construction survey of her buildings/structures and report its results to the Engineer (0177-CSAE60F4-UBM-GE);	Forwarded to CC	Pending	Open	328	Awaiting the pre-construction technical survey of the building(s)
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						With the letter (N 2-12/1984 dated 19.02.2021) the Employer required from the Enginner to carry out regular monitoring of the residential house along with its auxiliary buildings.							
3 2	F4	RD	19.02. 21	Social	Gia Kirtadze ID: 18001059 673 Mob N: 57978065 4 Pk 132+50	Inclusion in LARP	He stated that his residential house (C/C 32.03.48.4 90) is closed to the Project highway, which will worsen his living condition with noise, air pollution and vibration at the construction stage and at the operational stage. Hence, he demands inclusion in LARP.	On 19.02.2021 the Employer required from the Engineer to carry out regular monitoring, in order to determine whether the mentioned residential house will be impacted by the Project (N 2-12/1987); On 20.07.2021 the Contractor was instructed with the letter (0464-CSAE60F4-UBM-GE) to: -- Carry out the pre-construction survey of Gia Kirtadze's residential house including its supplementary buildings and report its results to the Engineer; -- Implement all project-defined environmental mitigation measures an instrumental monitoring near the aforementioned residential house, as soon as the construction work is started at this location and report to the Enginner monthly; On 22.09.2021 the Employer forwarded the AP's another application with the letter (N 2-14/15776) regarding the same concerns. The Employer required to discuss the issues in details and reply him in this regard; On 22.10.2021 the Employer was	Forwarded to RD	Pending	Open	328	Awaiting the pre-construction technical survey of the building(s)

				<p>(The residential house is located in approximately 29.5 meters for the edge of the carriageway of the Project highway. However, the Project envisages the Provision Noise Barrier at this location, between the residential house and the Project Highway.)</p> <p>With the letter (N 2-12/1987 dated 19.02.2021) the Employer required from the Engineer to carry out regular monitoring, in order to determine whether the mentioned residential</p>	<p>replied with the Engineer's letter (0702-CSAE60F4-UBM-GE) as follows: "The distance between the mentioned residential house and the edge of the carriageway of the Project highway is approximately 29.4 meters. ---According to the National Technical Regulations Relevant to the Project (Section D.7 of EIA): ---i. International and national importance roads should be built bypassing the settlements. Access roads to the settlements should be provided. To allow modernization, the distance between the residential area (settlement) and the edge of the carriageway must be not less than 200m, distance to agricultural land – 50m. If because of technical or economical purposes the road is to cross the settlement, minimum distance to the residential area must be 50m, in case noise barriers are provided – 25m. For local roads minimum distance to residential area must be 50m, distance from agricultural land – 25m. ---ii. To protect residential area from noise and emission impact, 10m wide green barrier must be arranged. ---The Project envisages the arrangement of the provision noise barrier between Pk130+00-TA and Pk133+20-TA of the Project highway, which will mitigate to some extent the adverse impact at the operational stage for the aforementioned residential house. However, the issue requires to be additionally investigated on a technical basis. ---Besides, the Project envisages the relocation of the 110kv power transmission lines, which pass through over the homestead land plot (C/C 32.03.48.490, C/C 32.03.48.488 & C/C 32.03.48.498) and the residential house of citizen Gia</p>				
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						house will be impacted by the Project.	Kirtadze. ---Hence, please discuss with the commission about the acquisition of the above-mentioned residential house along with the homestead land plot." On 13.12.2021 the Contractor was reminded to carry out the pre-construction condition survey of the residential house with considering the Engineer's comments issued with the letter (0449-SAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report its results to the Engineer (0852-CSAE60F4-UBM-GE);						
33	F4	RD	22.02.21	Env&HSE	Giorgi Sakvarelidze ID: 18001006227 Mob N: 599958161 Pk 85+00	Damage to Infrastructure / Assets	He stated that his residential house (C/C 32.10.32.181) is closed to the Project highway, which will worsen his living condition with noise, air pollution and vibration caused by the movement of vehicles at the Project highway. Hence, he demands inclusion in LARP. (The	On 22.02.2021 the Employer required from the Engineer to carry out regular monitoring during the construction works, in order to determine what kind of impact can be done to the household of citizen Giorgi Sakvarelidze, with noise, excess emissions and vibration. Also - to determine whether the mentioned residential house along with its auxiliary buildings will be impacted by the Project (N 2-12/2126); On 19.03.2021 the Contractor was instructed to carry out the pre-construction survey of the applicant buildings/structures and report its results to the Engineer (0177-CSAE60F4-UBM-GE); On 25.03.2021 the Contractor was instructed with the formal letter (0191-CSAE60F4-UBM-GE) to carry out instrumental monitoring at the residential house throughout the construction and to submit results to the Engineer. Also, the Contractor was reminded to carry out the pre-construction technical survey of the residential house and submit its results to the Engineer;	Forwarded to CC	Pending	Open	325	On 21.06.2021 the Contractor submitted the pre-construction survey report of the buildings/structures, which includes the applicant's residential house.

				<p>residential house is located in approximately 61 meters for the edge of the carriageway of the Project highway.)</p> <p>With the letter (N 2-12/2126 dated 22.02.2021) the Employer required from the Engineer to carry out regular monitoring during the construction works, in order to determine what kind of impact can be done to the household of citizen Giorgi Sakvarelidze, with noise, excess emissions and vibration. Also - to determine whether the</p>							
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						mentioned residential house along with its auxiliary buildings will be impacted by the Project.							
34	F4	Government	28.10.21	Env&HSE	Goderdzi Tsertsvadze ID: 18001009577 Mob N: 579207795, 595364449 Pk 65+50	Damage to Infrastructure / Assets	He is concerned regarding the risk of adverse impact on his residential house (C/C 32.10.41.247) and the groundwater well, due to the planned blasting work of Tunnel 4004.	On 28.10.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-08/17922). The Employer required to discuss the issue and inform him regarding the Engineer's position; On 04.11.2021 the Contractor was instructed with the Engineer's letter (0744-CSAE60F4-UBM-GE) to: --- •Carry out the pre-construction condition survey of citizen Goderdzi Tsertsvadze's residential house with considering of the Engineer's comments issued with the letter (0449-CSAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report it to the Engineer; ---Measure the baseline groundwater level in the well of Goderdzi Tsertsvadze before starting the blasting work of Tunnel 4004 and submit its result to the Engineer; ---Carry out weekly instrumental monitoring of groundwater level in Goderdzi Tsertsvadze's well and report the result to the Engineer weekly; --- •Carry out continuous blasting vibration instrumental monitoring throughout the blasting period of Tunnel 4004 and report its results to the Engineer weekly; On 04.11.2021 the Employer was informed through the Engineer's letter (0745-CSAE60F4-UBM-GE) about the Engineer's above instruction on the Contractor; On 13.12.2021 the Contractor was	Forwarded to CC	Pending	Open	77	Awaiting the pre-construction technical survey of the building(s)

							reminded with the Engineer's letter (0852-CSAE60F4-UBM-GE) to act according to the Engineer's above instruction and report to the Engineer;						
35	F4	RD	23.02.21	Env&HSE	Tamar Merkvilishvili ID: 18001044853 & Ekaterine Kvetenadze ID: 18001008683 Mob N: 577235618, 555283705. Pk 136+50	Damage to Infrastructure / Assets	They stated that the planned construction work will worsen living condition of their household (C/C 32.03.48.104 & C/C 32.03.06.605). Also, they stated, that their family members are hypertonic. Hence, it is unacceptable to leave close to the Project highway. Finally, they added, that the sustainability of their residential houses (C/C 32.03.48.104 & C/C 32.03.06.605) are questionab	On 23.02.2021 the Employer required from the Engineer to carry out regular monitoring, in order to determine whether the mentioned residential houses will be impacted by the Project (N 2-12/2154); On 20.07.2021 the Contractor was instructed with the letter (0464-CSAE60F4-UBM-GE) to: ---Carry out the pre-construction survey of the mentioned residential houses including its supplementary buildings and report its results to the Engineer; ---Implement all project-defined environmental mitigation measures an instrumental monitoring near the aforementioned residential houses, as soon as the construction work is started at this location and report to the Enginner monthly; On 03.12.2021 the Employer forwarded the joint application to the Engineer with the formal letter (N 2-06/19882). The Employer required to study the issue at the site with the applicants and to submit clarification and the required documentation; On 13.12.2021 the Contractor was reminded to carry out the pre-construction condition survey of the residential houses with considering the Engineer's comments issued with the letter (0449-SAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report its results to the Engineer (0852-CSAE60F4-UBM-GE);	Forwarded to CC	Pending	Open	324	Awaiting the pre-construction technical survey of the building(s)

						le during the planned construction activities.							
						On 03.12.2021 the Employer forwarded another joint application of the above citizens. The citizens required the Project documentation which reflects the relocation plan of the power transmission towers along with indicating voltage, as they are aware that the new power transmission towers shall be placed near their residential houses.							
36	F4	RD	22.06.21	Env&HSE	Gela Chitorelidze ID: 18001016086	Damage to Infrastructure / Assets	He stated that the boundaries of his agricultural land plot	On 22.06.2021 the Employer forwarded the application to the Engineer and required to investigate the issue and inform him regarding the findings (N 2-08/9960);	Rejected	09.09.21	Unsubstantiated	Closed	79

				Mob N: 59722292 2 Pk 39+50		(C/C 32.18.31.2 64) aren't marked correctly. Hence, he demanded that the boundaries shall be defined correctly.	On 30.08.2021 the joint site inspection revealed that the Contractor has correctly marked the RoW adjacent to the mentioned land plot. The Contractor doesn't violate the boundaries of the private land plot, which about Mr. Gela Chitorelidze has been informed; On 09.09.2021 the Employer was informed regarding the above findings with the Engineer's letter (0583-CSAE60F4UBM-GE);							
3 7	F4	UBM F4	20.07. 21	Env&HSE	Gaga Tabukash vili ID: 18001021 495 Mob N: 59839705 0 Pk 75+00	Damage to Infrastru cture / Assets	He is concerned regarding the risk of damage for his residential house (C/C 32.09.42.3 14), due to the further blasting works of Tunnel 4005. The distance between the mentioned residential house and the Tunnel 4005-TA is approximat ely 77 meters.	On 20.07.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-08/11798). The Employer required to study the issue and info him regarding the Engineer's position; On 11.11.2021 the Contractor was instructed with the Engineer's letter (0774-CSAE60F4-UBM-GE) to carry out the pre-construction condition survey for the mentioned residential house (C/C 32.09.42.314) along with its auxiliary buildings with considering the Engineer's comments issued with the letter (0449-CSAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report it to the Engineer; On 11.11.2021 the Employer was informed with the Engineer's letter (0775-CSAE60F4-UBM-GE) regarding the Engineer's above instruction on the Contractor. Also, the Employer was informed as follows: " <i>The distance between the mentioned residential house and the Tunnel 4005-TA is approximately 77 meters. In case of the excavated section of Tunnel 4005, the distance is approx. 723 meters. ---As you are aware, according to the Bill of Quantity (BoQ, Bill 6, TUN 4005) the excavation of Tunnel 4005 is fully</i>	Forwar ded to CC		Pending	Open	177	

							<p>provided with a tunnel boring machine and not with the methodology of explosion. --- However, the methodology of the explosion is provided with the project document "Geological-Geotechnical Profile" (MA.TUN.4005.TA.GD.5601 & MA.TUN.4005.TA.GD.5602) for the following sections of Tunnel 4005-TA: Pk 72+85 – Pk 74+00 and Pk 78+40 – Pk 80+15."</p> <p>On 09.12.2021 the Employer required from the Engineer with the letter (N 2-08/20310) to: 1) Submit the monitoring plan of houses being surveyed within 250 meters of the Tunnels indicating the intervals and other details of monitoring. 2) Submit the report describing the current situation and suggesting actions to be taken for the complaint (transferred to Tech-hold) of citizen Gaga Tabukashvili. 3) Prepare the communication plan and ensure its proper fulfillment by improving communication with the locals. Please also take into consideration the sensitive social environment and frequent complaints of citizens on site (especially near Tunnel No 5), most commonly resulted in by lack of communication;</p> <p>On 13.12.2021 the Contractor was reminded to carry out the pre-construction condition survey of the residential house with considering the Engineer's comments issued with the letter (0449-SAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report its results to the Engineer (0852-CSAE60F4-UBM-GE);</p>						
38	F4	RD	20.07.21	Env&HSE	Zurab Barbakadze	Damage to Infrastru	He stated that the Contractor	On 20.07.2021 the Employer required the Engineer to investigate the issue and inform him about the	Forwarded to RD		Pending	Open	177

				ID: 01009007 806 Mob N: Pk 108+50	cture / Assets	cut three wild plum trees for his agricultural land plot (C/C 32.03.44.5 97);	situation at the site (N 2-08/11770); On 28.09.2021 the Employer was replied with the Engineer's letter (0624-CSAE60F4-UBM-GE) as follows: "The Engineer and the Contractor jointly investigated the issue on the site. ---As a result, it has been confirmed that several trees have been cut down from the portion (293 sq.m) of the above- mentioned private agricultural land, located within the RoW and on which, according to the Employer's letter (N 2-08/11770 Dated: 20.07.2021), the inventory has been carried out. ---Please discuss the above and inform us about the Engineer's and the Contractor's further necessary actions"						
3 9	F4	RD	28.07. 21	Env&HSE	Damage to Infrastru cture / Assets	They stated that the area where their residential houses (C/C 32.09.42.0 10, C/C 32.10.31.3 66, C/C 32.09.42.3 14, C/C 32.09.42.1 10, C/C 32.10.31.1 66 & C/C 32.10.31.4 14) are located is erosive. Hence, in their opinion, there is a risk of damage to the residential	On 28.07.2021 the Employer forwarded the joint application of the local residents to the Engineer and the Contractor with the letter (N 2-08/12337). The Employer required to carry out monitoring in compliance with the regulation and standards of EIA. Also, the Employer required to discuss the circumstances and inform him regarding the Engineer's and the Contractor's position; On 30.07.2021 with the letter (N 2- 08/12497) the Employer additionally required the Engineer and the Contractor to confirm the following: 1) Whether the Tunnel Excavation Plan is prepared for Tunnel 4005 and what kind of methodology is provided for excavation of Tunnel 4005; 2) The working methodology of Tunnel 4005 is in compliance with the Contract and the EIA; 3) The working methodology of Tunnel 4005 is not explosion; 4) Before the start of the construction of Tunnel 4005, the pre-construction technical survey of buildings/structures will be implemented within 250 meters	Forwar ded to CC		Pending	Ope n	169	On 21.06.2021 the Contractor formally submitted the baseline technical survey report of the private buildings (183 units of the private properties), which includes the following residential houses: C/C 32.09.42.010, C/C 32.10.31.366, C/C 32.10.31.166 & C/C 32.10.31.414. (20210621- 0306-GHEC- UBM);

			<p>Gocha Saralidze ID: 18001019 382</p> <p>(St. Barbare street residents)</p> <p>Mob N: Pk 75+00</p>	<p>house due to the further possible worsening of the existing erosive process by the tunneling works of Tunnel 4005 at the construction stage and the movement of the heavy vehicles in Tunnel 4005 at the operational stage.</p> <p>Finally, they demanded a geological investigation to assess the possible risks and if there is no guarantee that their houses will not be damaged, they demand inclusion in LARP.</p>	<p>from Tunnel 4005 by the Contractor with considering of the Employers instructions; 5) Before the start of the construction of all the Project tunnels, the Contractor has submitted and the Engineer has approved the Groundwater Management Plan; On 06.08.2021 with the letter (0497-CSAE60F4-UBM-GE), the Method Statement of Crack Monitoring Using Gyps Plaster submitted by the Contractor, has been approved. Also, the Contractor was instructed as follows: •Carry out the pre-construction condition survey of the buildings/structures with consideration the Method Statement of Crack Monitoring Using Gyps Plaster and the Engineer's comments issued with the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021); •As the BoQ doesn't envisage the excavation of Tunnel N5 with explosion, it is instructed to prepare and submit the Tunnel Excavation Plan for Tunnel N5. ---Additionally, the Contractor was instructed to:</p> <ul style="list-style-type: none"> •Cease excavation work with a hydraulic hammer for Tunnel N5 until the Tunnel Excavation Plan is approved for Tunnel N5; •Cease excavation work with a hydraulic hammer for Tunnel N5 until the pre-construction condition survey of the buildings/structures is finalized within at least 250 meters from Tunnel N5, with consideration of the Method Statement of Crack Monitoring Using Gyps Plaster and the comments issued with the Engineer's letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021); <p>On 06.08.2021 the Employer was informed with the letter (0498-CSAE60F4-UBM-GE) regarding the Engineer's above instruction on the</p>				<p>Two residential houses (C/C 32.09.42.314, C/C 32.09.42.110) are awaiting the technical survey.</p>
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					<p>Contractor; On 17.08.2021 with the letter (20210817-0094-GHEC), the Contractor replied directly to the Employer and cc to the Engineer as follows: "As a reference of your letter (N 2-08/12497 dated 30th July 2021), we inform you that: 1) Tunnel excavation plan (TEP) has been prepared and the methodology is using mechanical excavation with rock hammer. 2) The methodology is consistent with the contracting and the EIA. 3) It has been confirmed that there is no blasting work for tunnel 5. 4) It has been confirmed that all building had been marked with 250 meters. 5) The groundwater management plan for the F4 project had been prepared, we are preparing the independent ground water management plan for each tunnel. - --Besides that the following land plots and houses distance from the edge of excavation is as follows: 1) 32.10.32.019 - owner Aza Bregvadze, 28.2 m. 2) 32.10.32.250 - owner Mamuka Peranidze, 21.9 m. 3) 32.10.32.226 - owner Neli Mchedlidze, 37.7 m. ---We recommend the Road Department to Consider the resettlement of the above mentioned houses in this area." On 09.12.2021 the Employer required from the Engineer with the letter (N 2-08/20310) to: 1) Submit the monitoring plan of houses being surveyed within 250 meters of the Tunnels indicating the intervals and other details of monitoring. 2) Submit the report describing the current situation and suggesting actions to be taken for the complaint (transferred to Tech-hold) of St. Barbare street residents. 3) Prepare the communication plan and ensure its proper fulfillment by</p>				
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							improving communication with the locals. Please also take into consideration the sensitive social environment and frequent complaints of citizens on site (especially near Tunnel No 5), most commonly resulted in by lack of communication;							
40	F4	Government	19.08.21	Env&HSE	Malkhazi Siradze ID: 18001059825 Mob N: 592025202 Pk 70+50	Damage to Infrastructure / Assets	He stated that the perennial trees located on his agricultural land plot (C/C 32.09.42.708) are damaged by the Contractor. Hence, he demands relevant remedial actions.	On 19.08.2021 the Employer forwarded the AP's application to the Engineer and the Contractor with the letter (N 2-06/13779). The Employer required to study the issue and carry out relevant remedial actions; On 01.09.2021 the joint site inspection endorsed that some perennial trees are damaged within the boundaries of the aforementioned plot of land; On 02.09.2021 the Contractor was instructed with the Engineer's letter (0557-CSAE60F4-UBM-GE) to initiate the negotiation with the landowner to compensate for incurred losses. Afterwards, provide a mutual consensual agreement and submit it to the Engineer as soon as possible; On 02.09.2021 the Employer was informed with the Engineer's letter (0558-CSAE60F4-UBM-GE) regarding the above findings of the joint site inspection and the Engineer's above instruction on the Contractor; On 08.12.2021 and on 27.12.2021 the Contractor submitted the agreement on one-time compensation for the incurred losses for the landowner (20211208-0641-GHEC-UBM & 20211227-0693-GHEC-UBM);	Accepted	16.09.21	Substantiated	Closed	28	The agreement on one-time compensation was signed on 16.09.2021
41	F4	Government	22.07.21	Env&HSE	Amiran Siradze ID: 18001040852, Jora	Damage to Infrastructure / Assets	They stated that their groundwater collection	On 22.07.2021 the Employer forwarded the joint application to the Engineer with the formal letter (N 2-08/11902). The Employer required to study the issue and inform him regarding the existing	Accepted	14.12.21	Substantiated	Closed	145	The agreement was signed on 14.12.2021

			<p>Tsertsvadze ID: 18001002364, Davit Maruashvili ID: 18001008230, Akaki Siradze ID: 18001019281 Nino Manjavidze ID: 18001052817</p> <p>(The residents of Batonishvili st)</p> <p>Mob N: 597652425 Pk 71+00</p>	<p>concrete tank and the drinking water supply pipeline is damaged by the Contractor's construction activities.</p>	<p>situation at the site and the Engineer's position; On 23.09.2021 the site inspection revealed that the mentioned concrete tank is located downwards to the temporary service road arranged by the Contractor to access at the western portal of Tunnel 4004. ---According to citizen Amiran Siradze, in the process of arranging the mentioned service road by the Contractor, the massive stones fell on the concrete tank and blocked the bed of the nearby stream; ---As a result of the site inspection implemented on 23rd September 2021, no damage was observed on the concrete tank. However, the underground water supply pipeline is damaged by the Contractor's excavation works carried out within the RoW. ---The water supply pipeline was used to supply drinking water from the mentioned concrete tank to the applicants' residential houses. --- Also, the following risks have been revealed: •The risk of damage to the groundwater collection concrete tank with the possible falling of the massive stones from the nearby temporary service road; •During excessive precipitation, there is the risk of pollution with flooding for the drinking groundwater collection tank, due to the blocked bed of the nearby stream;</p> <p>On 30.09.2021 the Contractor was instructed with the Engineer's letter (0632-CSAE60F4-UBM-GE) to initiate negotiation with the applicants, afterwards carry out necessary remedial actions to repair the damaged water supply pipeline and to prevent any further possible damages to the concrete tank. Also, the Contractor was instructed to settle the above issue in the form of a signed agreement</p>				
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							and submit it to the Engineer as soon as possible; On 30.09.2021 the Employer was informed with the formal letter (0633-CSAE60F4-UBM-GE) regarding the above findings and the Engineer's above instruction on the Contractor; On 13.12.2021 the Contractor was reminded to initiate negotiation with the applicants, afterwards carry out necessary remedial actions to repair the damaged water supply pipeline and to prevent any further possible damages to the concrete tank. Finally, the Contractor was reminded to settle the above issue in the form of a signed agreement and submit it to the Engineer as soon as possible. (0852-CSAE60F4-UBM-GE); On 20.12.2021 the Contractor submitted the signed consensual agreement, which confirms that the damaged groundwater collection concrete tank and the water supply underground pipeline have been repaired by the Contractor and the owners do not have any claims regarding the above-mentioned (20211220-0683-GHEC-UBM);								
4 2	F4	Government	30.07.21	Env&HSE	luri Zibzibadze ID: 18001002969 Mob N: 595577730 Pk 49+00	Damage to Infrastructure / Assets	luri Zibzibadze's is concerned regarding the hazard for his household (C/C 32.19.32.44), due to the planned construction work within Shorapani-	On 30.07.2021 the Employer forwarded the local resident's application to the Engineer with the letter (N 2-08/12492). The Employer required to study the issue and inform him about the Engineer's position; On 04.10.2021 the Contractor was instructed with the Engineer's letter (0641-CSAE60F4-UBM-GE) to: •Carry out the pre-construction condition survey for the mentioned residential house along with its auxiliary buildings with considering the Method Statement of Crack Monitoring Using Gyps Plaster and the comments issued with the	Forwarded to CC		Pending	Open	167		

						Argveta (F4) section. Hence, the applicant demands to ensure safety for his household during the planned construction work.	Engineer's letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021); •Ensure safety during the construction work and carry out necessary environmental mitigation measures as per EIA, to prevent any possible impact to the household of Mr. Iuri Zibzibadze; On 06.10.2021 the Employer was informed with the letter (0651-CSAE60F4-UBM-GE) regarding the Engineer's above instruction on the Contractor; On 13.12.2021 the Contractor was reminded to carry out the pre-construction condition survey of the residential house with considering the Engineer's comments issued with the letter (0449-SAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report its results to the Engineer (0852-CSAE60F4-UBM-GE);						
43	F4	RD	27.07.21	Env&HSE	Mevlud Nishnianidze ID: 18001003051 Mob N: 577790258 Pk	Damage to Infrastructure / Assets	He stated the his drinking water collection tank is located with the construction site of the Project. Hence, there is risk of damage to the water collection tank due to the Project construction works.	On 27.07.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-08/12260). The Employer required to study the issue and inform him regarding the existing situation;	Under review		Pending	Open	170

44	F4	Government	30.07.21	Env&HSE	Elena Gachechiladze ID: 18001041577 Mob N: 558768864 Pk 49+00	Damage to Infrastructure / Assets	<p>She is concerned about the risk of damage to her residential house (C/C 32.19.32.5 21), due to the planned construction work within Shorapani-Argveta (F4) section.</p> <p>Hence, the applicant demands to ensure safety for her household during the planned construction work.</p>	<p>On 30.07.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-08/12494). The Employer required to study the issue and inform him about the Engineer's position;</p> <p>On 11.11.2021 the Contractor was instructed with the Engineer's letter (0768-CSAE60F4-UBM-GE) to:</p> <ul style="list-style-type: none"> •Carry out the pre-construction condition survey for the mentioned residential house along with its auxiliary buildings with considering the Method Statement of Crack Monitoring Using Gyps Plaster and the comments issued with the Engineer's letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021); •Ensure safety during the construction work and carry out necessary environmental mitigation measures as per EIA, to prevent any possible impact to the household of Ms. Elena Gachechiladze; <p>On 11.11.2021 the Employer was informed with the letter (0769-CSAE60F4-UBM-GE) regarding the Engineer's above instruction on the Contractor;</p> <p>On 13.12.2021 the Contractor was reminded to carry out the pre-construction condition survey of the residential house with considering the Engineer's comments issued with the letter (0449-CSAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report its results to the Engineer (0852-CSAE60F4-UBM-GE);</p>	Forwarded to CC		Pending	Open	167	
45	F4	Government	02.08.21	Env&HSE	Lali Peradze ID: 18001073194 Mob N: 59351147	Damage to Infrastructure / Assets	<p>She stated that the Contractor uses the portion of her agricultural</p>	<p>On 02.08.2021 the Employer forwarded the AP's application through the letter (N 2-06/12585). The Employer required to study the issue and inform him regarding the existing situation;</p> <p>On 12.10.2021 the joint site</p>	Accepted	29.12.21	Substantiated	Closed	149	The agreement was signed on 29.12.2021

				9 Pk 142+00		land plot (C/C 32.03.49.4 94). Hence, she demands compensat ion.	inspection revealed that the temporary drainage channel is arranged on the part of the mentioned plot of land; On 18.10.2021 the Contractor was instructed with the Engineer's letter (0681-CSAE60F4-UBM-GE) to negotiate with the landowner on the necessary remedial actions to fully resolve the issue. Afterwards, provide a formal consensual agreement signed by the both parties and submit it to the Engineer as soon as possible; On 01.11.2021 the Employer was informed with the Engineer's letter (0730-CSAE60F4-UBM-GE) regarding the above findings of the joint site inspection and the Engineer's above instruction on the Contractor; On 13.12.2021 the Contractor was reminded to negotiate with the landowner on the necessary remedial actions to fully resolve the issue. Afterwards, provide a formal consensual agreement signed by both parties and submit it to the Engineer as soon as possible (0852-CSAE60F4-UBM-GE); On 05.01.2022 with the letter (20220105- 0712- GHEC-UBM) the Contractor submitted the agreement signed with the landowner as the confirmation that the above issue has been eliminated and the landowner doesn't have any claims against the Contractor;								
4 6	F4	RD	10.08. 21	Social	Badri Pkhaldze ID: 18001037 436 Mob N: 59559880 8 Pk 39+00	Restricti on or loss of access	He stated that the access road for his agricultural land plot (C/C 32.18.31.2 23) is blocked to	On 10.08.2021 the Employer forwarded the AP's application with the letter (N 2-08/13052). The Employer required to study the issue and reply him about the findings; On 18.10.2021 the Employer was informed with the Engineer's letter (0683-CSAE6F4-UBM-GE) as follows: "The site inspection was	Forwar ded to CC		Pending	Open	156		

					<p>the Project construction works.</p>	<p>implemented to study the issue. --- As a result, it revealed that the access road for the aforementioned land plot will be permanently blocked due to the construction of Local Road N3. ---It should be noted, that the Contractor has provided the temporary pedestrian access for the agricultural land plot, which will be canceled too, due to the further excavation works for the construction of Local Road N3. --- Additionally, please be informed, that the access road will be canceled too for other private agricultural land plots (C/C 32.18.31.285 & C/C 32.18.31.241) located nearby citizen Badri Pkhaladze's co-owned land plot (C/C 32.18.31.223). ---Please, discuss the acquisition of the above-mentioned agricultural land plots (C/C 32.18.31.223, C/C 32.18.31.285 & C/C 32.18.31.241)."</p> <p>On 15.12.2021 the Employer required submission of a detailed project and estimated costs for arranging an alternative access road for the agricultural land plot (N 2-06/20544);</p> <p>On 17.12.2021 the Contractor was instructed with the Engineer's letter (0865-CSAE60F4-UBM-GE) to prepare and submit the following for the Engineer's review and the Employer's approval: ---•The detailed drawings with indicating additional RoW, estimated costs for the acquisition of additional RoW (if required), and estimated costs for construction of a simple access road; ----•The detailed drawings with indicating additional RoW, estimated costs for the acquisition of additional RoW (if required), and estimated costs for construction of access road with an overpass over the Local Road N3 (at 3+60.00) connecting to the existing village</p>				
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							road; ---Estimated costs for full acquisition of the aforementioned land plot. ---Additionally, the Contractor was instructed to submit the cost comparison table between the access road construction and full land acquisition of the land plot;						
47	F4	Government	19.08.21	Social	Residents of the Village Phuti (contact perosn Ms. Lela Managadze ID: 55001005991) Mob N: 571101284 Pk 37+00	Restriction on or loss of access	They stated that the access road for the cemetery located in the village Phuti is blocked by the Project construction works. Hence, they demand the restoration of the access road. On 19.08.2021 the Employer forwarded the local residents' joint application to the Engineer and the Contractor with the letter (N 2-06/13773); The Employer required to study the issue and inform him about the existing situation at the site; On 04.10.2021 the Employer was informed with the Engineer's letter (0643-CSAE60F4-UBM-GE) as follows: "The cemetery had three access roads, from which two are pedestrian paths, and one is the transport road. ---One of these two pedestrian roads is canceled as a result of the construction of the Local Road N3. ---However, after completion of the construction of the Local Road N3, the cemetery will be provided with the alternative pedestrian access, which will be used by the local residents with passing the Local Road N3. ---It should be noted, that before completion of the construction of Local Road N3, residents will be able to access the cemetery via existing pedestrian and transport roads." On 16.12.2021 the site inspection revealed that the Contractor has arranged concrete pipe in the drainage channel of Local Road N3 to provide the alternative pedestrian access road for the cemetery (Photos: <a);<="" a="" href="https://photos.app.goo.gl/TqaokXVv xVDg7VrcA">	Accepted	16.12.21	Substantiated	Closed	119	
48	F4	Government	02.09.21	Social	Grigol Gabrichidze	Inclusion in LARP	He stated that the Contractor	Accepted	28.09.21	Substantiated	Closed	26	The land plot was acquired by the state

				ID: 18001015 961 Mob N: 59873007 6 Pk 47+00		uses his agricultural land plot (C/C 32.19.32.564) and the perennial trees is damaged located on it.	with the letter (N 2-06/14511). The Employer required to study the issue at the site and implement relevant remedial actions; On 22.10.2021 the Employer was replied with the Engineer's letter (0699-CSAE60F4-UBM-GE) as follows: "As you are well aware, based on the Employer's letter (N 2-05/11785 Dated: 19.10.2020), the following sections were handed over to the Contractor: •Km 0+000 – Km 1+700 (1,7 Km); •Km 2+500 - Km 5+580 (3,08 Km); •Km 5+640 - Km 7+020 (1,38 Km); •Km 7+050 – Km 8+100 (1,05 Km); •Km 8+300 – Km 10+050 (1,75 Km); •Km 13+680 – Km 14+720 (1,04 Km). - --Whereas, on 9th July 2021 citizen Grigol Gabrichidze registered his rights in the National Agency of Public Registry on the land plot (C/C 32.19.32.564), which is located within handed over section (Km4+600 - Km 4+700) of the RoW. ---From 28th September 2021, the aforementioned land plot is registered under the ownership of the state.												on 28.09.2021.
4 9	F4	RD	09.09.21	Social	Kukuri Tabagari ID: 18001045 357 Mob N: 55558707 5 Pk 19+00	Restricti on or loss of access	He stated that the access road for his land plot (C/C 32.17.32.346) will be blocked due to the Project construction works.	On 09.09.2021 the Employer forwarded the AP's application with the letter (N 2-08/14865) to the Engineer. The Employer required to inform him whether the aforementioned land plot will be provided with a access road at the construction stage and at the operational stage; On 03.11.2021 the Employer was replied with the Engineer's letter (0740-CSAE60F4-UBM-GE) as follows: "It revealed that the existing access road of the aforementioned citizen's land plots (C/C 32.17.32.346 & C/C 32.17.32.291) will be canceled due to the planned Project construction works. However, the alternative access road can be arranged. (please see	Forwar ded to CC			Pending	Open	126					

							<p>the attachment N1 for detailed information). ---Please, discuss the above issue and inform us regarding the Engineer's and the Contractor's further necessary actions;</p> <p>On 22.11.2021 the Employer replied to the Engineer with the letter (N 2-06/19303) that he has no objection on implementing construction in accordance with the above recommendation and the documentation submitted by the Engineer;</p> <p>On 07.12.2021 the Employer required submission of a detailed project and estimated costs for arranging an alternative access road for the aforementioned agricultural land plots (N 2-08/20102);</p> <p>On 14.12.2021 the Contractor was instructed to act according to the Employer's above instruction and submit the detailed project and estimated costs for the Engineer's review and the Employer's approval (0849-CSAE60F4-UBM-GE);</p> <p>On 17.12.2021 the Contractor replied to the Engineer with the letter (20211217-0679-GHEC-UBM) as follows: <i>"The diversion road No.1 plan is under adjustment, and after the adjustment, it would leave enough space for the access to the land plot (C/C 32.17.32.346 & C/C 32.17.32.291). In that case, we don't need to arrange an alternative access for the aforementioned land plots. ---The adjustment plan will be submitted to the Engineer as soon."</i></p>						
50	F4	RD	16.09.21	Env&HSE	Davit Pkhaladze ID: 18001042 207, & Liza Pkhaladze	Damage to Infrastructure / Assets	The landowners are concerned regarding the damaged part of	On 16.09.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-08/15307). The Employer required to study the issues raised in the application and inform him regarding the findings;	On 20.10.2021 the joint site	Forwarded to CC	Pending	Open	119

			<p>ID: 18001000 111 Mob N: 59998110 2 Pk 73+00</p>	<p>their agricultural land plot (C/C 32.09.42.4 64), due to the construction of the E60 Highway F4 Shorapani-Argveta Project.</p> <p>According to the landowners' application, the Contractor has obtained 208 sq.m of the land plot based on the lease agreement. Whereas, the remaining part (1792 sq.m) is left under use of the landowners. The total area of the aforementioned land plot is 2000 sq.m.</p> <p>The joint site</p>	<p>inspection revealed that: ---</p> <ul style="list-style-type: none"> •Approx. 220 sq.m of the mentioned land plot is crossed by the temporary service road arranged by the Contractor to access at the western portal of Tunnel 4004; --- •The rocky soil is dumped on the remaining part of the land plot; On 29.10.2021 the Contractor was instructed with the Engineer's letter (0722-CSAE60F4-UBM-GE) to negotiate with the landowners and to: --- •Separate the part of the land plot obtained based on the lease agreement and the remaining part of the land plot, in the National Agency of Public Registry; --- •Register the lease rights for the part of the land plot in the National Agency of Public Registry and submit the copy of the lease agreement to the Engineer; --- •Carry out necessary remedial actions to resolve the damage caused outside of the leased part of the land plot, sign a consensual agreement, and copy it to the Engineer; <p>On 29.10.2021 the Employer was informed with the Engineer's letter (0723-CSAE60F4-UBM-GE) regarding the above findings of the joint site inspection and the Engineer's above instruction on the Contractor;</p> <p>On 13.12.2021 the Contractor was reminded with the Engineer's letter (0852-CSAE60F4-UBM-GE) to act according to the Engineer's above instruction and report to the Engineer;</p>				
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						inspection implemented on 20th October 2021 revealed that: • Approx. 220 sq.m of the mentioned land plot (C/C 32.09.42.4 64) is crossed by the temporary service road arranged by the Contractor to access at the western portal of Tunnel 4004; The rocky soil is dumped on the remaining part of the land plot (C/C 32.09.42.4 64).						
51	F4	RD	16.09.21	Env&HSE	Marsel Manjavidze ID: 18001027801 Otar Kijashvili ID: 18001030	Disturbance: Noise / Vibration / Dust	The local residents are concerned about the possible adverse impact on the living condition	On 16.09.2021 the Employer forwarded the APs' application to the Engineer with the letter (N 2-08/15337). The Employer required to study the issue and reply him in this regard; On 11.11.2021 the Contractor was instructed with the Engineer's letter (0776-CSAE60F4-UBM-GE) to: --- •Limit his working hours from 8 AM	Forwarded to CC	Pending	Open	119

			<p>447 Zigprid Babukhadia ID: 18001006 49 Mob N: 57133886 3 Pk 59+00</p>	<p>of their household s with dust and noise raised during the construction activities of the E60 Highway F4 Shorapani-Argveta Project.</p> <p>Also, they are concerned about the destroyed pasture area due to the arrangement of Disposal Area #2 at the state owned land plots (C/C 32.10.41.096 & C/C 32.10.41.262);</p> <p>Besides, they expressed their dissatisfaction regarding the changing terrain due to the Project constructio</p>	<p>up to 6 PM within 250 meters from the aforementioned residential houses (C/C 32.10.41.139, C/C 32.10.41.324 & C/C 32.10.41.066); ---Carry out regular instrumental monitoring of the environment along with the necessary mitigation measures, at the residential houses, during the construction works and report its results to the Engineer monthly; On 11.11.2021 the Employer was informed with the Engineer's letter (0777-CSAE60F4-UBM-GE) regarding the Engineer's above instruction on the Contractor. Besides, the Employer was informed as follows: "<i>Disposal Area #2 is situated on the land plots (C/C 32.10.41.096 & C/C 32.10.41.262), which were used by the local residents for cattle grazing. According to the local residents, the remaining pasture area isn't enough to feed their livestock properly, which reduces income. Hence, they demand compensation.</i>"; On 13.12.2021 the Contractor was reminded with the Engineer's letter (0852-CSAE60F4-UBM-GE) to act according to the Engineer's above instruction and report to the Engineer;</p>					
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						<p>n work and arrangement of Disposal Area #2.</p> <p>The aforementioned local residents' residential houses (C/C 32.10.41.1 39, C/C 32.10.41.3 24 & C/C 32.10.41.0 66) are located approximately 90 meters from Project Bridge 4104. In case of the Disposal Area #2 arranged by the Contractor, the distance is approximately 50 meters.</p>						
52	F4	Government	15.10.21	Social	Residents living in Peradze St. of Zestafoni Mob N: 59545056 5 Pk 39+00	Other	<p>In their opinion, some additional engineering buildings shall be constructed for the Local Road N3,</p> <p>On 15.10.2021 the Employer forwarded the local residents' joint application to the Engineer and the Contractor with the letter (N 2-06/17195). The Employer required to study the issue at the site and inform him regarding the situation;</p>	Under review	Pending	Open	90	

						in order to prevent any further damage to their private properties.									
53	F4	RD	21.09.21	Env&HSE	Mariam Kiknavelidze P/N 18001067798 Mob N: 598232879 Pk 85+50	Damage to Infrastructure / Assets	She stated that she lost poultry due to the domestic animal(s) of the Contractor's employee. Therefore, she demands compensation for losses.	On 21.09.2021 the Employer forwarded the AP's application to the Engineer and the Contractor with the letter (N 2-06/15639). The Employer required to study the issue and carry out necessary remedial actions; On 11.11.2021 the meeting with Ms. Mariam Kiknavelidze's household revealed that the Contractor had already compensated for the incurred losses; On 11.11.2021 the Contractor was instructed with the Engineer's letter (0778-CSAE60F4-UBM-GE) to provide a formal consensual agreement signed by the both parties and to submit its copy to the Engineer, to formally resolve the issue; On 12.11.2021 the Contractor submitted the formal consensual agreement signed by the Contractor and the AP on one-time compensation (20211112-0584-GHEC-UBM); On 19.11.2021 the mentioned formal agreement on one-time compensation was forwarded to the Employer with the Engineer's letter (0798-CSAE60F4-UBM-GE);	Accepted	23.09.21	Substantiated	Closed	2	The consensual agreement was signed on 23.09.2021	
54	F4	RD	21.09.21	Env&HSE	Iuri Nebieridze ID: 18001057407 Mob N: Pk 125+00	Damage to Infrastructure / Assets	He stated that the Contractor uses his agricultural land plot (C/C 32.03.51.044). Hence,	On 21.09.2021 the Employer forwarded the AP's application with the letter (N 2-08/15729) to the Engineer. The Employer required to discuss the issue in details and reply him in writing; On 12.10.2021 the joint site inspection revealed the Contractor operates within the RoW and doesn't violate the mentioned	Rejected	12.10.21	Unsubstantiated	Closed	21		

						his house has to be implemented. The mentioned residential house is located approximately 50 meters from the construction site.	results to the Engineer (0852-CSAE60F4-UBM-GE);					
56	F4	RD	28.10.21	Env&HSE	Nuriko Katamadze ID: 18001038860 Mob N: 577317950 Pk 37+00	Disturbance: Noise / Vibration / Dust	He is concerned regarding the possible adverse impact on his perennial agricultural plants located on the land plot (C/C 32.18.31.279), due to the air pollution with dust and exhaust, at the construction stage and at the operational stage. Hence, he demands inclusion in LARP.	On 28.10.2021 the Employer forwarded the AP's application to the Engineer through the letter (N 2-08/17921). The Employer required to discuss the issue and inform him about the Engineer's position; On 04.11.2021 the Contractor was instructed with the Engineer's letter (0746-CSAE60F4-UBM-GE) to carry out regular instrumental monitoring of dust and air quality, along with the necessary mitigation measures as per EIA, during the construction of the Local Road N3 and report the results to the Engineer monthly; On 12.11.2021 the Employer was informed with the Engineer's letter (0783-CSAE60F4-UBM-GE) that the aforementioned agricultural land plot is located near the Local Road N3, at a lower place compared to the Local Road N3. Also, the Employer was informed regarding the Engineer's above instruction on the Contractor; On 13.12.2021 the Contractor was reminded to carry out regular instrumental monitoring of dust and air quality, along with the necessary mitigation measures as per EIA, during the construction of the Local	Forwarded to CC	Pending	Open	77

							Road N3 and report the results to the Engineer monthly (0852-CSAE60F4-UBM-GE);						
57	F4	RD	27.09.21	Env&HSE	Lia Kezevadze ID: 21001025632 Mob N: 557580328 Pk 85+50	Damage to Infrastructure / Assets	She stated the perennial trees located on her family-owned agricultural land plot (C/C 32.10.32.384) are damaged by the Contractor's construction activities. Hence, she demands compensation.	On 27.09.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-08/16046). The Employer required to discuss the issue in details and reply him in this regard; On 20.10.2021 the joint site inspection revealed that the Contractor operates within the RoW and doesn't violate the boundaries of the mentioned private land plots; On 22.10.2021 the Employer was informed through the Engineer's letter (0696-CSAE60F4-UBM-GE) regarding the above findings of the joint site inspection; On 10.11.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-08/18674) concerning the same matter. The Employer required to discuss the issue in details and reply him in this regard; On 16.11.2021 the joint site inspection was implemented. Ms. Lia Kezevadze was attending the inspection process. The joint site inspection revealed that: ---•The perennial trees located on the mentioned plot of land are damaged by cattle because the land plot is not fenced. ---•The Contractor operates within the RoW and doesn't violate the boundaries of the private land plot; On 19.11.2021 the Employer was informed with the Engineer's letter (0799-CSAE60F4-UBM-GE) about the above findings of the joint site inspection;	Rejected	20.10.21	Unsubstantiated	Closed	23
58	F4	Government	30.09.21	Env&HSE	Rusiko Guruli ID: 18001039324 Mob N:	Damage to Infrastructure / Assets	She stated that the Contractor damaged her agricultural	On 30.09.2021 the Employer forwarded the AP's application with the letter (N 2-08/16323) to the Engineer. The Employer required to discuss the issue in details and reply him in this regard;	Rejected	18.10.21	Unsubstantiated	Closed	18

				55797560 2 Pk 102+50		land plot (C/C 32.03.43.2 49) along with its fence and the perennial trees located on it. Hence, she demands compensat ion.	On 18.10.2021 the Employer replied through the Engineer's letter (0678-CSAE60F4-UBM-GE) that the the Contractor operates within the RoW and doesn't violate the mentioned private land plot boundaries;						
5 9	F4	Govern ment	06.10. 21	Env&HSE	Levan Nebieridz e ID: 18001015 879 Mob N: 55842468 8 Pk 126+00	Damage to Infrastru cture / Assets	He stated that the agricultural plants located on his land plot (C/C 32.03.47.4 55) are destroyed by the Contractor' s constructio n activities. Hence, he demands compensat ion.	On 05.10.2021 the joint site inspection revealed that confirmed that the agricultural plants located on the mentioned land plot are damaged due to flooding during rainfall, which in turn is caused by the improper arrangement of the temporary drainage channels in the surrounding area by the Contractor; On 06.10.2021 the Employer forwarded the AP's application with the letter (N 2-08/16656) to the Engineer. The Employer required to discuss the issue in details and reply him in this regard; On 12.10.2021 the Contractor was instructed with the Engineer's letter (0664-CSAE60F4-UBM-GE) to negotiate with the landowner on the necessary remedial actions to fully resolve the issue. Afterwards, provide a formal consensual agreement signed by the both parties and submit it to the Engineer as soon as possible; On 12.10.2021 the Employer was informed with the Engineer's letter (0665-CSAE60F4-UBM-GE) regarding the above findings of the joint site inspection and the Engineer's above instruction on the Contractor; On 01.12.2021 with the formal letter	Accepte d	29.10.2 1	Substantiat ed	Clos ed	23

							(20211201-0623-GHEC-UBM) the Contractor submitted the formal agreement between him and AP, along with the evaluation report of the damaged agricultural plants located on the AP's plot of land. (The evaluation report is provided by the certified third-party expert I/E Irakli Gotsidze P/N 18001003406.) - --The agreement stipulates as follows: "We agree that the "Company" will invite a third party-expert company performing the expertise work, to assess the loss of the said plot of land caused by the flood and the damage to the "Owner" of the plot of land. The "Company" will bear the cost of performing all of these tasks and will pay the loss accrued to the "Owner" as a result of the examination. ---After fulfilling the above conditions, the land "Owner will not have any claims against the "Company". " On 08.12.2021 the above agreement along with the evaluation report was forwarded to the Employer with the Engineer's letter (0837-CSAE60F4-UBM-GE);							
60	F4	Government	06.10.21	Social	Izolda Arabidze ID: 18001012 445 Mob N: 55828234 1 Pk 71+00	Restriction on or loss of access	She stated that the access road for her agricultural land plot (C/C 32.09.42.5 96) is blocked due to the ongoing Project construction works. Hence, She demands	On 06.10.2021 the Employer forwarded the AP's application with the letter (N 2-08/16673) to the Engineer. The Employer required to discuss the issue in details and reply to him in this regard; On 20.10.2021 the joint site inspection revealed that the access road of the aforementioned land plot crosses the construction site, where the construction of the eastern portal of Tunnel 4005 is in progress. Accordingly, the access to the land plot is worsened; On 28.10.2021 the Contractor was instructed with the Engineer's letter (0719-CSAE60F4-UBM-GE) to improve the access road of the land plot, based on negotiations with the	Accepted	07.12.21	Substantiated	Closed	62	The agreement was signed on 07.12.2021

						necessary corrective actions.	landowner, and to reply to the Engineer with the signed consensual agreement by both parties; On 28.10.2021 the Employer was informed with the Engineer's letter (0720-CSAE60F4-UBM-GE) regarding the above findings of the site inspection and the Engineer's instruction on the Contractor. Besides, the Employer was informed that after completion of the Project construction works, the land plot will be provided with the access road via passing under the Reinforced Concrete Bridge BRI 4.1.07; On 13.12.2021 the Contractor was reminded with the Engineer's letter (0852-CSAE60F4-UBM-GE) to improve the access road of the land plot, based on the negotiations with the landowner and reply to the Engineer with the signed consensual agreement by both parties; On 27.12.2021 with the letter (20211227-0692-GHEC-UBM) the Contractor submitted the agreement signed with the landowner as the confirmation that the above issue has been eliminated;						
61	F4	Government	18.10.21	Social	Merab Peradze ID: 18001045476 Mob N: 599935781 Pk 38+50	Restriction on or loss of access	He stated the access road for his agricultural land (C/C 32.18.31.285) plot is blocked due to the Project construction works of Local Road N3. On 18.10.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-08/17281). The Employer required to discuss the issue and inform hir regarding the Engineer's position; On 22.10.2021 the Employer was informed with the Engineer's letter (0701-CSAE60F4-UBM-GE) that the access road for the aforementioned land plot is permanently blocked due to the construction of Local Road N3 and provision of an alternative access is not feasible. Eventually, the Employer was recommended to	Forwarded to CC		Pending	Open	87	

							discuss the acquisition of the above-mentioned agricultural land plot; On 15.12.2021 the Employer required submission of a detailed project and estimated costs for arranging an alternative access road for the agricultural land plot (N 2-06/20544); On 17.12.2021 the Contractor was instructed with the Engineer's letter (0865-CSAE60F4-UBM-GE) to prepare and submit the following for the Engineer's review and the Employer's approval: ---•The detailed drawings with indicating additional RoW, estimated costs for the acquisition of additional RoW (if required), and estimated costs for construction of a simple access road; ----•The detailed drawings with indicating additional RoW, estimated costs for the acquisition of additional RoW (if required), and estimated costs for construction of access road with an overpass over the Local Road N3 (at 3+60.00) connecting to the existing village road; ----•Estimated costs for full acquisition of the aforementioned land plot. ---Additionally, the Contractor was instructed to submit the cost comparison table between the access road construction and full land acquisition of the land plot;					
6 2	F4	Government	21.10.21	Social	Mamuka Chitorelidze ID: 18001021813 Mob N: 551721737, 592010886. Pk 38+50	Restriction or loss of access	He stated the access road for his agricultural land (C/C 32.18.31.241) plot is blocked due to the Project construction works of Local Road N3.	On 21.10.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-08/17576). The Employer required to discuss the issue and inform him regarding the Engineer's position; On 29.10.2021 the Employer was informed with the Engineer's letter (0727-CSAE60F4-UBM-GE) that the access road for the aforementioned land plot is permanently blocked due to the construction of Local Road N3 and provision of an alternative access is	Forwarded to CC	Pending	Open	84

							not feasible. Eventually, the Employer was recommended to discuss the acquisition of the above-mentioned agricultural land plot; On 15.12.2021 the Employer required submission of a detailed project and estimated costs for arranging an alternative access road for the agricultural land plot (N 2-06/20544); On 17.12.2021 the Contractor was instructed with the Engineer's letter (0865-CSAE60F4-UBM-GE) to prepare and submit the following for the Engineer's review and the Employer's approval: ---•The detailed drawings with indicating additional RoW, estimated costs for the acquisition of additional RoW (if required), and estimated costs for construction of a simple access road; ---•The detailed drawings with indicating additional RoW, estimated costs for the acquisition of additional RoW (if required), and estimated costs for construction of access road with an overpass over the Local Road N3 (at 3+60.00) connecting to the existing village road; ---•Estimated costs for full acquisition of the aforementioned land plot. ---Additionally, the Contractor was instructed to submit the cost comparison table between the access road construction and full land acquisition of the land plot;							
63	F4	Government	18.10.21	Env&HSE	lamze Kvantidze ID: 18001055 427 Mob N: 56861701 4 Pk 40+00	Damage to Infrastructure / Assets	She stated that her drinking water supply pipeline is damaged due to the construction work of Local Road N3.	On 18.10.2021 the Employer forwarded the AP's application to the Engineer with the letter (N 2-08/17253). The Employer required to discuss the issue and reply to him about the Engineer's position; On 30.10.2021 the joint site inspection revealed that: ---•The access road for citizen lamze Kvantidze's family-owned residential house is provided through the Project Local Road N3;	Accepted	30.12.21	Substantiated	Closed	73	Awaiting a formal consensual agreement between the Contractor and the applicant

					<p>Also, she stated that her residential house (C/C C/C 32.18.31.2 87) never had transport access and ask a provision of transport access.</p>	<p>---•The water supply pipeline is damaged due to the excavation work for the construction of the Local Road N3. The water supply pipeline was used to supply the drinking water for the water collection tank to the residential house ---In order to restore the drinking water supply for lamze Kvantidze's family-owned residential house, it is necessary to arrange a metal or concrete pipe under the Local Road N3 and to restore the damaged water supply pipeline;</p> <p>On 03.11.2021 the Contractor was instructed with the Engineer's letter (0741-CSAE60F4-UBM-GE) to restore the drinking water supply with the coordination of the applicant's household. Afterwards, provide a signed consensual agreement on the resolving of the above issue and submit it to the Engineer as soon as possible;</p> <p>On 03.11.2021 the Employer was informed through the Engineer's letter (0742-CSAE60F4-UBM-GE) about the findings of the above joint site inspection and the Engineer's above instruction on the Contractor;</p> <p>On 13.12.2021 The Contractor was reminded to restore the drinking water supply with the coordination to the applicant's household, and provide a signed consensual agreement on the resolving of the above issue and submit it to the Engineer as soon as possible (0852-CSAE60F4-UBM-GE);</p> <p>On 30.12.2021 the site inspection revealed that the drinking water supply pipeline is restored by the Contractor (Photos: https://photos.app.goo.gl/bYgRh33HUP2vF3CQ9;). However, the Contractor has to submit signed consensual agreement to formally settle the issue;</p>					
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64	F4	Government	28.10.21	Social	Khatuna Jaoshvili ID: 18301073 883 Mob N: 55833191 1 Pk 5+00	Restriction on or loss of access	Khatuna Jaoshvili is concerned about the worsened condition of the transport access for her family-owned residential house (C/C 32.16.38.35), due to the construction works of the E60 Highway F4 Shorapani-Argveta Project. Therefore, she demands necessary remedial actions to improve the condition of the access road.	On 28.10.2021 the Employer forwarded the AP's application with the letter (N 2-08/17910). The Employer required to discuss the issue and inform him about the Engineer's position; On 29.10.2021 the joint site inspection revealed that the Contractor uses the aforementioned transport road to access at the Workers' Camp #1. Accordingly, the Contractor periodically carries out the necessary measures to improve the condition of the transport access. However, in order to resolve the issue raised by the applicant, it is necessary to carry out some road condition improvement measures; On 12.11.2021 the Contractor was instructed with the Engineer's letter (0748-CSAE60F4-UBM-GE) to carry out the condition improvement measures for the transport access with coordination with the applicant. Afterwards, provide a signed consensual agreement by both parties and submit its copy to the Engineer; On 04.11.2021 the Employer was informed with the Engineer's letter (0750-CSAE60F4-UBM-GE) about the above findings of the site inspection and the Engineer's above instruction on the Contractor; On 13.12.2021 the Contractor was reminded with the Engineer's letter (0852-CSAE60F4-UBM-GE) to act according to the Engineer's above instruction and report to the Engineer;	Forwarded to CC	Pending	Open	77
65	F4	RD	28.10.21	Env&HSE	Gocha Talakhadze P/N 18001009 241 Mobile N: 55813143	Damage to Infrastructure / Assets	Gocha Talakhadze is concerned regarding the risk of damage on his	On 28.10.2021 the Employer forwarded the AP's application to the Engineer through the letter (N 2-08/17916). The Employer required to discuss the issue and inform him about the Engineer's position; On 04.11.2021 the Contractor was	Forwarded to CC	Pending	Open	77

			1 Pk 39+00	<p>residential houses and the risk of depletion of the groundwater in his well, due to the planned construction works of Tunnel 4003.</p> <p>Also, he demand the copy of the documentation prepared as a result of the survey for his residential house and the groundwater well.</p>	<p>instructed with the Engineer's letter (0749-CSAE60F4-UBM-GE) to: ---</p> <ul style="list-style-type: none"> •Carry out the pre-construction condition survey of citizen Gocha Talakhadze's residential house with considering of the Engineer's comments issued with Ref (1) letter and the Method Statement of Crack Monitoring Using Gyps Plaster and report it to the Engineer; ---•Deliver the copy of the structure/building technical survey reports to the structures/building owners (including Gocha Talakhadze) with signing acceptance-delivery acts and submit its copies to the Engineer; ---•Carry out weekly instrumental monitoring of groundwater level in Gocha Talakhadze's well during the construction of Tunnel 4003 as soon as blasting will start for Tunnel 4003 and report its result to the Engineer weekly; ---•Carry out continuous blasting vibration instrumental monitoring throughout the blasting period of Tunnel 4003 and report the results to the Engineer weekly; <p>On 04.11.2021 the Employer was informed with the Engineer's letter (0751-CSAE60F4-UBM-GE) regarding the above Engineer's instruction on the Contractor;</p> <p>On 13.12.2021 the Contractor was reminded to carry out the pre-construction condition survey of the residential house with considering the Engineer's comments issued with the letter (0449-CSAE60F4/UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report its results to the Engineer (0852-CSAE60F4-UBM-GE);</p> <p>On 13.12.2021 the Contractor was reminded with the Engineer's letter</p> 			
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								(0852-CSAE60F4-UBM-GE) to act according to the Engineer's above instruction and report to the Engineer;					
66	F4	UBM F4	22.10.21	Social	Violeta Getsadze P/N 18001005913 Mob N: 551404249 Pk 81+60	Inclusion in LARP	She stated that the paper tapes and the plasters placed on the crack of her house walls are damaged, because the house (C/C 32.10.32.5 26) is getting damages due to the ongoing tunnel construction work of Tunnel 4005. Hence, she demands inclusion in LARP.	<p>On 22.10.2021 the joint site inspection revealed that some tapes and plasters put on the cracks of the residential house provided by the SDSC LTD are damaged;</p> <p>On 28.10.2021 the Employer forwarded the AP's application to the Engineer about the same concern. The Employer required to discuss the issue and inform him regarding the Employer's position (N 2-08/17918);</p> <p>On 01.11.2021 the Employer was informed with the Engineer's letter (0729-CSAE60F4-UBM-GE) that on 6th September 2021, the company SDSC LTD marked some cracks of the walls of the above-mentioned residential house, which about the Contractor hasn't officially submitted the necessary documentation to the Engineer yet. ---Also, the Employer was informed about the above findings of the above joint site inspection. --- Besides, the Employer was informed as follow: "It should be noted, that at Pk 81+60 the depth between the top of Tunnel 4005-AT and the basement of Ms. Violeta Getsadze's residential house is approximately 18.5 meters. --- Accordingly, during the planned tunnel excavation work to be carried out between Pk81+10 and Pk82+10 of Tunnel 4005-AT, it is recommended to temporarily relocate Ms. Violeta Getsadze's household to an alternative residential place."</p> <p>On 03.11.2021 the Employer was replied with the Engineer's letter (0743-CSAE60F4-UBM-GE) that</p>	Forwarded to RD	Pending	Open	83	

							the Employer was already informed in this regard;						
67	F4	Government	10.11.21	Env&HSE	Tinatin Tsertsvadze P/N 18001025424 Mob N: 571163782 Pk 65+50	Damage to Infrastructure / Assets	<p>She is concerned regarding the risk of damage on her residential houses (C/C 32.10.41.284) and the risk of depletion of the groundwater in her well, due to the planned construction works of Tunnel 4004.</p> <p>Hence, she demands that the pre-construction condition of the house and well shall be surveyed.</p> <p>(Note: The distance between the mentioned residential house and Tunnel 4004 is approximat</p>	<p>On 10.11.2021 the Employer forwarded the AP's application to the Engineer through the letter (N 2-08/18670). The Employer required to discuss the issue and inform him about the Engineer's position;</p> <p>On 22.11.2021 the Contractor was instructed with the letter (0803-CSAE60F4-UBM-GE) to: ---Carry out the pre-construction condition survey of citizen Tinatin Tsertsvadze's residential house with considering of the Engineer's comments issued with the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report it to the Engineer; ---Measure the baseline groundwater level in the well of Tinatin Tsertsvadze before starting the blasting work of Tunnel 4004 and submit its result to the Engineer; ---Carry out weekly instrumental monitoring of groundwater level in Tinatin Tsertsvadze's well and report the result to the Engineer weekly; ---Carry out continuous blasting vibration instrumental monitoring throughout the blasting period of Tunnel 4004 and report its results to the Engineer weekly;</p> <p>On 22.11.2021 the Employer was informed with the letter (0804-CSAE60F4-UBM-GE) regarding the Engineer's above instruction on the Contractor;</p>	Forwarded to CC	Pending	Open	64	

						ely 295 meters.)								
68	F4	Government	10.11.21	Social	Tea Chichinadze P/N 18001002 251 Mob N: 57738876 6 Pk 71+50	Restriction on or loss of access	She stated that the access road for her agricultural land plots (C/C 32.09.42.704 & C/C 32.09.42.514) is blocked due to the ongoing Project construction works. Hence, She demands restoration of the access or inclusion in LARP.	On 10.11.2021 the Employer forwarded the AP's application to the Engineer through the letter (N 2-08/18676). The Employer required to discuss the issue and inform him about the Engineer's position; On 16.11.2021 the joint site inspection revealed that the access road of the aforementioned land plots crosses the construction site, where the construction of the eastern portal of Tunnel 4005 is in progress. Accordingly, the access to the land plots is worsened; On 18.11.2021 the Contractor was instructed with the Engineer's letter (0796-CSAE60F4-UBM-GE) to improve the access road of the land plots (C/C 32.09.42.704 & C/C 32.09.42.514), based on negotiations with the landowner, and reply to the Engineer with the signed consensual agreement by both parties; On 18.11.2021 the Employer was informed regarding the above finding of the joint site inspection and the Engineer's above instruction on the Contractor. --- Besides, the Employer was informed that after completion of the Project construction works, the above-mentioned land plots will be provided with the access road via passing under the Reinforced Concrete Bridge BRI 4.1.07. --- Moreover, the Employer was informed citizen Tea Chichinadze's land plot (C/C 32.09.42.514) is located at a height of fewer than 25 meters from the top of the Tunnel 4005-TA-AT (0797-CSAE60F4-UBM-GE); On 13.12.2021 the Contractor was reminded with the Engineer's letter (0852-CSAE60F4-UBM-GE) to act	Accepted	14.12.21	Substantiated	Closed	34	The agreement was signed on 14.12.2021

								according to the Engineer's above instruction and report to the Engineer; On 20.12.2021 the Contractor submitted the signed consensual agreement that the access road of the aforementioned land plot is clean and repaired by the Contractor and the landowner does not have any claims regarding the above-mentioned (20211220-0684-GHEC-UBM);					
69	F4	Government	19.11.21	Social	Irma Sebiskver adze P/N 01010003 871 Mob N: 593 53 84 34 Pk	Restriction on or loss of access	She stated that the existing village road is blocked due to the Project construction works. Hence, she demands that the village road shall be connected to the Project road.	On 19.11.2021 the Employer forwarded the AP's application to the Engineer through the letter (N 2-08/19174). The Employer required to discuss the issue and inform him about the Engineer's position; On 30.12.2021 the Employer was replied with the Engineer's letter (0900-CSAE60F4-UBM-GE) as follows: " <i>We would like to inform you, that the site inspection was implemented to study the issue. As a result, it revealed that the aforementioned village road is permanently blocked by the Local Road N3 at 3+80. In order to resolve the issue, it is necessary to connect the village road to the Local Road N3 by arranging d-100 concrete pipe in the drainage channel of the Local Road N3 at 3+80. ---Besides, please be informed that the Local Road N3 permanently blocks another village road as well at 3+10. To connect the second village road to the Local Road N3, d-100 concrete pipe should be arranged in the drainage channel of the Local Road N3 at 3+10. ---The connection of the above-mentioned village roads and the Local Road N3 is not envisaged in the Project design. Therefore, please discuss the issue and inform us of the Engineer's and the</i>	Forwarded to RD		Pending	Open	55

							Contractor's further necessary actions.;"							
70	F4	RD	02.12.21	Env&HSE	Avtandil Katamadze P/N 18001010552 Mob N: 577674111 Pk 116+10	Damage to Infrastructure / Assets	<p>He stated that the Contractor positioning on this land plot (C/C 32.03.46.593). Hence, he demands that his land plot boundaries shall be defined and marked at the site.</p> <p>(Note: The aforementioned land plot is registered under ownership of the state in the NAPR since 27th December of 2021).</p>	On 02.12.2021 the Employer forwarded the local resident's application to the Engineer with the letter (N 2-08/19780). The Employer required to discuss the issue and inform him about the Engineer's position;	Accepted	27.12.21	Substantiated	Closed	25	The aforementioned land plot is registered under ownership of the state in the NAPR since 27th December of 2021
71	F4	Government	26.11.21	Env&HSE	Goga Kurtskhali P/N 18001050571 Mob N: 579250838, 577126196. Pk 95+00	Damage to Infrastructure / Assets	<p>He is concerned regarding the risk of deterioration of living condition for his residential house (C/C 32.03.43.44) due to</p>	<p>On 26.11.2021 the Employer forwarded the AP's application to the Engineer through the letter (N 2-08/19485). The Employer required to discuss the issue and inform him about the Engineer's position;</p> <p>On 29.12.2021 the Contractor was instructed to: ----Carry out the pre-construction condition survey of the residential house with considering the Engineer's comments issued with the letter (0449-CSAE60F4-</p>	Forwarded to CC		Pending	Open	48	

						<p>expected noise by the movement of vehicles on the Project highway at the operational stage, as the house is located close to the Project highway.</p> <p>Also, he is concerned about the risk of damage to his residential house due to the ongoing Project construction works.</p> <p>Hence, he demands that the situation shall be investigated and relevant actions shall be implemented.</p>	<p>UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report it to the Engineer; ---</p> <ul style="list-style-type: none"> •Carry out regular instrumental monitoring of environment (air quality, noise, vibration) near the house, during active construction works of Tunnel 6/Open excavation in the vicinity of the mentioned house and report its results to the Engineer (0892-CSAE60F4-UBM-GE); <p>On 29.12.2021 the Employer was informed that the residential house is located in approx. 40 meters from the slope of the variation highway/Tunnel 4006/Open excavation (at Pk95+00) and the house is within 50 meters of the variation RoW. Also, the Employer was informed regarding the Engineer's above instruction on the Contractor (0893-CSAE60F4-UBM-GE);</p>					
72	F4	RD	26.11.21	Social	Guram Pkhaladze P/N 18001052356 Mob N:	Restriction or loss of access	He stated that there is the tractor access problem of	On 26.11.2021 the Employer forwarded the AP's application to the Engineer through the letter (N 2-08/19482). The Employer required to discuss the issue and inform him about the Engineer's	Forwarded to RD	Pending	Open	48

			57732408 3, 57732196 4. Pk 39+00	his co-owned agricultural land plot (C/C 32.18.31.2 48) due to the changed configuration of the agricultural land plot as a result of the land acquisition implemented by the Employer. Also, he states that the land creeping process is activated as a result of the implemented excavation by the Contractor, which in his opinion poses the risk of damage for the mentioned agricultural land plot. Eventually, he demands inclusion in LARP.	position; On 30.12.2021 the Employer was informed with the Engineer's letter (0901-CSAE60F4-UBM-GE) as follows: "We would like to inform you, that the site inspection was implemented to study the issue. The site inspection was attended by Mr. Guram Pkahladze's family member to explain the issues in detail. ---As a result, it revealed that some grape trunks are close to the new boundary of the agricultural land plot dedicated as a result of the land acquisition implemented by the Employer. Hence, the landowner states, that he is forced to cut down some grape trunks located close to the new boundary to make it possible to access between the rows of the vineyard with a tractor. Hence, the landowner demands compensation for the grape trunks, which are subject to be cut down. ---It should be noted, there is another possibility to provide the tractor access between the rows of the vineyard with extending the land plot boundary towards the drainage channel of Local Road N3. ---Also, please be informed, that the visual observation revealed that the land creeping process is insignificant and temporary to naturally settle down the excavated ground, which doesn't pose the risk of damage to the agricultural land plot";				
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73	F4	Government	26.11.21	Env&HSE	Teimuraz Shavgulidze P/N 18001008953 Mob N: 574041897 Pk 93+00	Damage to Infrastructure / Assets	<p>He is concerned about the risk of damage to his residential house (C/C 32.10.33.064) due to the planned Project construction works at his residential house.</p> <p>Hence, he demands to investigate the issue to determine whether he will get compensation and what amount. Also, he demands to get compensation at this stage, before the occurrence of damage on his residential house.</p>	<p>On 26.11.2021 the Employer forwarded the AP's application to the Engineer through the letter (N 2-08/19499). The Employer required to discuss the issue and inform him about the Engineer's position;</p> <p>On 24.12.2021 the Contractor was instructed to: ----Carry out the pre-construction condition survey of the residential house (C/C 32.10.33.064) with considering the Engineer's comments issued with the letter (0449-CSAE60F4-UBM-GE Dated: 14.07.2021) and the Method Statement of Crack Monitoring Using Gyps Plaster and report it to the Engineer; ----Carry out vibration instrumental monitoring near the house, during active construction works of Tunnel 6/Open excavation in the vicinity of the mentioned house and report its results to the Engineer (0876-CSAE60F4-UBM-GE);</p> <p>On 24.12.2021 the Employer was informed that the residential house (C/C 32.10.33.064) is within 50 meters from the RoW. Also, the Employer was informed regarding the Engineer's above instruction on the Contractor (0877-CSAE60F4-UBM-GE);</p>	Forwarded to CC	Pending	Open	48
74	F4	Government	15.12.21	Env&HSE	Residents of the village Vachevi	Damage to Infrastru	They stated the only access	On 15.12.2021 the Employer forwarded the local residents' joint application to the Engineer and the Contractor with the formal letter (N	Under review	Pending	Open	29

				Mob N: 59357241 3 Pk 30+00	cture / Assets	road of village Vachevi collapses time to time due to the Contractor' s constructio n activities. Hence, in their opinion, it is necessary to construct some protective structure to stop collapsing process.	2-06/20541). The Employer required to study the issue at the site with the applicants and representatives of the local municipality. Finally, the Employer required to carry out relevant remedial actions and inform him in this regard;					
7 5	F4	Government	27.12. 21	Env&HSE	Gogi Katamadze P/N 18001068 088 Mob N: 59500630 Pk 119+00	Damage to Infrastru cture / Assets	He stated that there is the restriction risk of the access road for his co-owned agricultural land plot (C/C 32.03.46.5 87) due to the Project constructio n activities. Hence, the requires that the situation shall be studied and relevant	On 27.12.2021 the Employer forwarded the local resident's application to the Engineer with the formal letter (N 2-08/21499); The Employer required to discuss the issue and inform him the Engineer's position;	Under review	Pending	Open	17

						measure shall be implemented.							
76	F4	Government	28.12.21	Env&HSE	Mariam Nebieridze P/N 18001027791 Mob N: 599708201 Pk 126+00	Damage to Infrastructure / Assets	She stated that the Contractor's construction activities near her residential house (C/C 32.03.47.445) cause noise and vibration. Hence, the residential house is getting damage from time to time. Finally, she demands necessary investigation and conclusion for further measures.	On 28.12.2021 the Employer forwarded the local resident's application to the Engineer with the formal letter (N 2-08/21677). The Employer required to discuss the issue and inform him about the Engineer's position;	Under review		Pending	Open	16
77	F4	Government	28.12.21	Env&HSE	Manana Matsaberdze P/N 18001000014 Mob N: 555362880 Pk	Damage to Infrastructure / Assets	She stated the retaining wall is getting damage due to the movement of the Contractor's heavy vehicles, which poses threats for	On 28.12.2021 the Employer forwarded the local resident's application to the Engineer with the formal letter (N 2-08/21688). The Employer required to discuss the issue and inform him about the Engineer's position;	Under review		Pending	Open	16

						her residential house and yard. Hence, she demands that the situation shall be studied and necessary measures shall be implemented.						
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