

Environmental Monitoring Report

Semi-annual Environmental Monitoring Report

July 2020

Azerbaijan: MFF Second Road Network Development Investment
Program, Project 1

Prepared by the State Agency of Azerbaijan Automobile Roads for the Asian Development Bank.

CURRENCY EQUIVALENTS

as of 31 July 2019

Currency unit	–	Azerbaijani Manat
AZN1.00	=	\$0.5894
\$1.00	=	AZN1.6965

ABBREVIATIONS

AAYDA	–	State Agency of Azerbaijan Automobile roads
MOF	–	Ministry of Finance
ADB	–	Asian Development Bank

NOTES

- (i) The fiscal year (FY) of the Government of Azerbaijan (and its agencies) ends on 31 December. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2011 ends on 31 December 2011.
- (ii) In this report, "\$" refers to United States dollars

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Project Number: 45389

July, 2020

Republic of Azerbaijan:

Second Road Network Development Investment Program, Tranche 2 under
Multitranche Financing Facility 2

Lot 1. Construction Supervision of Civil Works Contracts for Reconstruction of Ujar-Zardab-Agjabadi Section of R32 (70.50 Km). Ujar-Zardab, Km 0+000 – Km 37+000

Lot 2. Construction Supervision of Civil Works Contracts for Reconstruction of Ujar-Zardab-Agjabadi Section of R32 (70.50 Km). Zardab-Agjabadi, Km 37+000 – 70+500

Financed by the Asian Development Bank
Loan 2921- AZE

Prepared by State Agency of Azerbaijan Automobile Roads (SAAAR) for the Asian Development Bank (ADB).

Reporting Period: 01 January to 30 June, 2020

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Abbreviations

ADB	–	Asian Development Bank
EA	–	Executing Agency
IEE	–	Initial Environmental Examination
EMP	–	Environmental Management Plan
EPM	–	Environmental Protection Manager
EMR	–	Environmental Monitoring Report
FCE	–	Focal Communal Exploitation
GRM	–	Grievance Redress Mechanism
PPE	–	Personal Protective Equipment
EPM	–	Environmental Protection Manager
MENR	–	Ministry of Ecology and Natural Resources
OHS	–	Occupational Health and Safety
PIU	–	Project Implementation Unit
SSEMP	–	Site Specific Environmental Management Plan
SAAAR	–	State Agency of Azerbaijan Automobile Roads
HIV/AIDS	–	Human Immunodeficiency Virus/Acquired Immune Deficiency System

INTRODUCTION

Preamble

This report represents the Semi - Annual Environmental Monitoring Review (SAEMR) for Second Road Network Development Investment Program, Tranche 2 under Multi tranche Financing Facility 2 Reconstruction of Ujar-Zardab-Agjabadi Section Lot 1 of R32 (70.50 km) – Ujar-Zardab Section, Km 0+000 – Km 37+000 and Lot 2 – Zardab-Agjabadi Section, Km 37+000-km 70.+500

This report is the third EMR for the project.

Headline Information

The Project is Category B for environmental impacts. The Initial Environmental Examination (IEE) for the Project has been prepared in 2018 as required by ADB SPS (2009) and in compliance with laws of the Azerbaijan. The EA and ADB have approved the IEE. The IEE includes an EMP to address potential impacts, and provides mitigation measures to minimize mitigate impact and/or compensate affected parties if any during the entire project cycle.

The project area is located at Kur–Araz lowland. Main landscape of the Kur – Araz lowland is semi-desert area below sea level (mostly) with high salinity soils. Annual precipitation is 200 – 400 mm. Based on the climate map of Azerbaijan area belongs to I climatic zone with soft winter, semi-desert with dry summer and step climate. The general environment of the project is mostly agricultural fields, barren lands with no vegetation or very few Tamarix and Artemisia bushes, crossing over number of small and medium size irrigation channels and the Kura River (longest river in the country). Main water source of the area is Kura River and as well as irrigation channels that are very typical for lowland areas of Azerbaijan.

No protected or any other areas with specific importance have been found along the project alignment. The closest protected area is Agghol National Park which is located approximately 6 km east of the Agjabedi district. Agriculture and livestock are main sources of incomes of the rural population along the project road and agriculture is a main industry with the main crops as grains, cotton and vegetables. The environmental impacts are mainly related to the construction period and within the Right-Of-Way (ROW), construction and facility sites; while some activities can affect the outlying areas, if not properly mitigated.

Due to the outbreak of CORONAVIRUS (COVID 19) all over the world, the Contractors were very much conscious and proactive about the pandemic of the COVID and took necessary precautionary and preventive measures. They organized special awareness meeting and training to the workers. They also adjusted work plan according to the situation and carried out appropriate precautionary and safeguard measured against spreading and infection of Coronavirus Pandemic during the reported period.

Daily COVID 19 prevention activities are carried out as following at the camp facilities and the construction sites:

- i. Disinfecting all camp area, offices, canteens, kitchens, dormitories, and bathrooms
- ii. Supplying disinfectants, masks, gloves to all employees and workers
- iii. Measuring the body temperature of each employee daily
- iv. Toolbox talking about Coronavirus: COVID-19 to the employees
- v. Putting warning posters and signs in visible places like the entrance to the camp, offices, kitchen, dormitories, workshops, etc.
- vi. Maintaining social distancing and arranging small groups working in a place.

There haven't been identified COVID 19 affected employees at both Lot 1 and Lot 2 and the work continued without stopping during the reported period.

Due to the on-going risks and constraints imposed by the COVID-19 virus outbreak and the current pandemic situation the following applications is being carried out:

The Consultant and Contractor put in place measures to minimize the chances and contain the spread of the virus as a result of the movement of workers and ensure all working locations are prepared for an outbreak. The Consultant and Contractor also develop and practice contingency plans so that personnel know what to do if an outbreak occurs and how treatment will be provided. Further information on preparing a workplace for COVID-19 may also be found at.

In addition, the Consultant and Contractor adopt the relevant recommendations given in the ADB's relevant documents to be used in Construction/Civil Works Projects (such as <https://www.who.int/docs/default-source/coronaviruse/advice-for-workplace-clean-19-03-2020.pdf>; <https://www.adb.org/sites/default/files/publication/614811/safety-well-being-workers-communities-covid-19.pdf>; <https://www.adb.org/sites/default/files/institutional-document/579616/adbs-comprehensive-response-covid-19-pandemic-redacted-version.pdf>).

For various tasks, if it needs urgent in future, the movement of experts and other staff will be minimized. Experts will be required to work from home so far as practical. Internal and external meetings will be conducted by telecommunication and information passed digitally. For meetings with external organizations, including with the Client, the Consultant and Contractor will ensure to have compatible video meeting software available.

PROJECT DESCRIPTION AND CURRENT ACTIVITIES

Project Description

The project is upgrading the Ujar- Zardab – Agjabadi Road (R32), a 70.5 km long road which links the road R18 on the south of Agjabadi city with the international highway M2 at Ujar intersection on the north. The project upgrades the road from category III to category II in accordance with the prevailing design standards of roads in Azerbaijan.

The road is 70.5 km long and reconstruction works will be done following the existing alignment except minor adjustment of short radii curves but all works will be done within the existing ROW. The construction works are executed through two construction contracts for Lot 1 and Lot 2. The construction contract for the Lot 1 has been awarded to KORPU-BINA-TIKINTI LLC (KBT), with commencement date as of 1 February 2019, and for the Lot 2 to POLAT A.Ş. (POLAT) companies, with commencement date as of 1 March 2019.

The contractors' commencement and completion dates.

Lot-1: Ujar-Zardab Section, Km 0+000 – Km 37+000	Lot-2: Zardab-Agjabadi Section, Km 37+000-km 70+500
<p>Contractor: KORPU-BINA-TIKINTI LLC (KBT)</p> <p>Contract No.: CWC 01/ICB/2018/L1</p> <p>ADB Loan No.: ADB Loan 2921 AZE</p> <p>Accepted Contract Amount: AZN 80,192,918.79 including VAT</p> <p>Date of Contract signing: 31 October 2018</p> <p>Commencement date: 01 February 2019</p> <p>Defects Notification Period: 730 days</p> <p>Time for Completion: 730 days</p> <p>Original Completion Date: 31 January 2021</p>	<p>Contractor: POLAT YOL YAPI SANAYI VE TICARET A.S.</p> <p>Contract No.: 01/ICB/2018/L2</p> <p>Accepted Contract Amount: AZN 59,604,647.11 excluding VAT and Price Adjustment</p> <p>Date of Contract signature: 19 November 2018</p> <p>Commencement date: 1 March 2019</p> <p>Defects Notification Period: 730 days</p> <p>Time for Completion: 730 days</p> <p>Original Completion Date: 28 February 2021</p>

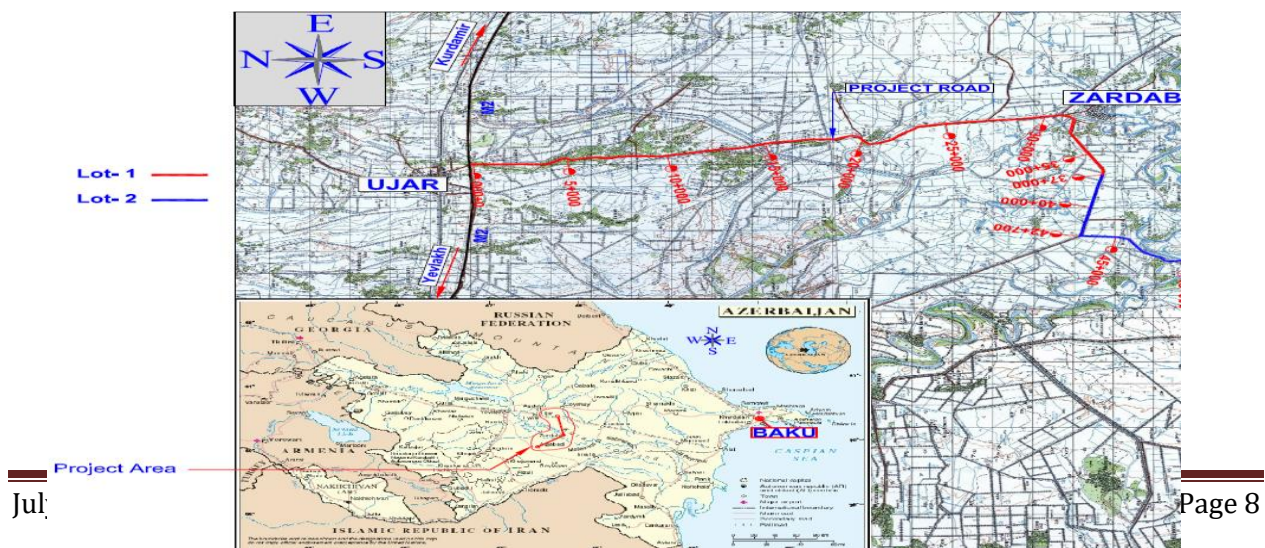


Figure 1. Project Location Map



Figure 2. Lot 1: Project location map

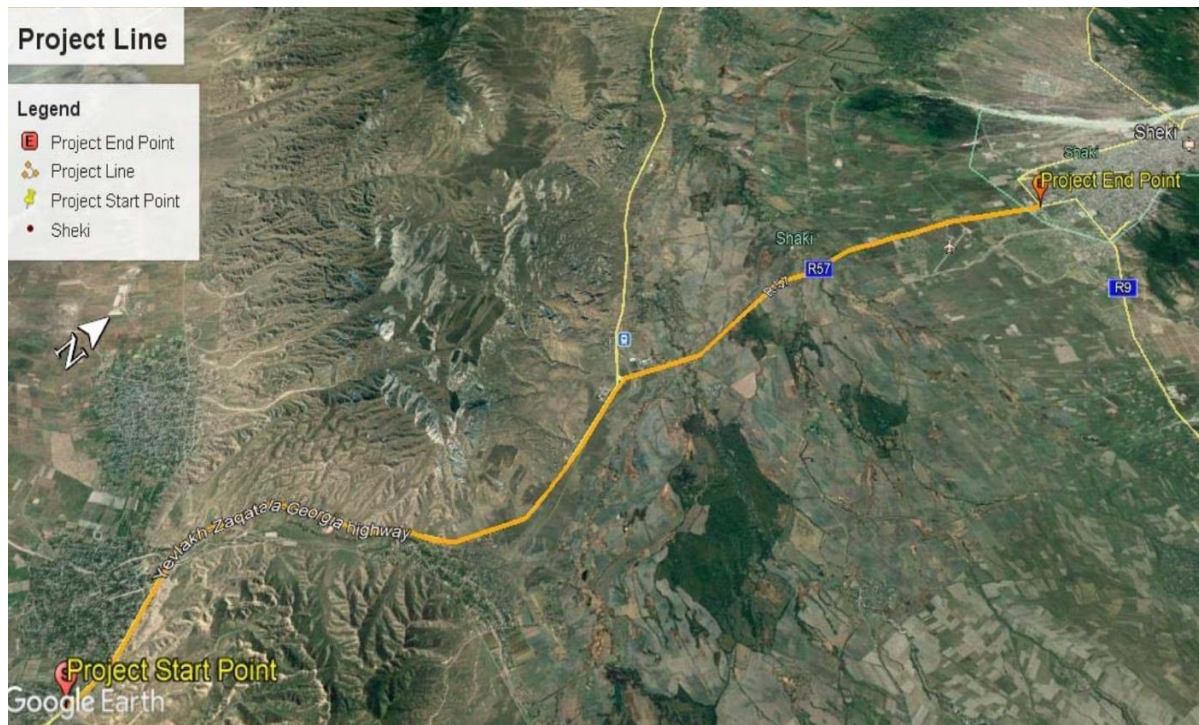


Figure 3. Lot 2: Project location map

The project's road upgrading works include:

- Reconstruction of 70,5 km two lane road;
- Replace or repair of 7 bridges and 55 culverts;
- Construction of side drains and other drainage structures;
- Provision of retaining walls and river protection measures, where necessary;
- Provision of adequate road signing and marking;
- Provision of safety barriers.

The design elements for the cross section of the project road are as follows:

- Number of lanes: 2;
- Lane width is 7.5 m (2 x 3.75m);
- Maximum shoulder width is 3.75m (3.75m x 2), 0.75m x 2 paved with asphalt concrete
- Total road width: 15.00 m;
- New alignment will be within the existing ROW to avoid any land acquisition and resettlement issues. Road widening at some areas will include only increasing the width of asphalt layer. But this will be done still within the existing RoW.

Selected 6 local roads that have been added to the Project to be funded from the expected savings in the Loan 3144 AZE are 2 roads in Ujar Region, 3 roads in Zardab Region and 1 road in Agjabadi region.

The SC with the EA has conducted roads examination to select the local roads with priority rehabilitation needs. Six local roads in total length of 42.74km have been selected and prioritized for immediate rehabilitation due to their existing poor and unsatisfactory conditions. All road rehabilitation works will be carried out within existing Right of Way (ROW). Therefore, the magnitude of impacts will be minor and temporary during the construction phase. The temporary impacts will be managed and mitigated as per mitigation measures provided in Environmental Management Plan, following ADB's Safeguards Policy Statement (SPS 2009) and laws of Azerbaijan.

As per the project documents, the lane width of local roads to be rehabilitated will be 3.00 m, two-lane road, and width of shoulders on both sides within the existing ROW be 2.00m of which 0.50m will be paved, 1.50 m be fortify by gravel. The width of the existing local roads is between 10-12 m. These local roads will be rehabilitated to category IV. To avoid land acquisition, embankment will be adjusted as per site conditions keeping carriageway parameters same. Design documents provide details about the current road conditions and the technical design of roads rehabilitation works. Summary description of roads conditions follows below:

Selected local roads			
No	Index and No. of roads	Names of roads	Length (m)
		Ujar region	
1	Y-61-07	M-2 (232 km) – Alpi	3,562.18
2	Y-61-08	M-2 (233 km) – Gulebend	3,384.41
		Zardab region	
1	Y-63-08	R-32 (41 km) – Yarmemmedbagi-Pervanli	15,866.00
2		Y-63-11 (11 km) – Korpukend	4,658.30
3	Y-63-15	Zardab-Alvand	5,030.00

Agjabadi region			
1		Y-04-20 (7 km) – Shenlikkend	10,236.74
Total: 42,737.63 m			

Design characteristics:

- (i) Embankment width: 10.0 m
- (ii) Number of lanes: 2
- (iii) Lane width: 3 m
- (iv) Carriageway width: 6 m (2 x 3.m)
- (v) Width of shoulder: 2m (2x2m; of which 0.50m will be paved)
- (vi) Carriageway gradient: 2%
- (vii) Shoulder inclination: 2%
- (viii) Embankment slope ratio (v & h):
- (ix) 1:3 up to 2.5m height of embankment slope;
- (x) 1:2 > 2.5m to 4.0m height of embankment slope;
- (xi) 1;1.5 > 4.0 m height of embankment.

The rehabilitated local roads will improve accesses to R32 road and M2 Highway, and connectivity till end users and villagers to main roads and nearby markets that will support the Program's objectives.

The project area is located at Kur–Araz lowland. Main landscape of the Kur – Araz lowland is semi-desert area below sea level (mostly) with high salinity soils. Annual precipitation is 200 – 400 mm. Based on the climate map of Azerbaijan area belongs to I climatic zone with soft winter, semi-desert with dry summer and step climate. The general environment of the project is mostly agricultural fields, barren lands with no vegetation or very few Tamarix and Artemisia bushes, crossing over number of small and medium size irrigation channels and the Kura River (longest river in the country). Main water source of the area is Kura River and as well as irrigation channels that are very typical for lowland areas of Azerbaijan.

No protected or any other areas with specific importance have been found along the project alignment. The closest protected area is Agghol National Park which is located approximately 6 km east of the Agjabedi district. Agriculture and livestock are main sources of incomes of the rural population along the project road and agriculture is a main industry with the main crops as grains, cotton and vegetables. The environmental impacts are mainly

related to the construction period and within the Right-Of-Way (ROW), construction and facility sites; while some activities can affect the outlying areas, if not properly mitigated.

The project is Category B for environmental impacts. The Initial Environmental Examination (IEE) for the project has been prepared in 2018 as required by the ADB SPS 2009 and in compliance with the laws of Azerbaijan. The EA and ADB have approved the IEE. The IEE includes an EMP to address environmental impacts and provide measures to minimize mitigate and/or compensate the affected parties if any during the entire project cycle.

Project Contracts and Management

The road is 70.5 km long and reconstruction works will be done following the existing alignment except minor adjustment of short radii curves but all works will be done within the existing ROW (figure 1). The construction works are executed through two construction contracts for Lot 1 and Lot 2. The construction contract for the Lot 1 has been awarded to KORPU-BINA-TIKINTI LLC (KBT), with commencement date as of 1 February 2019, and for the Lot 2 to POLAT A.Ş. (POLAT) companies, with commencement date as of 1 March 2019.

Lot-1: Ujar-Zardab Section, Km 0+000 – Km 37+000. It is a 37 km section of the road R32 starts from the intersection with an international road (M2) at Ujar and runs southwards through several villages namely Qarabork, Qazyan, Lek, Xalac, Challi with access roads till Zardab city. It has major intersection at km 31.5 in Zardab city (hereinafter “Lot 1”)

Lot-2: Zardab-Agjabadi Section, Km 37+000-km 70+500. It is a 33.5 km section of the road R32 starts at km 37+000, the end of Lot 1 of Ujar- Zardab Road section and runs to the south-west direction passing through Agjabadi city and joining the road R18 road at km 70+500. It forms part of the important road connection from Baku to the Zardab and Agjabadi cities (hereinafter “Lot 1”).

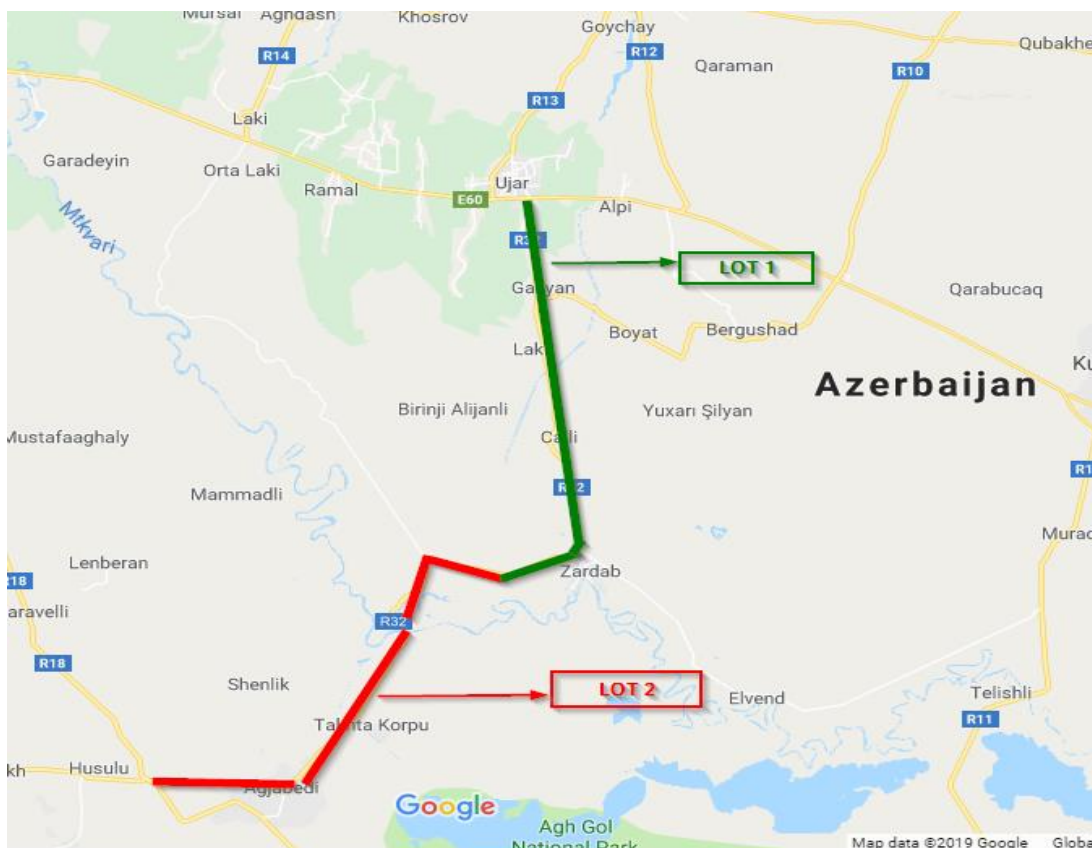


Figure 4. Project road layout

The EA/PIU: The PIU has a Safeguard Specialist based in Baku with periodic field inspections and supervision of the Project Environment team consisted of staff of the PIU, Supervision Engineer, and Contractors for Lot 1 and Lot 2.

Supervision Engineer: The Supervision Engineer has one International Social and Environmental Safeguards Specialist (Ms. Nargis Halimova) and one National Environmental Specialist (Mr. Alizamin Mustafayev), who work both for Lot 1 and Lot 2 on intermittent bases.

Lot 1. The Contractor has one Environmental Specialist Mr. Aliyev Orkhan and one OHS Officer and 16 flagmen for traffic management and safety during road construction works, and a Doctor with a medical services room and first aid kits in the workers' accommodation camp.

Lot 2. The Contractor has one local Environmental Specialist Mr. Mammadov Khalid, one OHS Officer and 14 flagmen for traffic management and safety during road construction works, and a Doctor for the first aid with a medical services room and first aid kits in the workers' camp.

The PIU, Supervision Engineer and both Contractors have maintained a good working relationship for environmental management and monitoring. The Supervision Engineer and

PIU have had regular inspections in construction work sites and instructed corrective actions to both Contractors for the observed environmental shortcomings in verbal and written forms. The Contractors submitted Monthly and Quarterly Environmental Reports for the Supervision Engineer's review and further reporting to the PIU.

Project activities during current reporting period

The main construction activities for the reporting period for Lot 1 are summarized below and in Annex A with construction photos.

Construction works:

Main activities carried out during the reporting month are setting out, site clearance, topsoil removal, unsuitable excavation, rock fill, suitable materials fill, capping, sub-base, crushed stone base, Bituminous Base, Binder course, sub base on shoulders and Bus Shelter works. The progress is summarized in the below table:

Table 1.Lot 1 Work description during the reported period

Work Description	Executed up to end of June 2020 Progress (%)
Setting out	100.00
Site Clearance	54.86
Topsoil Removal	54.92
Unsuitable Excavation	130.80
Embankment Fill	86.37
Rock Fill	76.75
Geocomposite	99.46
Geogrid	97.66
Capping Layer	75.88
Sub base	57.29
Crushed Stone Base	74.59
Bit. Base Course	68.94
Bit. Binder Course	69.86
Bridge construction works	Three bridge 92, two bridges 94
Drainage Structure and Cattle Underpass	96

Total progress achieved till the end of June 2020 is 78% against a target of 76.12 %.
(1.88% ahead)

Maintenance of the service roads is done regularly, which included grading and levelling, filling depressions, and damaged areas with milled asphalt from existing road pavement, regular watering for dust control, cleaning and reinstating of safety signage, etc.

The workers accommodation facility is clean and properly arranged. The camp is provided with toilets, shower rooms with cold and hot water. The rooms have air-conditioning (heating and cooling for winter and summer) and electricity. Each room has a direct access to corridor and exit, and a window to outside. Fire extinguishers are available in the corridors and entrance. In total, 370 workers live in the workers accommodation as of 1 July 2020.

There haven't been any delays/cancellation or changes in work plan related to COVID 19. The works continued without any delay/cancellation.

The main construction activities for the reporting period for Lot-2 are summarized below and in Annex B with construction photos.

Construction works:

Main activities carried out during the reporting month are setting out, unsuitable excavation, rock fill, suitable fill material, laying of geotextile, capping, sub-base, Bituminous base course, Binder course, and shoulder sub base work. The progress of road works is summarized in the below table:

Table 2.Lot 2 Work description during the reported period

Work Description	Executed up to end of June 2020 Progress (%)
Setting out	86.56
Site clearance	93.49
Top soil	91.80
Unsuitable Excavation.	103.20
Rock Fill	99.48
Embankment Fill	106.84
Geotextile	96.81
Capping layer	92.72
Sub base	89.18
C. Stone Base	59.23
Bit. Base Course	64.46
Binder Course	60.97
Wearing Course	15.19
Bridge No 1	54
Bridge No 2	59
Drainage Structure and Cattle Underpass	98.5

Total progress achieved till the end of June 2020 is 78.11% against a target of 79.94 %.
(3.17% ahead)

Daily maintenance of the service roads includes the levelling and compaction of its roadway surface, extending of additional material in damaged areas (milled asphalt from existing road pavement), regular watering for dust control and cleaning, and reinstating damaged safety signage.

The workers accommodation in general are well arranged, provided with toilets, shower rooms, hot and cold water, personal sanitary items (soap in in toilets sinks for washing hands) and so on. The rooms are equipped with air-conditioning (heating and cooling function for winter and summer), and electricity. Each room has access to the corridor and exit, and a window. In the corridors and the entrance, there are fire extinguishers. In total, 510 workers live in the workers accommodation as of 1 July 2020.

The Contractors continued normal construction activities following all preventive measures and guidelines of WHO and those imposed by the Employer and the Government of Azerbaijan Republic. They engaged more numbers of small working groups to maintain social distancing. Checked all workers health condition regularly and monitored the compliance of all safety and precautionary measures that workers are instructed. The contractor adjusted the work plan in compliance of the guidelines given nationally and with the concurrence of the Employer. They followed the work plan related to COVID 19 and the works continued without any delay/cancellation.

Description of Any Changes to Project Design

There have not been any changes to the Project Design during the reported period at both Lot-1 and Lot-2 except that addition of six local roads. Hence no need for updating to the IEE and Environmental Management Plans of both Lot-1 and Lot-2

Initial environmental examination study for the Rehabilitation of Local Roads in Ujar, Zardab, and Agjabadi together with Yevlakh and Sheki Regions has been carried out.

IEE of Local Roads:

EXECUTIVE SUMMARY

The Government of Azerbaijan has received Loan (3144-AZE) from Asian Development Bank (ADB) for construction of highways under the Second Road Network Development Investment Program (Program) Tranche 2 within the Multi-Tranche Financing Facility (MFF2). The State Agency of Azerbaijan on Automobile Roads (SAAAR) is an Executing Agency (EA) for the

Program and will be for this Project too. Part of the fund under the MFF has been used for upgrading roads R32 road and M5, motorways of Azerbaijan. The EA expect savings around USD 15-20 Million (exc. VAT) under the loan that will be utilized for rehabilitating 10 existing local roads (62,5 km) in Ujar, Zardab, Agjabadi, Yevlakh and Sheki regions (Project). The rehabilitated local roads will improve accesses to R32 road and M5, and connectivity till end users and villagers to main roads and nearby markets that will support the Program's objectives. Construction Supervision Consultant and Contractors for upgrading of M5 and R32 road sections have been procured and construction is in progress.

The Initial Environmental Examination (IEE) has been carried out for the Project following ADB's Safeguard Policy (SPS 2009), including environmental legislation and regulations of Azerbaijan, and international conventions as defined in Appendices I of ADB SPS 2009. The IEE identified the expected environmental impacts; provide measures for management and mitigation of adverse impacts related to local roads rehabilitation.

The Project impact will be minimum and temporary during construction work as the roads rehabilitation works will be carried out within the Right-of-Way (ROW) of the existing local roads, though certain impacts also occur in the operational stage. The IEE have reviewed environmentally sensitive receptors and the Project's potential impacts.

All road rehabilitation works will be carried out within existing Right of Way (ROW). Therefore, the magnitude of impacts will be minor and temporary during the construction phase. The identified impacts include:

- (i) Noise impacts, emission of pollutants to air and vibration, which is especially of high significance within the settlements alongside the Project road and where sensitive receptors are located such as schools, hospitals;
- (ii) Potential impact on water courses and rivers, soil and vegetation, inclusive tree plantations alongside the Project road due to site clearance activities;
- (iii) Impacts from aggregate sourcing at borrow sites, asphalt plant and aggregate crushers;
- (iv) Impacts from bridge and drainage facilities rehabilitation and contractor's working camps;

The temporary impacts will be managed and mitigated as per mitigation measures provided in Environmental Management Plan following ADB SPS 2009 and laws of Azerbaijan. To avoid land acquisition and resettlement impact, embankments will be adjusted as per site conditions keeping carriageway parameters same. The Engineer will provide training to workers of Contractors to support implementation of the EMP as per ADB SPS (2009) and laws of Azerbaijan.

Project information disclosure and public consultations have been carried out in all 5 regions of the project in January 2020. Representatives of the PIU, CSC have presented the key information about the project, requirements of ADB SPS (2009) and laws of Azerbaijan on social and environmental safeguards and measures that will be applied during the project implementation, the GRM that will be during the Project's implementation.

Rehabilitation of the local roads will improve social, agricultural, and economical opportunities and access of rural population to regional cities and the capital city-Baku. This will make a significant positive impact in living standards of rural populations.

INTRODUCTION

PROJECT BACKGROUND AND RATIONALE

The Government of Azerbaijan has received Loan (3144-AZE) from Asian Development Bank (ADB) for construction of highways under the Second Road Network Development Investment Program (Program) Tranche 2 within the Multi-Tranche Financing Facility (MFF2). The State Agency of Azerbaijan on Automobile Roads (SAAAR) is an Executing Agency (EA) for the Program and will be for this Project too. Part of the fund under the MFF has been used for upgrading roads R32 road and M5, motorway of Azerbaijan. The EA expect savings around USD 15-20 Million (exc. VAT) under the loan that will be utilized for Rehabilitation of Local Roads in Ujar-Zardab-Agjabadi and Yevlakh-Sheki Regions (10 local roads, in total 62 km, hereinafter "Project"). The local roads provide accesses to R32 road and M5, improve connectivity till end users and villagers to access main roads and nearby markets that will support the Program's objectives. Construction Supervision Consultant (CSC) and Contractors for upgrading of M5 and R32 road sections have been procured and construction is in progress.

The EA has engaged the current SC (IRD Engineering SRL, Italy) for the proposed Project to conduct:

- (i) Selection of local roads to be rehabilitated under this Loan, prepare designs, cost estimate, safeguard report, engineering report and bid documents for rehabilitation of these local roads and to assist SAAAR in bidding process and procurement of Contractors;
- (ii) Conducting survey of selected operational highways and identify a specific program of road safety measures.

The Project Implementation Unit (PIU) of the EA will be in charge of project management, among others, to ensure that appropriate budget will be provided for the implementation of social and environmental mitigation measures and monitoring, and ensure that the contract provisions are properly implemented.

Objective and Scope of the Study

1. The environmental examination has been carried out and this IEE Report is prepared for the Project as per environmental laws of Azerbaijan, international conventions and procedures as defined in Appendix I of ADB's Safeguard Policy Statement (SPS) (2009). The EA and ADB are committed to ensure the environmental sustainability by protecting the environment and people from potential adverse impacts of the Project. ADB's SPS (2009) objectives include:
 - (i) Avoid adverse social and environmental impacts of projects, where possible;
 - (ii) Minimize, mitigate, and/or compensate adverse social and environmental impacts of projects when avoidance is not possible; and
 - (iii) Help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks.

-
2. This IEE Report documents the environmental examination of the rehabilitation works for ten local roads and identifies potential environmental impacts to be considered in the Project planning and design stages following ADB's SPS (2009) and national laws. It provides information about:
 - (i) Baseline environmental setting of the project area,
 - (ii) Potential environmental impacts of the project and mitigation measures,
 - (iii) Disclosure and public consultations,
 - (iv) Environmental management and monitoring plans, institutional responsibility, and grievance redress mechanism, monitoring and mitigation measures.
 3. The scope of the examination includes all 10 local roads in five regions of Azerbaijan, as specified in the Project Description Section and Table 1. The study included analysis of collected topographic, demographic, technical and economic data for the proposed local roads. The study methodology also included:
 - (i) Review of the available project documents, environmental settings of the project area, review of the maps and existing road alignments, the parameters for the ROW;
 - (ii) Site-visits and observations in the project area, and photo documentation of the Project sites and impact area,
 - (iii) Stakeholders' consultations, meetings and discussions with local residents, contractors and local municipality;

Description of Any Changes to Agreed Construction methods

Reason for changes to construction processes:

Lot-1: Till the end of June, 2020 these are the following main variances recorded:

- Miscellaneous and utility relocations. There are substantial increases in the quantity of most of the utility work items and even new items encountered.
- Bridgeworks (due to geological condition and redesign) + Drainage structures
- Other items of road works.
- Further increase in slope protection and soft ground treatment works

Lot-2: Till the end of June 2020, the following are the main variances recorded:

- Quantities of several items of works varied substantially from the contract quantity. As of today, the item of works identified with varying quantity are:
- Unsuitable excavation, Free draining Rock fill, and Geotextile for treating soft ground
- Increasing number of Pipe culvert, Box culvert, Cattle underpass, and a Siphon near Bridge no.2
- 400 m long Trapezoidal concrete channel at km 47+290 LHS
- Service ducts for utility relocation and future use
- Some changes in bridge elements

3. ENVIRONMENTAL SAFEGUARD ACTIVITIES

General Description of Environmental Safeguard Activities

The undertaken environmental and Occupational Health and Safety (OHS) monitoring, includes supervision and inspection of construction work sites, verification of permits, monitoring of compliance performance of contractors, instrumental environmental monitoring for noise and vibration, water and air pollution, soil contamination, construction waste management, flora and fauna, review of documentations, implementation of EMP and SSEMPs, review of environmental management and monitoring reports, and so on, undertaken by Contractors' and monitored by the Supervision Engineer, such as:

Lot 1 and Lot 2

- Daily site inspections by the Contractors' local Environmental Specialist and OHS Officer;
- HIV/AIDS Trainings: Lot 1 January and June 2020; Lot 2 June, 2020
- Public consultations regularly and on-going grievances management;

Lot-1:

- Bi-weekly inspections of camps and worksites by Supervision Engineer's local Environmental Specialist: (on 05 and 17 January; 04 and 27 February; 04 and 27 March; 03 and 16 April; 02 and 24 May; 05 and 22 June of 2020) by using monitoring checklists for each worksite;

Lot-2:

- Bi-weekly inspections of camps and worksites by Supervision Engineer's local Environmental Specialist: (on 06 and 18 January; 05 and 28 February; 05 and 28 March; 04 and 27 April; 03 and 25 May; 06 and 29 June of 2020) by using monitoring checklists for each worksite;

Site Audits

Mr.Jamil Rustankhanli, Head of Investememt Department of State Agency of Azerbaijan Automobile Roads (SAAAR), Mr. Jeyhun Yusifov, Director of Project Implementation Unit 4 (PIU 4), Project Implementation Unit (PIU) Engineers Mr.Vugar Pashayev for Lot-1, Mr.Parviz Aliyev for Lot-2, PIU's Social/Safeguard Expert Arastun Quliyev had regular site inspections in the reported period.

Daily inspections by the Contractor's staff;

The Contractor's local Environmental Specialist and OHS Manager check sites daily, with a full audit of all sites once a week;

The Engineer's local Environmental Specialist visited all sites on a bi-weekly basis, with additional ad hoc visits as required;

No cultural affections have been detected;

No flora and fauna have been disturbed and no animal mortality reported due to the construction works.

No wildlife or bird sanctuary or protected area lies within the ROW

Based on the environmental site inspections, review of monthly and quarterly reports of the Contractor and Supervision Engineer, and other documents and records, the following status and shortcomings are found for the reporting period;

All project management/supervision consultants including expatriate staff were able to travel project sites by special permission from Task Force under the Cabinet of Ministers of Azerbaijan Republic which is checked by the policemen at the border of the regions and after the policemen have checked on the access portal and confirmed that they have their special permission, they are allowed to visit the work sites.

Lot 1 Site visits

Name	Organization	Designation	Date
Mr.Vugar Pashayev	SAAAR	PIU Engineer	16,24 January,2020
Mr.	SAAAR	PIU Engineer	5,20 February,2020
Mr.Vugar Pashayev	SAAAR	PIU Engineer	12 March,2020
Mr. Jeyhun Yusifov	SAAAR	Project Implementation Unit Director	17 March,2020 01 June,2020
Mr.Parviz Aliyev	SAAAR	PIU Engineer	17,29 March,2020 01,10 June 2020
Mr.Jamil Rustamkhanli	SAAAR	Head of Investment Department of SAAAR	29 March,2020
Mr.Arastun Guliyev	SAAAR	PIU Social/Safeguard Expert	24 April,2020
Mr.Vugar Pashayev	SAAAR	PIU Engineer	28 April,2020
Mr.Vugar Pashayev	SAAAR	PIU Engineer	20 May,2020
Mr.Vugar Pashayev	SAAAR	PIU Engineer	10 June,2020

Lot 2 Site visits

Name	Organization	Designation	Date
Mr.Parviz Aliyev	SAAAR	PIU Engineer	15,23 January,2020
Mr.Parviz Aliyev	SAAAR	PIU Engineer	13 February,2020

Mr.Vugar Pashayev	SAAAR	PIU Engineer	12 March,2020
Mr. Jeyhun Yusifov	SAAAR	Project Implementation Unit Director	17 March,2020 1-3 June,2020
Mr.Parviz Aliyev	SAAAR	PIU Engineer	29 March,2020
Mr.Jamil Rustamkhanli	SAAAR	Head of Investment Department of SAAAR	29 March,2020
Mr.Arastun Guliyev	SAAAR	PIU Social/Safeguard Expert	24 April,2020
Mr.Vugar Pashayev	SAAAR	PIU Engineer	28 April,2020
Mr.Parviz Aliyev	SAAAR	PIU Engineer	20 May,2020
Mr.Parviz Aliyev	SAAAR	PIU Engineer	16,25 June,2020

Issues Tracking (Based on Non-Conformance Notices)

The Contractor has maintained satisfactory performance on the required environmental management measures provided in the EMP and SSEMP. However, some non-compliance practices and shortcomings have been also observed which the Supervision Engineer has communicated with the Contractor regularly both in formal and written forms. The issued instructions and corrective actions in written form are in Table 3 and Table11.

Lot-1

Table 3. Summary of Issues Tracking Activity for Current Period

Summary Table

Total Number of Issues for Project	6
Number of Open Issues	0
Number of Closed Issues	6
Percentage Closed	100%
Issues Opened This Reporting Period	6
Issues Closed This Reporting Period	6

Lot-2

As for the Lot 1, the routine and requirements for the environmental management and monitoring were similarly required. This Contractor has also in general maintained satisfactory performance on the required environmental management measures as per the EMP and SSEMPs. However, similar shortcomings have been also observed in Lot 2 and the Supervision Engineers have communicated them with the Contractors regularly both in verbal and written forms. The issued instructions and corrective actions in written form are in Table 4 and Table 12.

Lot-2

Table 4. Summary of Issues Tracking Activity for Current Period

Summary Table

Total Number of Issues for Project	8
Number of Open Issues	0
Number of Closed Issues	8
Percentage Closed	100%
Issues Opened This Reporting Period	8
Issues Closed This Reporting Period	8

Trends

Information from previous period has been used and the current period information is identified below.

Lot 1

Quarterly Report No	Total No of Issues	% issues Closed	% issues closed late
1	1	100	0
2	1	100	0

Lot 2

Quarterly Report No	Total No of Issues	% issues Closed	% issues closed late
1	1	100	0
2	1	100	0

All major Non-Conformances shown in Table 11.

Unanticipated Environmental Impacts or Risks

No unanticipated environmental impacts and risks have been identified in the current period

RESULTS OF ENVIRONMENTAL MONITORING

Overview of Monitoring Conducted during Current Period

Regular environmental measurements have been undertaken during the current reporting period.

Instrumental monitoring for air and water quality and noise and vibration has been arranged by the Contractors for both Lot 1 and Lot 2. The National Environmental Monitoring Department of the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan has carried out the sampling for these instrumental environmental monitoring. The results of the instrumental monitoring under the reporting period are given in the following after presenting the relevant national environmental standards

Lot-1: Instrumental monitoring for air quality, water quality, and noise and vibration measurement: June 2020; (Annex H)

Lot-2: Instrumental monitoring for air quality, water quality, and noise and vibration measurement: June 2020; (Annex I)

Instrumental Monitoring (air, water, noise and vibration) have been carried out during the reported period and the results have been summarized below:

Lot 1

The results of the instrumental monitoring for water and air pollution as well as noise and vibration show the indicators are within the permitted standards.

Water quality monitoring: 5 water monitoring stations have been located within the Project's start and end points (figure 5). The results of monitoring of samples taken during the reporting period show that some determinants in some monitoring stations were above Azerbaijan standards. However, this is not related to the construction works as its normal baseline was high.



Figure 5. Water monitoring stations

Baseline water monitoring results

The results of physical-chemical and microbiological analysis held on water samples (mg/l)

Ingredients	Unit of measurement	Zardab city Garasu river	Zardab city Canal	Available consistence limit
Smell, organoleptic met.	_____	No smell		_____
Color, organoleptic met.	_____	No color		_____
Solved oxygen in water	(Mg/l,%)	5.1 62.6	5.1 61.2	≥4.0
biochemical consumption of oxygen	mgO ₂ /L	2	3.7	<3.0
Turbidity	FTU(NTU)	77.8	5.5	<5.0
Limpidity	cm	1	27	30
Electrical conductivity	X10 ⁻³ S/cm	0.639	4.280	-
Hydrogen Index pH	_____	7.8	7.7	6.5-8.5
Roughness	Mg-equiv/l	4.7	35.5	7.0
Calcium ions, Ca ²⁺	Mg/l	52.1	541.1	-
Magnesium ions, Mg ²⁺	Mg/l	25.5	103.4	-
Chloride ions, Cl ⁻	Mg/l	50.8	956.1	350.0
Sulfate ions, SO ₄ ²⁻	Mg/l	125.4	677.6	500.0
Bicarbonate ions, HCO ₃ ⁻	Mg/l	261.3	370.0	-
Carbonate ion, CO ₃	Mg/l	0	0	-
Na ⁺ + Ka ⁺ ions	Mg/l	86.9	314.0	-
Ammonium ion, NH ₄ ⁺	Mg/l	0.07	0.5	0.5
Nitrate ions, NO ₃ ⁻	Mg/l	5.1	43.7	45.0

June 2020 water monitoring results

The results of physical-chemical and microbiological analysis held on water samples (mg/l)

Ingredients	Unit of measurement	Zardab city Garasu river	Zardab city Canal	Available consistence limit
Smell, organoleptic met.	—————	No smell		—
Color, organoleptic met.	—————	No color		—
Solved oxygen in water	(Mg/l,%)	5.1 62.6	5.1 61.2	≥4.0
biochemical consumption of oxygen	mgO ₂ /L	2	3.7	<3.0
Turbidity	FTU(NTU)	77.8	5.5	<5.0
Limpidity	cm	1	27	30
Electrical conductivity	X10 ⁻³ S/cm	0.639	4.280	-
Hydrogen Index pH	—————	7.8	7.7	6.5-8.5
Roughness	Mg-equiv/l	4.7	35.5	7.0
Calcium ions, Ca ²⁺	Mg/l	52.1	541.1	-
Magnesium ions, Mg ²⁺	Mg/l	25.5	103.4	-
Chloride ions, Cl ⁻	Mg/l	50.8	956.1	350.0
Sulfate ions, SO ₄ ²⁻	Mg/l	125.4	677.6	500.0
Bicarbonate ions, HCO ₃ ⁻	Mg/l	261.3	370.0	-
Carbonate ion, CO ₃	Mg/l	0	0	-
Na ⁺ + Ka ⁺ ions	Mg/l	86.9	314.0	-
Ammonium ion, NH ₄ ⁺	Mg/l	0.07	0.5	0.5
Nitrate ions, NO ₃ ⁻	Mg/l	5.1	43.7	45.0

Air quality monitoring: 2 air monitoring stations have been located within the Project's start and end points (figure 6). Air quality monitoring results for all determinants and all monitoring stations were below Azerbaijan standards.



Figure 6. Air monitoring station

Air monitoring results

Air Quality			
Garabork village	Khalaj village	Challi village	Zardab district

Units (mg/m ³)	PM 2.5	PM 10	PM 2.5	PM 10	PM 2.5	PM 10	PM 2.5	PM 10
Allowable	0.025	0.050	0.025	0.050	0.025	0.050	0.025	0.050
Baseline	0.022	0.040	0.019	0.050	0.023	0.040	0.022	0.035
June 2020	0.019	0.025	0.019	0.034	0.018	0.034	0.022	0.039

Noise: 6 noise monitoring stations have been located within the Project's construction area (figure 7). Noise monitoring results were all below the permitted limits.

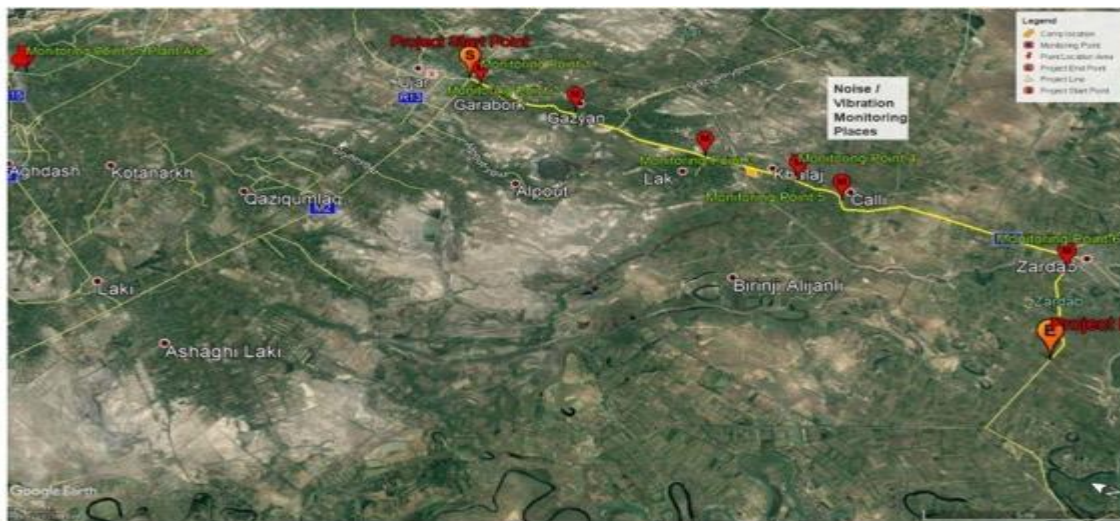


Figure 7. Noise and vibration monitoring stations

Noise monitoring results

Units (dB)	Noise				Zardab district
	Garabork village	Gazian village	Khalaj-Site camp	Challi village	
Allowable	70	70	70	70	70

Baseline	54.4	50	50	55	55
June 2020	53.2	51.2	65.8	59.8	60.2

Vibration: 6 vibration monitoring stations have been located within the Project's construction area (figure 7). Vibration monitoring results were all below the permitted limits

Vibration monitoring results

	Vibration				
Units (dB)	Garabork village	Gazian village	Khalaj-Site camp	Challi village	Zardab district
Allowable	77	77	77	77	77
Baseline	60	50	50	60	55
June 2020	64.1	59.3	64.5	63.3	63.2

The results of the instrumental monitoring for water and air pollution as well as noise and vibration show the indicators were all below the permitted standards.

Lot-2:

Water quality monitoring: All water quality monitoring results for all determinants and all monitoring stations were below Azeri national standards during the present reporting period.



Figure

8. Water monitoring stations

Baseline water monitoring results

No	Name of the ingredient	Unit of measurement	Kur river (50km+060km)	Upper Garabagh channel (km58+0/4)	Permissible hardness limit
1	Hidrogen indicator pH	-	8.0	7.7	6.5-8.5
2	Transparency	sm	15	23	≥30
3	Turbidity	NTU	74.3	18.9	--
4	Electrical conductivity	$\times 10^{-3} \text{Sm/sm}$	0.807	2.600	--
5	biological consumption of oxygen (OBS ₅)	mqO ₂ /l	0.8	1.7	6.0
6	Oxygen soluble in water	mqO ₂ /l %	5.9 67.8	6.10 64.4	≥4.0
7	Kalsium ionu, Ca ²⁺	mq/l	40.1	100.3	-
8	Magnezium ionu, Mg ²⁺	mq/l	18.1	65.6	-
9	Xlorid ionu, Cl ⁻	mq/l	65.9	213.4	350.0
10	Sulfat ionu, SO ₄ ²⁻	mq/l	219.0	707.2	500.0
11	Hidrokarbonat ionu, HCO ₃	mq/l	289.0	316.3	-
12	Karbonat ionu, CO ₃	mq/l	0	0	-
13	Na ⁺ K ⁺ ionu	mq/l	107.6	192.1	-
14	Ammonium, NH ₄	mq/l	0	0	0.5
15	Nitritlər, NO ₂	mq/l	0.07	0.11	3.3
16	Nitratlar, NO ₃	mq/l	5.9	14.2	45.0
17	Total ions	mq/l	746.17	1609.2	≤1000
18	E. coli bacterial group (BÇBQ)	ədəd/l	96000	82000	1000
19	Escherichia coli	ədəd/l	750	870	1000

May 2020 water monitoring results

No.	Name of the ingredient	Unit of measurement	Kur river (50+060km)	Upper Garabagh channel (58+074)	Permissible hardness limit
1	Hidrogen indicator Ph	-	7.5	7.2	6.5-8.5
2	Transparency	Sm	22	25	≥30
3	Turbidity	NTU	44	38	≤5
4	Electrical conductivity	X10 ³ Sm/sm	1.100	0.957	--
5	Color	Colorless			
6	Oxygen soluble in water	MqO2/l	6.0 45.5	6.7 55.9	≥4.0
7	Kalsium ionu CA ²⁺	Mq/l	108.9	120.8	-
8	Maqnezium ionu Mg ²⁺	Mq/l	40.8	30.5	-
9	Xlorid ion Cl	Mq/l	150.9	300.4	350.0
10	Sulfat ion SO ₄ ²⁻	Mq/l	250.5	320.2	500.0
11	Hidrocarbonate ion HCO ₃	Mq/l	120.1	180.4	-
13	Na ⁺ K ⁺ ionu	Mq/l	95.0	130.5	-
14	Ammonium NH ₄	Mq/l	0	0	0.5
15	Nitrites NO ₂	Mq/l	1.5	0.8	3.3
16	Nitrites NO ₃	Mq/l	7.6	6.9	45.0
17	Roughness	Mq/l	5.8	6.0	7.0
18	Total ions	Mq/l	1.5	0.8	≤1000
			689.5	744.9	

Air quality monitoring: 2 air quality monitoring stations have been located within the construction area (figure 9). All air quality monitoring results for all determinants and all monitoring stations were below Azeri national standards during the reporting period.



Figure 9. Air monitoring stations

	Air Quality							
	Gorugbaghi village		Najafgulubayli village		Site camp		Kehrizli borrow pit	
Units (mg/m ³)	PM 2.5	PM 10	PM 2.5	PM 10	PM 2.5	PM 10	PM 2.5	PM 10
Allowable	0.025	0.050	0.025	0.050	0.025	0.050	0.025	0.050
Baseline	0.020	0.037	0.021	0.031	0.023	0.028	0.022	0.033
June 2020	0.019	0.025	0.019	0.034	0.018	0.034	0.022	0.039

Noise: 8 noise sensitive receptors have been located within the Project's construction area (figure 10). The monitoring results shows that noise monitoring results were all below the permitted limits during the reporting period.

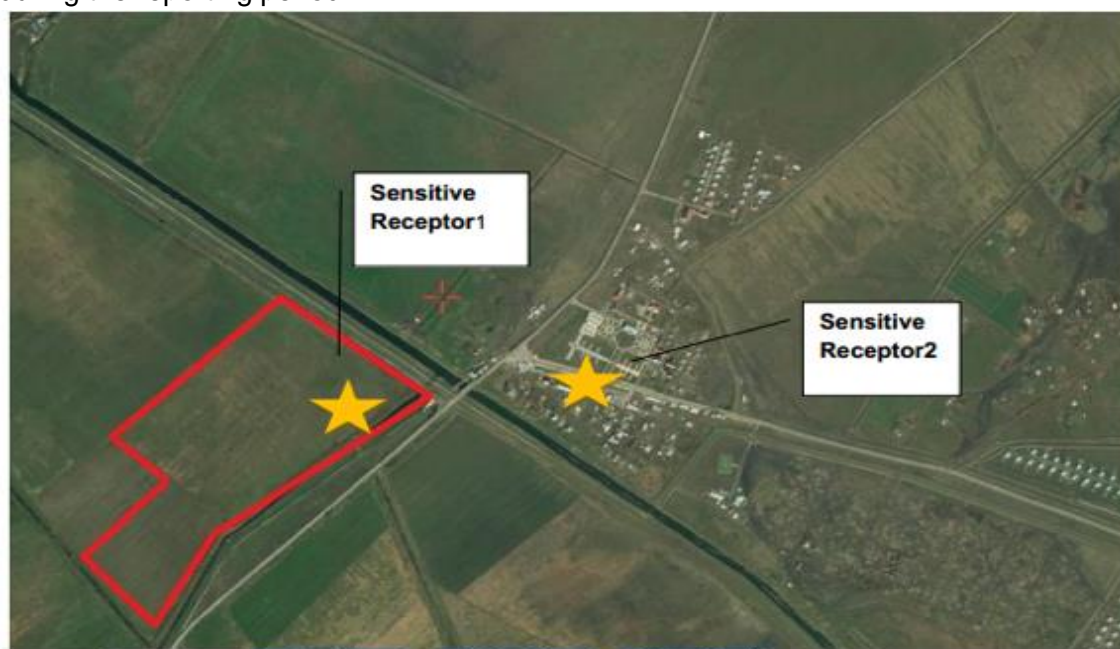


Figure 10. Noise and vibration monitoring stations

Noise monitoring results

	Noise			
Units (dB)	Gorugbaghi village	Najafgulubayli village	Site camp	Kehrizli borrow pit
Allowable	70	70	70	70
Baseline	28	58	27	60
May 2020	28	34	59	51

Vibration: 8 vibration sensitive receptors have been located within the Project's construction area (figure 10). The monitoring results shows that noise monitoring results were all below the permitted limits during the reporting period.

Vibration monitoring results

	Vibration			
Units (dB)	Gorugbaghi village	Najafgulubayli village	Site camp	Kehrizli village
Allowable	77	77	77	77
Baseline	27.7	56	26	58
May 2020	32	40	24	38

Action: No actions are required in both Lot-1 and Lot-2: referring to the monitoring results under the reporting period as the monitoring indicators are within the limits.

Azerbaijan environmental standards

Table 5: National Ambient Air Quality Standards

Pollutants	Maximum allowed concentrations (mg/m3)	
	Maximal concentration for a given moment	Average daily concentration
Carbonic Oxides (CO and CO ₂)	3.0	1.0
Sulfur Dioxide (SO ₂)	0.5	0.03
Nitrogen Oxides (NO _x)	0.085	0.085

Pollutants	Maximum allowed concentrations (mg/m ³)	
	Maximal concentration for a given moment	Average daily concentration
Non-toxic Dust	0.5	0.15
Ozone (O ₃)	0.16	0.03
Hydrocarbon (HC)	1.0	-
Lead (Pb) and its compounds (except tetraethyl lead)	0.0010	0.0002
Source: Maximum allowed concentrations of toxic elements in the working area GOST 12.1.005-88; Ministry of Ecology and Natural Resources, 2003.		

Water quality standards

Table 6: National Ambient Surface Water Quality Standards

№	Components	Allowed concentrations	Unit
1	Hydrogen index pH	6,5-8,5	
2	Electrical conductivity	-	x10 ⁻³ Cm/cm
3	Limpidity	> 30	cm
4	Turbidity	< 1,0	FTU(NTU)
5	Solid substances	0,25	mg/l
6	Dissolved oxygen	≥4,0	mg/l %
7	Roughness	7,0	mg-ekv/l
8	Calcium ion Ca ²⁺	180,0	mg/l
9	Magnesium ion Mg ²⁺	200,0	mg/l
10	Chloride ion, Cl ⁻	350,0	mg/l

11	Sulphate ion, SO ₄ ²⁻	500,0	mg/l
12	Bicarbonate ion, HCO ₃ ⁻	-	mg/l
13	Carbonat ion, CO ₃	-	mg/l
14	Na ⁺ + K ⁺ ions	-	mg/l
15	Sum of ions, Σ	<1000	mg/l
16	Nitrite ion, NO ₂ ⁻	0.02	mg/l
17	Nitrate ion, NO ₃ ⁻	9,0	mg/l
18	Ammonium ion, NH ₄ ⁺	0.39	mg/l
19	Phosphate ion, PO ₄ ³⁻	0,05	mg/l
20	SSAM	0.1	mg/l
21	Phenol	0.001	mg/l
Source: Maximum allowed concentrations of toxic elements in water surface. Decree № 1. Monitoring Committee of Ecology and Natural Resources, 1994.			

Noise & vibration standards

Table 7: Maximum Allowable Noise Levels

Type of area	Noise standard (max) in decibel (dBA)	
	Day (06:00-23:00)	Night (23:00-06:00)
Residential Areas (apartment houses)	50	40
Commercial Areas: a) Restaurants, cafe	65	65
b) Shops, airports, bus stations	70	70
Hotels, dormitories and recreation centers	60	50
Halls of hotels, dormitories and boarded houses	60	60

Type of area	Noise standard (max) in decibel (dBA)	
	Day (06:00-23:00)	Night (23:00-06:00)
Areas directly adjacent to hotels and dormitories	75	65
Administrative buildings; scientific, research and project institutions	65	65
Doctors' rooms in medical institutions	50	50
Areas directly adjacent to hospitals and sanatoriums	60	50
Areas directly adjacent to polyclinics, dispensaries, boarded houses, geriatric and disabled person's homes, libraries, kindergartens, schools, and educational centres.	70	60
Sensitive areas:		
a) bedrooms in hospitals and sanatoriums	50	40
b) surgical wings in the hospitals	45	45
c) yard of hospitals and sanatoriums	35	35
d) geriatric and disabled persons homes, kindergartens and orphanages	55	45
e) educational institutions, conference halls, meeting rooms and reading room in the libraries	55	55
Source: Noise Standards DÜST 17187 (State General Standards and Requirements, Presidential Decree No 796 from 8th of July, 2008).		

Table 8: Maximum Allowable Vibration Levels

Type of areas	Vibration standard (max) in decibel (dBA)	
	Day (06:00-23:00)	Night (23:00-06:00)
Residential (apartment houses)	77	72
Commercial: Restaurants, café, shops, airports, bus stations	80	80
Hotels, dormitories and recreation centers	80	75
Administrative buildings; scientific, research and project institutions	80	80
Doctors' rooms in medical institutions	77	77
Sensitive areas: a) bedrooms in hospitals and sanatoriums	74	69
b) surgical wings in the hospitals	69	69
c) geriatric and disabled persons homes, kindergartens and orphanages	77	72
d) educational institutions, conference halls, meeting rooms and reading room in the libraries	77	77
Source: Noise Standards DÜST 17187 (State General Standards and Requirements, Presidential Decree No 796 from 8th of July, 2008).		

Detailed monitoring results for both Lot 1 and Lot 2 are presented in Annex H and Annex I.

Trends

Based on the current and past periods of monitoring no actions are required as the monitoring indicators are within the limits.

Summary of Monitoring Outcomes

Regular instrumental monitoring is carried out by The National Environmental Monitoring Department of the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan at both Lot 1 and Lot 2.

At Lot 1, the results of monitoring of water samples taken during the baseline and the reporting period show that some determinants in some monitoring stations were above Azerbaijan standards. However, this is not related to the construction works as its normal baseline was high.

The air, noise, vibration monitoring results was within the limits at baseline monitoring results and is within the relevant national environmental standards and no significant effects were observed during the reported period.

Material Resources Utilisation

Current Period

The Supervision Engineer's environmental Specialist has visited the borrow areas, provided instructions to the Contractor's staff about proper utilization of borrow areas and traffic management during materials transportation:

Lot 1

- Turyanchay: it is located at the Turyanchay River in Agdash town. Materials are being analysed to verify the conformity for the realization of pavement and concrete works.
- Qaramaryam-Mususli: it is located nearby to Qaramaryam-Mususli village road of Goychay town. Materials are being analysed to verify the conformity for the realization of fill, embankment, capping, sub-base, and base layer.

Lot 2

- Shahmaly quarry within Kahrizli and Sharafkhanly village at about 30 km from the Camp for Embankment, capping, sub base and crushed base.

Mitigation measures:

All stockpiles are located at least 100 m from any water body;

- Regular visual traffic control is maintained to avoid exceeding of speed limits and to ensure no vehicles use unpermitted roads;
- Installation of GPS system aboard all trucks to record routes and speeds;
- Allocation of flagmen at all access road junctions for proper regulation of traffic and

avoiding accidents;

- Provision of covers for all trucks;
- All trucks pass weight control;
- Regular maintenance of all equipment is carried out;

After the project completion rehabilitation measures will include:

- removing of all types of equipment from the site;
- Removing of all types of waste or/and polluted soil and materials if any exist;
- Slope gradient reduction;
- Sampling to ensure site is free from contaminates if any exists;

Cumulative Resource Utilisation

Lot 1: Campsites are supplied with portable and domestic water by Water-Sewage Department of the Ujar District. (Annex C. Agreement with FCE of Ujar District for providing with portable water and disposal/transportation of waste water). The drinking water is transported by water truck to fill water tanks from where it is pumped to camp distribution system or, if need will be provided by water pumps

ANNEX C.

Lot 1: Agreement with FCE of Ujar District for providing with portable water and disposal/transportation of waste water, on haulage and disposal of hazardous, domestic, waste and sewage.

This agreement identifies the tasks of the contractor and the FCE of Lachin on haulage and disposal of hazardous, domestic, waste and sewage which responsibilities they have and what regulations they should follow.

Lot 2: Agreement with FCE of Lachin District, Takhtakorpu settlement for providing with portable water and disposal/transportation of waste water, on haulage and disposal of hazardous, domestic, waste and sewage.

This agreement identifies the tasks of the contractor and the FCE of Lachin on haulage and disposal of hazardous, domestic, waste and sewage which responsibilities they have and what regulations they should follow.

Lot 1

Surveying and identification of all utilities were done with the participation of the relevant Stakeholder. Relocation designs of gas, electrical, and communication lines are finalized. Works continued according to plan and the status of utilities and services relocation is listed in the following tables.

- i) Underground gas pipelines from km 4+200 to km4+700 LHS (diameter 159 mm) and km 5+200 to km4+900 RHS (diameter 57mm), relocation of these pipe lines are completed.
- ii) A waste water steel pipe crossing the road at km1+100, which has been protected by concreting in May 2020.
- iii) Several service ducts have been constructed at different locations

Gas lines:

Nos	Location (Km)			Line length (m)	Diameter (mm)	Side	Status
N	4+200	4+700	500	500	159	LHS	Relocated
N	5+200	4+900	300	300	57	RHS	„
1	00+120	00+880	760	685	50	RHS	„
2	00+240	02+700	2460	2400	160	LHS	„
3	01+000	02+000	1000	600	50	RHS	„
4	03+500	03+650	150	150	160	LHS	„
5	03+800	04+200	400	470	108	LHS	„
6	04+210	06+000	1790	1750	160	RHS	„
7	04+470	06+140	1670	1650	108	LHS	„
8	06+540	06+780	240	225	160	RHS	„
9	07+600	08+000	400	400	160	LHS	„
10	07+890		0	35	108	Crossing	„
11	08+370	08+500	130	135	160	LHS	„
12	12+700	14+380	1680	1660	219	LHS	„
13	14+300	14+700	400	320	108	RHS	„
14	14+422		0	40	219	Crossing	„
15	14+422		0	40	108	Crossing	„

16	14+420	15+180	760	780	108	LHS	„
17	19+550	19+600	50	60	50	LHS	„
18	19+700	19+780	80	85	108	LHS	„
19	20+090	20+300	210	210	108	LHS	„
20	20+000	20+300	300	220	108	LHS	„
21	20+390	20+560	170	170	50	LHS	„
22	20+340	20+550	210	215	160	RHS	„
23	20+535		0			RHS	Gas Distributor
24	25+720		0	32	50	Crossing	Relocated
25	29+167		0	25	50	Crossing	„
26	29+868		0	25	108	Crossing	„
27	30+123		0	24	108	Crossing	„
28	30+140	30+278	138	160	80	Crossing	„
29	30+278		0	24	108	Crossing	„
30	30+320		0	25	200	Crossing	„
31	30+510	30+600	90	95	108	Crossing	„
32	31+210		0	35	108	Crossing	„
33	32+875		0	25	200	Crossing	„
34	34+750	34+790	40	40	250	RHS	„
35	34+790	35+240	437	437	250	RHS	„
36	34+800	34+840				RHS	„
37	35+140	35+160				RHS	„

38	36+400	34+780	0	1597.5	325	RHS	„
39	15+170	15+170				Crossing	„
40	35+200	36+370	1170	1180	250	RHS	„

Electrical lines:

N o	Location (Km)		Line length m		Type	Number of poles	Side	Status
1	4+475	4+475	120.5x4=482	482	0.4	2	Crossing	Relocate d
2	4+770	5+120	572x4=2288	2288	0.4	15	RHS	„
3	4+770	4+850	96x2=192	192	0.4	3	LHS	„
4	5+880	5+880	123x4=492	492	0.4	2	Crossing	„
5	6+310	6+310	70x4=280	280	0.4	2	Crossing	„
6	7+270	7+270	115x3=345	345	10	2	Crossing	„
7	8+410	8+410	113x4=452	452	0.4	3	Crossing	„
8	8+530	8+530	103x3=412	412	0.4	2	Crossing	„
9	10+060	10+060	84x3=252	252	10	2	Crossing	„
10	11+160	11+160	108x3=324	324	10	3	Crossing	„
11	12+760	12+760	107x2=214	214	0.4	2	Crossing	„
12	15+560	15+560	123x4=492	492	0.4	2	Crossing	„
13	15+590	15+590	107x3=321	321	10	3	Crossing	„
14	15+590	15+820	228x3=684	684	10	4	RHS	„
15	17+300	17+300	142x2=284	284	0.4	2	Crossing	„
16	17+770	17+940	173x3=519	519	10	5	RHS	„

17	18+240	18+500	317x3=951	951	10	9	LHS	„
18	23+380	23+560	185x3=555	555	10	3	RHS	„
19	29+630	29+630	63	63	10	2	Crossing	„
20	29+880	29+880	132	132	10	1	Crossing	„
21	29+900	29+900	138	138	10	1	Crossing	„
22	20+360	20+560	222	222	0.4/10	5	LHS	„
23	20+143	20+226	82.5	82.5	0.4/10	1	LHS	„
24	4+160	4+330	162	162	0.4	6	LHS	„
25	4+130	4+160	30	30	10	0	LHS	„
26	4+290	4+290	35	35	0.4	1	Crossing	„
27	1+000	1+160	160	160	0.4	7	RHS	„
28	1+160	1+160	50	50	0.4	3	Crossing	„
29	1+160	1+410	253	253	0.4	9	RHS	„
30	8+410	8+410	113x4=452	452	0.4	3	Crossing	„

Water lines:

No	Location (Km)			Line length m	Diameter (mm)	Side	Status
1	08+500	10+860	2360		100	LHS	Relocated
2	17+800			23	100	LHS	„
3	17+800	18+160	360	360	100	Crossing	„
4	19+720	20+322	602	425	100	RHS	„
5	20+322			19	100	Crossing	„

6	19+890	20+725	835	750	450	LHS	„
7	20+725			45	450	Crossing	„
8	30+540			23	100	Crossing	„
9	30+550			50	160	Crossing	„
10	30+583	30+900	317	310	450		Zardab roundabout
11	30+800	30+900	100	72	450		Zardab roundabout
12	32+875			29	100	Crossing	Relocated

Communication Lines:

No	Location (Km)			Line length (m)	Number of poles	Side	Status
1	00+110	00+110	0	25	2	Crossing	Relocated
2	00+080	00+110	30	35	3	LHS	„
3	00+260	00+720	460	459	10	LHS	„
4	00+720	00+720	0	19	2	Crossing	„
5	00+720	00+900	180	171	5	RHS	„
6	00+790	00+790	0	45	3	Crossing	„
7	00+830	00+900	70	66	3	LHS	„
8	04+000	04+460	460	423	2	RHS	„
9	04+460	04+460	0	75	3	Crossing	„
10	04+780	05+340	560	565	11	LHS	„
11	04+780	05+350	570	569	9	LHS	„

12	05+120	05+120	0	44	3	Crossing	„
13	08+420	08+500	80	87	3	RHS	„
14	08+500	09+520	1020	1020	17	LHS	„
15	08+860	08+860	0	20	2	Crossing	„
16	09+100	09+100	0	40	2	Crossing	„
17	13+155	13+155	0	33	2	Crossing	„
18	17+560	18+590	1030	1042	18	RHS	„
19	19+850	19+850	0	63	3	Crossing	„
20	20+200	20+200	0	32	2	Crossing	„
21	20+330	20+330	0	27	3	Crossing	„
22	29+590	30+620	1030	1041	13	LHS	„
23	29+880	29+880	0	127	2	Crossing	„
24	17+820	18+160	340	327	0	Left	„
25	18+240	19+840	600	1556	0	Left	„
26	20+620	21+750	1130	1081	0	Left	„
27	25+364	27+300	1936	2014	0	Left	„
28	18+160	18+240	80	104	3	Left	„
29	19+840	20+180	340	734	21	Left	„

Lot 2

The plans for utility relocation work of electricity and gas lines are approved. The Contractor also finalized the relocation plan of communication lines, except for the Agjabadi city area. The Contractor has continuing execution of the relocation and protection of utility works and completed so far: 99% of the Electric, Gas pipeline, and water line but 96.3% of the communication lines.

The activities of protection and relocation of utilities are going on within km64+500 to km65+950 during the reporting month.

The detailed list of Electric and Gas line relocation required under the contract presented in Tables A and B below:

Table A: List of Electricity Lines and Poles need relocation							
Km	Side	Length	Voltage	Offset from Centre	Number of Pole needed		Status (complete d or in progress)
41+147	Main road crossing	400	35 Kv	-	3		Completed
41+228	Main road crossing	100	10 Kv	-	2		Completed
41+365	Main road crossing	100	10 Kv	-	2		Completed
41+600	42+770	Left	1,170	10 Kv	offset: 7-17m		Completed
42+730	Main road crossing	200	10 Kv		3		Completed
42+762	Main road crossing	100	10 Kv		2		Completed
42+771	Main road crossing	400	35 Kv		4		Completed
42+820	Main road crossing	100	10 Kv		2		Completed
42+770	44+810	Right	2,040	10 Kv	offset:	41	Completed
44+710	Main road crossing	100	10 Kv		2		Completed
44+730	Main road crossing	100	10 Kv		2		Completed
45+136	45+220	Left / Sol	150	10 Kv	offset:	2	Completed
45+136	47+050	Right / Sağ	1,914	10 Kv	offset:	42	Completed
45+200	Main road crossing	100	10 Kv		2		Completed
45+300	Main road crossing	100	10 Kv		2		Completed
45+880	Main road crossing	100	10 Kv		2		Completed
47+050	Main road crossing	100	10 Kv		2		Completed
47+160	Main road crossing	100	10 Kv		2		Completed
47+270	Main road crossing	100	10 Kv		2		Completed
47+550	Main road crossing	100	10 Kv		2		Completed
47+800	Main road crossing	100	10 Kv		2		Completed
48+060	Main road crossing	100	10 Kv		2		Completed
48+320	Main road crossing	100	10 Kv		2		Completed
48+400	Main road crossing	100	10 Kv		2		Completed
48+640	Main road crossing	100	10 Kv		2		Completed
48+280	49+200	Right / Sağ	920	10 Kv	offset:	18	Completed
48+450	48+640	Left / Sol	190	10 Kv	offset:	7	Completed
50+350	Right / Sağ		250 kva KTM	Within			Completed
50+800	51+000	Left / Sol	230	10 Kv	offset:	8	Completed

50+350	51+140	Right / Sağ	790	10 Kv	offset:	19	Completed
51+140	Main road crossing	100	10 Kv		2		Completed
51+150	Main road crossing	100	10 Kv		2		Completed
52+650	52+900	Right / Sağ	0	10 Kv	offset:	6	Completed
53+700	Main road crossing	200	10 Kv		4		Completed
53+900	Main road crossing	100	10 Kv		2		Completed
55+200	57+480	Left	2,280	10 Kv	offset:	40	Completed
57+480	57+880	Right	400	10Kv	offset	12	Completed
55+180	Main road crossing	100	10 Kv		2		Completed
56+800	Main road crossing	100	10 Kv		2		Completed
56+800	Right		100 Kv KTM	offset: 15m			Completed
57+480	Main road crossing	100	10 Kv		2		Completed
57+450	57+550	Left	100	10 Kv	offset:	13-18m	Completed
58+500	Main road crossing	100	10 Kv		2		Completed
58+770	Main road crossing	100	10 Kv		2		Completed
60+750	64+350	Right / Sağ	3,600	10 Kv	offset:	60	Completed
60+960	Main road crossing	100	10 Kv		2		Completed
61+200	Main road crossing	100	10 Kv		2		Completed
62+930	Main road crossing	100	10 Kv		2		Completed
63+720	Main road crossing	100	10 Kv		2		Completed
64+250	Main road crossing	100	10 Kv		2		Completed
64+400	Main road crossing	100	10 Kv		2		Completed
Total =			18,184 m				

Summarize Table

Voltage	Length of Elect line relocation (m)	No. of	Transformer	Remarks
10 Kv	17,384.00	360.00	1.00	Length and
35 Kv	800.00	7.00	1.00	"
Total=		367.	2.00	

Table B: List of Gas Pipes, which are likely to be affected and need relocation.					
Km	Side	Type / Diameter (mm)	Length need relocation (m)	Service Duct	Status (Complete or)
37+900	Main Road crossing	D160 steel pipe	100		Completed
37+900	Service duct	D426 steel pipe		50	Completed
41+170	Main Road crossing	D110 steel pipe	68		Completed
41+170	Service duct	D325 steel pipe		50	Completed

47+100	47+400	Left	D57 steel pipe	450		Completed
47+250	47+465	Right	D57 steel pipe	400		Completed
47+752		Service duct	D325 steel pipe		50	Completed
47+752		Channel / Service duct	D219 steel pipe		10	Completed
47+752		Main Road crossing	D76 steel pipe	260		Completed
48+300	49+030	Right	D76 steel pipe	1,100		Not
48+500	48+690	Main Road crossing	D76 steel pipe	290		Completed
50+680	50+936	Right	D57 steel pipe	400		Completed
50+707	51+155	Left	D108 steel pipe	650		
51+152		Service duct	D325 steel pipe		50	Completed
53+270	53+500	Right	D160 steel pipe	230		Completed
53+900	58+230	Right	D160 steel pipe	4,330		
53+985		Channel / Service duct	D325 steel pipe		8	Completed
53+996		Access road Service duct	D325 steel pipe		8	Completed
54+260		Channel / Service duct	D325 steel pipe		12	Completed
54+267		Access road - Service duct	D325 steel pipe		8	Completed
54+273		Channel / Service duct	D325 steel pipe		6	Completed
55+482		Access road Service duct	D325 steel pipe		13	Completed
56+859		Access road Service duct	D325 steel pipe		13	Completed
56+859		Access road Service duct	D426 steel pipe		13	Completed
56+888		Access road Service duct	D426 steel pipe		13	Completed
56+888		Access road Service duct	D325 steel pipe		13	Completed
57+230		Access road Service duct	D426 steel pipe		8	Completed
57+230		Access road Service duct	D325 steel pipe		8	
57+252		Channel / Service duct	D426 steel pipe		13	Completed
57+252		Channel / Service duct	D325 steel pipe		13	Completed
57+700		Access road Service duct	D426 steel pipe		29	Completed
57+700		Access road Service duct	D325 steel pipe		29	Completed
58+186		Channel / Service duct	D426 steel pipe		29	Completed
58+186		Channel / Service duct	D325 steel pipe		29	Completed
55+625	57+850	Right	D200 steel pipe	2,225		Completed

55+700		Service duct	D325 steel pipe		50	Completed
55+620	55+700	Left	D160 steel pipe	165		Completed
55+705		Service duct	D500 steel pipe		50	Completed
57+760		Service duct	D500 steel pipe		50	Completed
58+890		Service duct	D219 steel pipe		50	Completed
58+890		Service duct	D325 steel pipe		50	Completed
58+890		Main Road crossing	D57 steel pipe	100		Completed
58+890		Main Road crossing	D76 steel pipe	100		Completed
62+260	63+260	Right / Sağ	D160 steel pipe	1,000		

Table: Summary of Different Type of Gas Line to be relocated

Type/ Diameter	Engineer's Estimated Quantity (m)		
	Gas line	Service Duct	Remarks
D57	950		
D76	1,750		
D108	650		
D110	0		
D160	5,825		
D200	2,225		
D219 Service duct		60	
D325 Service duct		360	
D426 Service duct		147	
D500 Service duct			100
Total =		11,400 m	667 m

Waste Management

The Contractor has waste management plans for:

- (i) Hazardous and (ii) domestic waste in workshops, construction sites and camps

Current Period

Hazardous waste is stored in the special bounded area. According to the agreement Lot 1 with FCE of Ujar District and Lot 2 with FCE of Lachin District hazardous waste is collected once a week and transported for disposal following the laws of Azerbaijan.

Domestic waste is placed in dedicated bins and is emptied daily into larger containers, which are then emptied twice a week by FCE Lot 1 with FCE of Ujar District and Lot 2 with FCE of Lachin District and disposed following the laws of Azerbaijan

Waste contractors' names of Lot 1 and Lot 2:

- Lot 1 - agreement with FCE of Ujar District
- Lot 2 – agreement with FCE of Lachin District

All type of waste is collected once a week and transported for final disposal to Lot 1 FCE of Ujar district and Lot 2 FCE of Lachin District waste disposal areas.

Both Lot 1 and Lot 2

- Suitable containers have been provided for waste materials. These containers are emptied by the Lot 1 FCE of Ujar District and Lot 2 FCE of Lachin District once a week and transported to final disposal area.
- Oily or paint soaked rags, waste, or clothing shall be placed in closed, metal containers that are emptied frequently, ensuring safe disposal of their contents.
- Contaminated waste materials are disposed of safely in accordance with the Environmental Management Plan.

Cumulative Waste Generation

Sewage and waste water are collected from each building and work sites, pass through the preliminary sedimentation tanks and then finally discharged into a number of concrete septic tanks, which are regularly emptied by a cesspool truck of the Lot 1 with FCE of Ujar District and Lot 2 with FCE of Lachin District transported from the camp site and utilized following Azerbaijan regulations and Waste Management Plan

Health and Safety

Community Health and Safety

To increase the public safety, the Contractors (i) fenced the construction areas close to the settlements and pedestrians not allow the entrance of unauthorized people to the construction area to avoid accidents and health and life risks; (ii) provided more training and awareness rising to its personnel and workers about safety at work sites.

The Contractors have installed required signs and speed limit signboard in road construction sites to guide the road traffic. Any driver who violates the speed limit is subject to fines and other disciplinary actions according to the national regulations. The Lot 1 Contractor has also 16 flagmen, Lot 2 Contractor 14 to guide the traffic at places of interference. Reportedly, the flagmen received training on traffic management by provided by the Engineer and Contractor's OHS team. The Supervision Engineers monitor the traffic management regularly and instruct the Contractors to address any identified traffic safety issues.

Both Contractors have revised HS plans accordingly considering the Government and WHO protocols and strictly follow all the prevention rules of Covid-19 set by World Health Organization and the Government

Contractors of both lots take serious precautions about Covid-19 and carry out the follow mentioned Covid-19 trainings to the employees regularly:

- Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water. Why? Washing your hands with soap and water or using alcohol-based hand rub kills viruses that may be on your hands.
- Maintain at least 1 metre (3 feet) distance between yourself and others. Why? When someone coughs, sneezes, or speaks they spray small liquid droplets from their nose or mouth which may contain virus.
- Avoid going to crowded places.
- Avoid touching eyes, nose and mouth. Why? Hands touch many surfaces and can pick up viruses. Once contaminated, hands can transfer the virus to your eyes, nose or mouth. From there, the virus can enter your body and infect you.
- Make sure you, and the people around you, follow good respiratory hygiene. This means covering your mouth and nose with your bent elbow or tissue when you cough or sneeze. Then dispose of the used tissue immediately and wash your hands. Why? Droplets spread virus. By following good respiratory hygiene, you protect the people around you from viruses such as cold, flu and COVID-19.
- If you have a fever, cough and difficulty breathing, seek medical attention, but call by telephone in advance if possible and follow the directions of your local camp health authority. Why? National and local authorities will have the most up to date information on the situation in your area. Calling in advance will allow your health care provider to quickly

direct you to the right health facility. This will also protect you and help prevent spread of viruses and other infections.

- Keep up to date on the latest information from trusted sources, such as World Health Organization or your local and national health authorities. Why? Local and national authorities are best placed to advise on what people in your area should be doing to protect themselves.

Worker Safety and Health

A fatal accident was reported during the reporting period

No	Date of Accident	Name/Surname of the victim	Position	Place of the accident	The reason of the accident	Undertaken actions
1	17.06.2020 15:45 p.m	Guliyev Afgan	Foreman	0+26 km of the Ujar-Zardab (R32) Project	Load truck driver of "Mack" when reversing back, didn't see the foreman and the foreman didn't see the truck either and the truck stroke him with the back tyres and he lost his life.	The incident was investigated by the Police and regulated the issue according to the Local of the country. To make aware of the grave situation the employees and construction workers were trained about Health and Safety at the Site. All the drivers were trained about "Safe driving"

The incident was investigated by the Police and regulated the issue according to the Local Labor Laws of Azerbaijan Republic.

SAAAR and ADB were informed about the incident via MPR (monthly progress report) June, 2020

Regular comprehensive trainings and every day before the works starts tool boxes are organised by the HSE team of the contractors. Training is covered with all Environmental safeguard requirements and Health & safety aspects (Lot 1 Table 9, Lot 2 Table 9)

Training

Table 9. Lot 1: Social and Environment Safeguard Activities: Meetings/Training/Seminar during the reported period

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Date	Name of Meeting/ Training	Purpose
June 2020	Public Consultation	<p>Venue: Ujar region, Qazyan village</p> <p>Participants:9</p> <p>Consultation with the local community to make them aware of the:</p> <ul style="list-style-type: none"> • The Project Features and Construction Schedule • Probable Temporary Negative Impacts: (Dust emission, Air pollution, Noise, Vibration, Water Pollution, and Access Problems, etc.) • Mitigation of Impacts • Future Training to Community to develop environmental consciousness. • Ultimate Goal and Social Benefits to the Community. • Mitigation of Negative Impacts <p>Public Consultations were done according to the HS plan and all necessary Covid 19 safety measures were taken strictly.</p> <p>Before the meeting, the Consultant Local Environmentalist had a phone call to the local municipality chief about to plan to have a Public Consultation at identified time and asked the municipality chief all the participants to follow the safety measures during the meeting strictly:</p> <ul style="list-style-type: none"> • To Disinfect the meeting building before the meeting • To Supply disinfectants, masks, gloves to all employees and workers • To wear masks and gloves properly • To wait the social distance between one another • Maintaining social distancing and arranging small groups working in a place. • <p>During the meeting some questions and replies:</p> <ul style="list-style-type: none"> • The local people told their anxiety about the dust and depressions on the existing road under traffic. <p>Action: The contractor increased the water trucks and spread more</p>

		material on the service roads and the problem was solved properly.
Jan 2020	HIV/AIDS Training	<p>Venue: Ujar region, Contractor's Site Camp</p> <p>Participants:30</p> <p>Training to Contractor's staff and workers to make them aware:</p> <p>What is HIV/AIDS,</p> <p>What are the symptoms,</p> <p>How does it transmit or people are affected</p> <p>How to prevent and what are the protection measures:</p> <p>The Contractor's doctor distributed leaflets to all staff/ workers who attended the seminar/training. He gave brief information about the disease and how harmful it is. He described the possible reasons for how it can transmit, advised all to be careful about the disease, and anyone finds the preliminary symptoms in him he should report to the doctor.</p>
June 2020	HIV/AIDS Training	<p>Venue: Ujar region, Contractor's Site Camp</p> <p>Participants:30</p> <p>Training to Contractor's staff and workers to make them aware:</p> <p>What is HIV/AIDS,</p> <p>What are the symptoms,</p> <p>How does it transmit or people are affected</p> <p>How to prevent and what are the protection measures:</p> <p>The Contractor's doctor distributed leaflets to all staff/ workers who attended the seminar/training. He gave brief information about the disease and how harmful it is. He described the possible reasons for how it can transmit, advised all to be careful about the</p>

		disease, and anyone finds the preliminary symptoms in him he should report to the doctor.
Every week	COVID-19 trainings	<p>Venue: Ujar region, Contractor's Site Camp</p> <p>Hygienic facilities to be used by workers in the workplace should be identified and notified to employees;</p> <p>In accordance with the requirements of social distance, waiting signs should be provided in the workplace and the gathering of employees should be prevented;</p> <p>Body temperature should be measured with a non-contact heat meter at workers' entrances to the workplace;</p> <p>Workers with fever, cough, shortness of breath, and similar complaints should be hospitalized immediately at work</p> <p>Taking into account the requirements of social protection distance, the rules of work of employees should be reconsidered, and if possible, work should be reorganized in accordance with these rules;</p> <p>Measures should be taken to reduce close contact between employees during lunch breaks and other rest periods</p> <p>Arrange for a small number of employees to be retained at the same time in the workplace, or if this is not possible, employees should work at a distance from each other;</p> <p>The workplace should be adequately ventilated;</p> <p>Sanitary and hygienic cleaning of other equipment and workplaces used, including the computer and its parts (keyboard, mouse, common telephone, etc.);</p> <p>Quality personal protective equipment (FMV) should be selected that will not interfere with work activities and reduce the risk of spreading the virus, and workers should be provided with them and ensure that they are used by employees;</p> <p>According to the requirements of protective social distance, hands should not be greeted, hugged and hands should not touch the face;</p> <p>Workplaces should be provided with adequate waste containers available to open and close without touch hands</p> <p>Toilets, baths, and other sanitary places should have adequate personal hygiene, and such</p>

		<p>places should be disinfected several times a day;</p> <p>Employees PPEs should not come into contact with in their civilian clothing and should be kept as separate as possible;</p> <p>Cleaning and waste management personnel must be provided with appropriate PPE and monitored to ensure that employees use PPE;</p> <p>Commonly used water dispensers and tea / coffee machines should not be used as much as possible, workers should be provided with plastic and glass bottled water;</p> <p>If an employee is suspected of having a coronavirus (COVID-19), those who come in contact with him or her should be identified, made a list, and notified to the related bodies</p> <p>Canteens and places of rest:</p> <p>In the canteen and rest areas of the workplace, the order of waiting and sitting at the table should be ensured, taking into account the social distance and hygienic rules;</p> <p>Whenever possible, food and beverages should be given to employees in one-person packages;</p> <p>Canteens and rest areas should be disinfected periodically.</p> <p>Workers should wash their hands with soap and water for at least 20 seconds before and after meals, and dry their hands with a paper towel;</p> <p>Whenever possible, spices, curds, salt, spoons, forks, knives, cups, etc. should be provided for single use;</p> <p>Canteen staff and administrators should follow personal hygiene rules and use appropriate PPE;</p>
Every month	Health and Safety trainings	<p>The Contractors implement all the Health and Safety Regulations. To keep good health and safety life of the Contractor's workers, the Health and Safety trainings are conducted monthly and daily briefings are also provided by the HSE Team as applicable.</p> <p>The employees are conducted "tool box talking" every day before work starts.</p> <p>The employees were conducted with health and safety training at the canteen about Health, safety issues</p>

Lot 2:

Table 10. Social and Environment Safeguard Activities: Meetings/Training/Seminar

Date	Name of Meeting/ Training	Purpose
June 2020	Public Consultation	<p>Venue: Agjabadi region</p> <p>Participants:12</p> <p>Cconsultation with the local community to make them aware of the:</p> <ul style="list-style-type: none">• The Project Features and Construction Schedule• Probable Temporary Negative Impacts: (Dust emission, Air pollution, Noise, Vibration, Water Pollution, and Access Problems, etc.)• Mitigation of Impacts• Future Training to Community to develop environmental consciousness.• Ultimate Goal and Social Benefits to the Community.• Mitigation of Negative Impacts <p>Public Consultations were done according to the HS plan and all necessary Covid 19 safety measures were taken strictly.</p> <p>Before the meeting, the contractor's HSE manager had a phone call to the local municipality chief about to plan to have a Public Consultation at identified time and asked the municipality chief all the participants to follow the safety measures during the meeting strictly:</p> <ul style="list-style-type: none">• To Disinfect the meeting building before the meeting• Supplying disinfectants, masks, gloves to all employees and workers• To wear masks and gloves properly• To wait the social distance between one another• Maintaining social distancing and arranging small groups working in a place. <p>The local people expressed their concern about more speed of the haul trucks.</p> <p>Action: The contractor warned the haul truck drivers about not to exceed the speed limit.</p>
June 2020	HIV/AIDS Training	<p>Venue: Agjabadi region, Contractor's Site Camp</p> <p>Participants:16</p>

		<p>Training to Contractor's staff and workers to make them aware:</p> <p>What is HIV/AIDS,</p> <p>What are the symptoms,</p> <p>How does it transmit or people are affected</p> <p>How to prevent and what are the protection measures:</p> <p>The Contractor's doctor distributed leaflets to all staff/ workers who attended the seminar/training. He gave brief information about the disease and how harmful it is. He described the possible reasons for how it can transmit, advised all to be careful about the disease, and anyone finds the preliminary symptoms in him he should report to the doctor.</p>
Every week	COVID-19 trainings	<p>Venue: Agjabadi region, Contractor's Site Camp</p> <p>Hygienic facilities to be used by workers in the workplace should be identified and notified to employees;</p> <p>In accordance with the requirements of social distance, waiting signs should be provided in the workplace and the gathering of employees should be prevented;</p> <p>Body temperature should be measured with a non-contact heat meter at workers' entrances to the workplace;</p> <p>Workers with fever, cough, shortness of breath, and similar complaints should be hospitalized immediately at work</p> <p>Taking into account the requirements of social protection distance, the rules of work of employees should be reconsidered, and if possible, work should be reorganized in accordance with these rules;</p> <p>Measures should be taken to reduce close contact between employees during lunch breaks and other rest periods</p> <p>Arrange for a small number of employees to be retained at the same time in the workplace, or if this is not possible, employees should work at a distance from each other;</p> <p>The workplace should be adequately ventilated;</p> <p>Sanitary and hygienic cleaning of other equipment and workplaces used, including the computer and its parts (keyboard, mouse, common telephone, etc.);</p> <p>Quality personal protective equipment (FMV) should be selected that will not interfere with work activities and reduce the risk of spreading the virus, and workers should be provided with them and ensure that they are used by employees;</p> <p>According to the requirements of protective social distance, hands should not be greeted, hugged and hands should not touch the face;</p> <p>Workplaces should be provided with adequate waste containers available to open and close without touch hands</p> <p>Toilets, baths, and other sanitary places should have adequate personal hygiene, and such places should be disinfected several times a day;</p> <p>Employees PPEs should not come into contact with in their civilian clothing and should be kept as separate as possible;</p>

		<p>Cleaning and waste management personnel must be provided with appropriate PPE and monitored to ensure that employees use PPE;</p> <p>Commonly used water dispensers and tea / coffee machines should not be used as much as possible, workers should be provided with plastic and glass bottled water;</p> <p>If an employee is suspected of having a coronavirus (COVID-19), those who come in contact with him or her should be identified, made a list, and notified to the related bodies</p> <p>Canteens and places of rest:</p> <p>In the canteen and rest areas of the workplace, the order of waiting and sitting at the table should be ensured, taking into account the social distance and hygienic rules;</p> <p>Whenever possible, food and beverages should be given to employees in one-person packages;</p> <p>Canteens and rest areas should be disinfected periodically.</p> <p>Workers should wash their hands with soap and water for at least 20 seconds before and after meals, and dry their hands with a paper towel;</p> <p>Whenever possible, spices, curds, salt, spoons, forks, knives, cups, etc. should be provided for single use;</p> <p>Canteen staff and administrators should follow personal hygiene rules and use appropriate PPE;</p>
Every month	Health and Safety trainings	<p>The Contractors are very interested in the implementation of Health and Safety Regulations.</p> <p>To keep good health and safety life of the Contractor`s workers, the Health and Safety trainings are conducted monthly and daily briefings are also provided by the HSE Team as applicable.</p> <p>The Trainings are also providing on the Construction area on a daily basis.</p> <p>The employees are conducted "tool box talking" every day before work starts.</p> <p>The employees were conducted with health and safety training at the canteen about Health, safety issues</p>

The below-mentioned Social and Environment Safeguard Activities Meetings/Training/Seminar: are planned for coming six months: Public Consultations, HIV/AIDS trainings, COVID-19 trainings, Health and Safety Aspects trainings

- Next Public Consultation will be carried out in October, 2020.
- Next HIV/AIDS training will be carried out in October, 2020.

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- Covid-19 trainings are carried out every week.
 - Covid-19 safety precaution measures are reminded to all the employees at toolbox talks before the work start every day

FUNCTIONING OF THE SEMP

SEMP Review

The project IEE identified likely environmental impacts of construction of the project and suggested outline mitigation measures corresponding to the impacts both within the report and as part of the outline SSEMP. The contract specification also requires numerous environmental impact mitigation activities

The contractors have studied the contractual documents IEE and prepared a set of Site-Specific Environmental Management Plans (SSEMP) to ensure full mitigation of potential environmental impacts during construction.

The SSEMPs are provided below, and are split into four main site specific plans:

- Camp SSEMP (covering the construction camp area);
- Workshop SSEMP (covering the workshop area);
- Plant Operation SSEMP (covering the crushing plant, asphalt plant area); and
- Road Construction SSEMP (covering the road construction site areas).

The above are supplemented by a number of additional site specific environmental management plans as required by the contract specification:

- Water SSEMP;
- Air Pollution Control SSEMP;
- Noise Control SSEMP;
- Waste SSEMP;
- Soil SSEMP;
- Site Drainage SSEMP;
- Borrow Pit SSEMP;
- Flora and Fauna SSEMP;
- Cultural and Archaeological Find Plan; and
- Grievance Redress Mechanism.

All construction works carried out by the contractors are in compliance with the SSEMP, and regular monitoring are carried out, as described in the Air, Water and Noise Control Plans in the SSEMP

Mitigation measures for these potential impacts are primarily aimed at ensuring that environmentally appropriate construction methods are used, and that the activities of construction workers are regulated. The mitigation measures proposed in the SSEMPs are intended to be site-specific, relevant, practical and easily monitored.

GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

Good Practice

The Contractors have maintained satisfactory performance on the required environmental management measures provided in the IEE and SSEMP. However, some non-compliance practices and shortcomings have been also observed which the Supervision Engineer has communicated with the Contractor regularly both in formal and written forms. The issued instructions and corrective actions in written form are in Table 11 and 12.

Table 11. Lot-1: Official letters on non-compliances issued to the Contractor under the reporting period

Date	Non-compliance issues	Official note issued	Corrective action
15/02/2020	Delay in submitting Health, Safety and Environmental reports, Environmental Monitoring Results, Public Consultation and HIV/AIDS training reports	AH-KBT-20-R32 - Lot 1-220, Submission of Health, Safety and Environmental reports, Environmental Monitoring Results, Public Consultation and HIV/AIDS training reports	Submit the Health, Safety and Environmental reports, Environmental Monitoring Results, Public Consultation and HIV/AIDS training reports as soon as possible
04/03/2020	Carrying out regular preventive measurement trainings against COVID-19 virus	AH-KBT-20-R32- Lot 1-228 Engineer's instruction in relation of COVID-19 virus	To carry out regular COVID-19 trainings to inform all the employees about COVID-19 and preventive measurements against it.
24/04/2020	Lack of road signs, dust emission	AH-KBT-20-R32- Lot 1-244 Temporary road marking, additional traffic signs, dust control	To increase road safety signs, increase road water sprinkling
10/06/2020	Submission of Monitoring results and additional information to be included in HIV/AIDS reports	AH-KBT-20-R32- Lot 1-265 Environmental and social issues	Submit the requested issues and add the information
18/06/2020	Report of any kind of occurrences	AH-KBT-20-R32- Lot 1-275 Submission of unforeseen occurrences	Submit the detailed reports about the unforeseen occurrences
20/06/2020	Hazards and risk at the working places	AH-KBT-20-R32- Lot 1-276 Hazards and risks from workplace transport operations and reducing deaths, injuries by conducting effective safety programs.	Competent to drive the vehicle - Proof of qualification (e.g. driver's license) may be necessary, or the driver may have to be trained and assessed to achieve qualification. Refresher training and re-certification may be required. In certain situations the driving license may have to be checked

			<p>periodically to ensure that the driver does not have undisclosed penalties or disqualification for road traffic offences</p> <p>Medically fit to drive - A medical examination to assess the driver's health and fitness. This should take place at selection and may have to be repeated periodically</p> <p>Provided with specific information - instruction and training appropriate to the workplace and site where they will be driving. Driver-specific site induction training may have to be provided</p> <p>Follow safe systems of work - obey site rules and do not lapse into bad practices</p> <p>The following Health, Safety and Environmental issues should be carried out properly:</p> <p>Improve Safe Traffic Flow – ensuring that workers and vehicles move around the work site safely, it's vital to establish where workers enter and leave the site. It should be enhanced traffic controls in order to reduce risks</p> <p>Train Workers on a Safe Work Zone – training workers on how to set up and maintain a safe work zone.</p> <p>Regular Staff Training –ensuring that all site employees know how to manoeuvre around equipment and take all precautions for their own safety and others.</p> <p>Separate Workers from Traffic – separating workers from traffic as much as possible;</p> <p>Use Proper Safety Barriers – following The Traffic Management strictly</p> <p>Road Maintenance –Repairing the existence and diversion road by trimming, grading and compacting regularly.</p> <p>Reversing Alarm system – Controlling the reversing alarm signals of heavy equipment for keeping in good working condition regularly.</p> <p>Flagmen - assisting a driver with reversing and awkward manoeuvring operations where the driver cannot always fully see what they are in control of. A driver must always use their own judgment, and should</p>
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			<p>only follow instructions from a properly trained flagman. Flagmen may be used to ensure that vehicle manoeuvres in the vicinity of pedestrians are carried out safely.</p> <p>Driving too fast – is a major cause of vehicle collisions and vehicles overturning. The effects of driving too fast are worsened by movements across uneven ground, or sloping surfaces and around bends. Loads may move as a result of abnormal movements and may fall from vehicles. Braking when driving too fast may be ineffective and more hazardous</p>
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Table 12. Lot-2: Official letters on non-compliances issued to the Contractor under the reporting period

Date	Non-compliance issues	Official note issued	Corrective action
15/02/2020	Delay in submitting Health, Safety and Environmental reports, Environmental Monitoring Results, Public Consultation and HIV/AIDS training reports training reports	AH-PLT-20-R32 Lot 2-184 Submission of Health, Safety and Environmental reports, Environmental Monitoring Results, Public Consultation and HIV/AIDS training reports	Submit the Health, Safety and Environmental reports, Environmental Monitoring Results, Public Consultation and HIV/AIDS training reports as soon as possible
05/03/2020	To strength electrical safety	AH-PLT-20-R32 Lot 2-192 HSE preventative measures related to electrical safety	<p>Control measures to be considered when selecting electrical equipment for use at the construction sites and camp are to:</p> <p>No electrical equipment should be put into use where its electrical strength and capability may be exceeded and give rise to danger</p> <p>Carry out pre-use checks of the equipment for signs of damage</p> <p>Implement a programme of routine visual inspection of electrical equipment and cables</p> <p>Repairs should be carried out by authorized personnel</p>

24/03/2020	Carrying out regular preventive measurement trainings against COVID-19 virus	AH-PLT-20-R32 Lot 2-198 Engineer's 2 ND instruction in relation of COVID-19 virus	To carry out regular COVID-19 trainings to inform all the employees about COVID-19 and preventive measurements against it.
11/06/2020	Oil tanks unattended Oil waste on the ground at the workshop Dangerous flammable substances are directly put into environment at the camp and have explosion potential. Hazardous plastic bottles are directly put into the environment at the camp and construction site. The chemical tanks were unattended at the workshop Plastic bottles were unattended at the camp site	AH-PLT-20-R32 Lot 2-206 Health, safety and environmental shortcomings at the camp and construction site	
24/03/2020	Health, safety and environmental shortcomings	AH-PLT-20-R32 Lot 2-225 Unstable and poorly maintained inspection facilities	Adequate measures were carried out
11/06/2020	Submission of Monitoring results and additional information to be included in HIV/AIDS reports	AH-PLT-20-R32- Lot 2-231 Environmental and social issues	Submit the requested issues and add the information
11/06/2020	Carrying out regular preventive measurement trainings against COVID-19 virus	AH-KBT-20-R32- Lot 1-228 Preventive safety measures against COVID-19 pandemic	To carry out regular COVID-19 trainings to inform all the employees about COVID-19 and preventive measurements against it.

Opportunities for Improvement

Both Contractors put efforts and addressed most of the mentioned non-compliances immediately during the reporting period. However, these types of impacts may re-occur easily and frequently, therefore, require continuous efforts. The Supervision Engineer's team continue regular follow-up and monitoring to ensure any possible non-compliance are timely

addressed, and where applicable, their re-occurrence is prevented. Nevertheless, environmental management in general has been acceptable during the reporting period

SUMMARY AND RECOMMENDATIONS

Summary

The road construction works have progressed significantly during the reporting period and generally in a compliant status. Both Contractors for Lot 1 and Lot 2 maintain environmental management in general acceptable standard and follow the EMP and SSEMPs. No major specific environmental issues have been emerging under the reporting period. ADB and the Supervision Engineer have been conducting monitoring and providing technical support to the Contractors as needed on environmental management.

The Contractors will continue all precautionary and safeguard measures set by the Government and World Health Organization against spreading and infection of Coronavirus Pandemic during the next period.

There haven't been any delays/cancellation or changes in work plan related to COVID 19. The works continued without any delay/cancellation during the reported period.

During next period, as before daily COVID 19 prevention activities will be continued out as following at the camp facilities and the construction sites:

- i. Disinfecting all camp area, offices, canteens, kitchens, dormitories, and bathrooms
- ii. Supplying disinfectants, masks, gloves to all employees and workers
- iii. Measuring the body temperature of each employee daily
- iv. Toolbox talking about Coronavirus: COVID-19 to the employees
- v. Putting warning posters and signs in visible places like the entrance to the camp, offices, kitchen, dormitories, workshops, etc.
- vi. Maintaining social distancing and arranging small groups working in a place

Recommendations

Though the environmental management had been satisfactory, numbers of shortcomings are observed in performance of the Contractors for both Lot 1 and Lot 2. The observed shortcomings and areas for improvement are common for both lots. Below are summarized the observed shortcomings common to both Contractors for Lot 1 and Lot 2 and should be improved:

- Waste management in work sites, workshops, accommodations camps yards;
- Full supply of the complete sets of PPEs to all workers and control they wear it;
- Safety in road traffic and construction works sites;
- Ensure reflective safety ribbons and safety signs and measures throughout the construction road (as there many slopes in road sides);

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- Provide air ventilation, smoke detectors and fire alarms in the workers accommodations, canteen, site laboratories and all applicable work site premises;
 - Do not dump the unsuitable materials in the road side and remove the dumped ones,
 - Outreach more workers in trainings on OHS and HIV/AIDs;
 - Improve dust management (loaded trucks should be covered);
 - Conduct regular public consultations and informing communities about the project GRM.
 - Improve women participation in public consultations and in any other relevant community events arranged by the project.

Addressing the above-said require on-going and constant follow-ups and monitoring by the project environmental team of the Supervision Engineer and Contractors, and the Contractors' commitment and actions. In addition, more regular and frequent site inspections by the Supervision Engineer and PIU is recommended to have more impact on the Contractors, make and help them to improve their performance for better compliance.

During the next period, Covid 19 safety precautions will be continued as before:

Daily COVID 19 prevention activities will be carried out as following at the camp facilities and the construction sites:

- i. Disinfecting all camp area, offices, canteens, kitchens, dormitories, and bathrooms
- ii. Supplying disinfectants, masks, gloves to all employees and workers
- iii. Measuring the body temperature of each employee daily
- iv. Toolbox talking about Coronavirus: COVID-19 to the employees
- v. Putting warning posters and signs in visible places like the entrance to the camp, offices, kitchen, dormitories, workshops, etc.
- vi. Maintaining social distancing and arranging small groups working in a place.

HSE team keeps under control of all the employees always should wear masks and wait the social distances at the camp and construction site.

INFORMATION ABOUT CORONAVIRUS (COVID-19) PANDEMIC IN AZERBAIJAN

The Government of Azerbaijan has implemented strict rules requiring people to stay inside, whether in private homes, apartments, or permanent or temporary residences and to monitor citizen movements. The Government of Azerbaijan introduced an SMS regime requiring individuals in sensitive regions (where there is high-potential Covid-19 affecting) to obtain permission by SMS to leave home for medical care, the grocery store, pharmacy, bank, post office, or time outdoors, and to attend funerals. Foreigners temporarily staying in Azerbaijan can obtain an identification number from the State Migration Service (SMS) online. Foreigners must then text the number indicating the reason for their departure from home plus either their temporary or permanent residence number or the identification number provided online by the SMS.

All the prevention rules of Covid-19 set by World Health Organization is strictly followed by the Contractors at Lot 1 and Lot 2.

Contractors of both lots take serious precautions about Covid-19 and carry out the following mentioned Covid-19 trainings to the employees regularly:

- Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water. Why? Washing your hands with soap and water or using alcohol-based hand rub kills viruses that may be on your hands.
- Maintain at least 1 metre (3 feet) distance between yourself and others. Why? When someone coughs, sneezes, or speaks they spray small liquid droplets from their nose or mouth which may contain virus.
- Avoid going to crowded places.
- Avoid touching eyes, nose and mouth. Why? Hands touch many surfaces and can pick up viruses. Once contaminated, hands can transfer the virus to your eyes, nose or mouth. From there, the virus can enter your body and infect you.
- Make sure you, and the people around you, follow good respiratory hygiene. This means covering your mouth and nose with your bent elbow or tissue when you cough or sneeze. Then dispose of the used tissue immediately and wash your hands. Why? Droplets spread virus. By following good respiratory hygiene, you protect the people around you from viruses such as cold, flu and COVID-19.
- If you have a fever, cough and difficulty breathing, seek medical attention, but call by telephone in advance if possible and follow the directions of your local camp health authority. Why? National and local authorities will have the most up to date information on the situation in your area. Calling in advance will allow your health care provider to quickly direct you to the right health facility. This will also protect you and help prevent spread of viruses and other infections.
- Keep up to date on the latest information from trusted sources, such as World Health Organization or your local and national health authorities. Why? Local and national authorities are best placed to advise on what people in your area should be doing to protect themselves.

During the reported period, all project management/supervision consultants were able to travel project sites by special permission from Task Force under the Cabinet of Ministers of Azerbaijan Republic which is checked by the policemen at the border of the regions and after the policemen have checked on the access portal and confirmed that they have their special permission, they are allowed to visit the work sites.

During the reported period, no employees were affected with Covid 19 at both lots.

Specific information Safeguard Activities against CORONAVIRUS (COVID 19)

The Contractor took several precautionary and safeguard measures against spreading and infection of Coronavirus Pandemic during the reported period (photos attached below). There haven't been identified COVID 19 affected employees at both Lot 1 and Lot 2 and the work continued without stopping during the reported period.

Daily COVID 19 prevention activities are carried out as following at the camp facilities and the construction sites:

- vii. Disinfecting all camp area, offices, canteens, kitchens, dormitories, and bathrooms
- viii. Supplying disinfectants, masks, gloves to all employees and workers
- ix. Measuring the body temperature of each employee daily
- x. Toolbox talking about Coronavirus: COVID-19 to the employees
- xi. Putting warning posters and signs in visible places like the entrance to the camp, offices, kitchen, dormitories, workshops, etc.
- xii. Maintaining social distancing and arranging small groups working in a place.

HSE team keeps under control of all the employees always should wear masks and wait the social distances at the camp and construction site.

All the employees' temperature is measured by the camp doctor before the work starts every morning.

Lot 1: Disinfection of the facilities



Lot 2: Disinfection of the facilities



GRIEVANCE REDRESS MECHANISM

The Grievance Registration Books are maintained in both lots. In total, thirteen grievance cases have been registered for Lot 1 during the reporting period. The grievances were about (i) six for villagers requesting a pipe culvert, animal cross and bus shelter; (ii) seven for cracks on the walls. Thus, all grievances have been investigated and have resolved status.

Under the same period, in total twelve grievance cases have been registered in Lot 2. The grievances were related to (i) Damage to the house during the road construction activities; (ii) Damage to private commercial outlet during the road construction activities (iii) Some part of the complainer's private land has been felt into the construction works; (iv) Some part of the complainer's courtyard has been affected during the construction works; (v) Asked for asphalt pavement road from the project road to village Mosque. All grievances have been investigated and have resolved status.

Public Consultations

During the reported period for Lot 1 the public consultation was held in Gazyan village on 18 of June 2020 and for Lot 2, in Agjabadi city on 24 of June 2020 respectively. The key issues discussed in Public Consultations of both lots included: (i) construction process and schedule; (ii) HIV awareness and Coronavirus pandemic; and (iii) the Grievance Redress Mechanism. The list of participants and photos in the Appendix 1.

Public Consultations were done according to the Covid 19 safety measures strictly.

Before the meetings, the Consultant's Local Environmentalist had a phone call to the local municipality chief and asked the municipality chief that all the participants to follow the Covid 19 safety measures seriously during the meeting set by the Government and WHO.

Conclusions and Recommendations

The social monitoring was conducted for the entire project area to address timely any potential social issues. The physical works are progressing well and in general ahead of the schedule. The final LARP has been implemented; all compensations are paid to all 13 AHs. Assistance allowance in cash was paid also to one identified AHs (single mother). No any unanticipated land acquisition and resettlement impact has been identified during the reported period. The Project's GRM has been established and the received grievances have been registered, reviewed and resolved (in total twenty five grievances, thirteen grievances for Lot 1 and twelve grievances for Lot 2). The PIU carries out regular social safeguards monitoring including on Contractors' performance and submits reports. The followings recommended:

- (i) The PIU Safeguard expert shall visit site regularly, review the grievances and meet with the complainants and local authorities as needed for solving the complaints, if any;
- (ii) Proceed social monitoring, grievance management and any potential unanticipated impact on time, and reflect on the monthly progress reports the status and issues, if any;

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- (iii) Conduct meetings and consultations with the project communities to inform about the project progress, the GRM, and issues related to public safety during construction works; ensure women participation in the community meetings and consultations;
 - (iv) Strengthen the implementation of measures for public health and safety including on making temporary fences to not allow unauthorized entry to the project worksite and road construction sites, road traffic safety and occupational health and safety for the construction workers.

Date and form of grievance received	Grievance type and summary	Notes/undertaken actions
08-01-2020 Official letter to SAAAR	Villagers requested to construct four culverts and one animal crossing on the part of the road passing through the village.	The request was investigated and resolved.
14-01-2020 Official letter to SAAAR	He requested for construction of a bus shelter in front of his house.	The request was investigated and resolved.
16-01-2020 Official letter to the President	Her store locates very near to the road. She requested to demolish her store and rebuilt in proper distance.	The request was investigated and resolved.
15-02-2020 Official letter to the President	Damages caused to the houses next to the project road.	The request was investigated and resolved.
10-02-2020 Official letter to SAAAR	Cracks at the walls of house locating next to the project road.	The request was investigated and resolved.
27-02-2020 Official letter to SAAAR	They requested underground animal crossing and pipe culvert to be constructed within the village.	The request was investigated and resolved.
27-04-2020	Overpass crossing to be built near School No2.	The request was investigated and resolved.
04-05-2020 An official letter to SAAAR	Cracks on the walls of his house	The request was investigated and resolved.

14-05-2020 An official letter to SAAAR	The channel of garden belonging to her was filled by soil material	The request was investigated and resolved.
15-05-2020 An official letter to president Ilham Aliyev	Cracks on the fence of his house	The request was investigated and resolved.
09-05-2020 An official letter to MP of Azerbaijan republic	To Construct the overpass pedestrian crossing, cleaning culvert, to construct bus shelter	The request was investigated and resolved.
01-06-2020 An official letter to the President of Azerbaijan	Her store located very near to the road. She mentioned that her business is could not be run.	The request was investigated and resolved.
01.06.2020 An official letter to Saleh Mammadov, the chairman of SAAAR	Drainage water is being collected at the cellar of newly built school. For preventing this situation, villager want a culvert accross the road to be constructed.	The request was investigated and resolved.

Table 13. Grievance Registration Book Lot 1

Table 14. Grievance Registration Book Lot 2

	Date and form of grievance received	Grievance type and summary	Notes/undertaken actions
an			
	25 January 2020 Informed the Engineer's office with official letter	Damage to his house during the road construction activities.	The complaint was investigated and resolved.
	28 January 2020 Informed the Engineer's office and SAAAR with official letter	Damage to his private commercial outlet during the road construction activities.	The complaint was investigated and resolved.
	30 January 2020 Informed the Engineer's office and SAAAR with official letter	Some part of the complainer's private land has been felt into the construction works.	The complaint was investigated and resolved.
	25 February 2020 Informed the Contractor and the Engineer verbally	Some part of the complainer's courtyard has been affected during the construction works.	The complaint was investigated and resolved.
	25 February 2020 Informed the Engineer's office and SAAAR with official letter	Some part of the complainer's private land has been felt into the construction works.	The complaint was investigated and resolved.
	27 February 2020	Some part of the complainer's private land has been felt into the construction works.	The complaint was investigated and resolved.

	Informed the Engineer's office and SAAAR with official letter		
	15 February 2020 Informed the SAAAR with official letter.	Damages to his house and fences during the road construction activities.	The complaint was investigated and resolved.
	15 February 2020 Informed the SAAAR with official letter	Damages to his house during the road construction activities.	The complaint was investigated and resolved.
	15 February 2020 Informed the SAAAR with official letter	Asked for asphalt pavement road from the project road to village Mosque.	The complaint was investigated and resolved.
	04 March 2020 Informed the Engineer's office and SAAAR with official letter	Some part of the complainer's private land has been felt into the construction works.	The complaint was investigated and resolved.
	11 March 2020 Informed the Contractor verbally	Some part of the complainer's private land has been felt into the construction works.	The complaint was investigated and resolved.
	1 April 2020 Informed the Contractor and Engineer with official letter	Damages to his fences and cattle shelter during the road construction works activities	The complaint was investigated and resolved.

Appendix 1.

Photo from Public Consultation in Lot 1



List of participants of Public Consultation in Lot 1

Nº	Soyad/Surname	Ad/Name	Yer/Location	Imza/Surname
1	Əliyev	Məmməd	Nəzar rayonu, Qazax kəndi	Ə.Ə.Ə.
2	Xəlilov	İbrahim	— /	İ.Ə.
3	Göndəlov	Keyhan	— /	Key.
4	Məmmədova	Gülzar	— /	G.Ə.
5	İsmayilova	Şahla	— /	Ş.Ə.
6	İbrahimov	Məhəmməd	— /	M.Ə.
7	Mirzəyev	Elvin	— /	E.Ə.
8	Mirzəyev	Əlihussein	— /	Ə.Ə.
9	Məmmədov	Mirzəhəsən	— /	M.Ə.
			— /	
			— /	
			— /	

Photo from Public Consultation in Lot 2



List of participants of Public Consultation in Lot 2

No	Adı Soyadı/Name Surname	İmza/Signature
1	Zahir Bayramov	B. Bayramov
2	Elson İsmayilov	Elson İsmayilov
3	Tarlan Həsənov	Tarlan Həsənov
4	Əbid. Qasımov	Əbid. Qasımov
5	Gülzarə Təlibova	Gülzarə Təlibova
6	Esmira Abbasova	Esmira Abbasova
7	Kamilə Kərimova	Kamilə Kərimova
8	Rəhil Bərdiyarov	Rəhil Bərdiyarov
9	Zeynal Rüstəmov	Zeynal Rüstəmov
10	Əliyə Ə. Məmmədov	Əliyə Ə. Məmmədov
11	Ayşən Hüseynov	Ayşən Hüseynov

Annex A. LOT 1. Construction works during the reported period



Roadway Excavation works



Rock filling works



Laying Bituminous Base Course



Reinforcement works of box culvert

Concreting of approach slab of Br. 3

Launching of girders of Bridge no.4

Annex B. LOT 2. Construction works during the reported period



Asphalt milling



Excavation un-suitable material



Construction of embankment layer

Sub-base course



Water spraying on capping layer

Sub base on shoulder

Construction of Bituminous base course

Installation of PC Girders at bridge no. 1

Surveys checking at km bridge no 1

ANNEX C.

Lot 1 - Agreement with FCE of Ujar District for providing with portable water and disposal/transportation of waste water.

This land lease agreement between the contractor and the FCE of Ujar identifies the liabilities which both sides they should follow.

M Ü Q A V İ L Ə

Ucar şəhəri

03 yanvar 2019-cu il

Bu müqavilə bir tərəfdən Ucar rayon Kommunal Müəssisələri Kombinatı digər tərəfdən "Körpü-Bina-Tikinti" MMC arasında kommunal xidmətlərin göstərilməsi məqsədi ilə aşağıdakı şərtlərlə bağlanmışdır.

1. Müqavilənin məqsədi

Bu müqavilə KMK –ı ilə "Körpü-Bina-Tikinti" MMC arasında Kommunal xidmətlərin göstərilməsi münasibətini tənzimləyir.

2. Tərəflərin vəzifə və hüquqları

- 2.1** Kommunal Müəssisələri Kombinatının vəzifə və hüquqları.
- 2.1.1 KMK –ı öz öhdəsinə götürür ki, müəyyən olunmuş normativ hüquqi aktlara uyğun fəaliyyət göstərəcək.
- 2.1.2 "Körpü-Bina-Tikinti" MMC müqaviləyə əsasən üzərinə düşən vəzifələri yerinə yetirəcək.
- 2.1.3 Müəyyən edilmiş norma və qaydalara uyğun kommunal xidmət göstərəcək.
- 2.2** "Körpü-Bina-Tikinti" MMC-nin vəzifə və hüquqları
- 2.2.1 Vaxtlı-vaxtında məişət tullantılarının daşınmasını tələb etmək
- 2.2.2 Kommunal xidmətlərin göstərilməsi üçün hər ay 150 manat xidmət haqqını KMK-nın Kapital bankda olan hesablaşma hesabına hər ayın sonunda ödəmək.
- 2.2.3 Kommunal xidmətdən istifadə qaydalarına riayət etmək.
- 2.2.4 Kommunal xidmətlərdə narazılıq yaranarsa KMK-ya müraciət etmək.

3.Müqavilənin müddəti mübahisələrin həlli

3.1 Bu müqavilə 03 yanvar 2019-cu il tarixdən etibarlıdır və müddətsiz bağlanır.

Müqavilə qüvvədə olduğu müddətdə hər hansı bir dəyişikliklər edilərsə müqavilənin şərtlərində dəyişiklik aparıla bilər.

3.2 Bu müqaviləyə "Körpü-Bina-Tikinti" MMC-nin yazılı müraciətinə əsasən yaxud müqavilə şərtləri "Körpü-Bina-Tikinti" MMC tərəfindən pozulduqda KMK tərəfindən xəbərdarlıq etməklə birtərəfli qaydada xitam verilə bilər.

3.3 Müqavilə 2 nüsxədən ibarət tərtib olunur.1 nüsxə Kommunal Müəssisələri Kombinatında digər nüsxə isə "Körpü-Bina-Tikinti" MMC –də saxlamalı

4.Tərəflərin reykvizitləri

Bank reykvizitlərimiz

Ucar Kapital bank

Kod:200770

Vöen:9900003611

M/H :AZ37NABZ01350100000000001944

SWIFT WIK AIIBAZ-ZX

Alan

Ucar Kommunal Müəssisələri Kombinatı

Vöen 7400056651

h/h AZ69AIIB33010019447700259177

Kommunal Müəssisələri kombinatının rəisi:

I.M.İsmayılov

"Körpü-Bina-Tikinti" MMC-nin direktoru:

Göyüşov Xəliq Avdıl



Lot 2 - Agreement with FCE of Lachin District, Takhtakorpu settlement on haulage and disposal of hazardous, domestic, waste and sewage.

This agreement identifies the tasks of the contractor and the FCE of Lachin on haulage and disposal of hazardous, domestic, waste and sewage which responsibilities they have and what regulations they should follow.

M Ü Q A V İ L Ə

01 mart 2019-cu il

Laçın rayon Taxta körpü ərazisi

Birinci tərəf - Laçın Rayon Kommunal Mütəssisələr Kombinatının rəisi Cavid Qənimət oğlu Hüseynov.

İkinci tərəf - "Polat Yol Yapı ve Ticaret Anonim Şirkəti"nin Azərbaycan Respublikasındakı Filialının Ucar-Zərdab-Ağcabədi Yolunun Bərpasının İstehsal Sahəsinin müdiri Altan Şərbətinin iştirakı ilə bu müqaviləni aşağıdakı şərtlər əsasında bağlayırıq.

1. Birinci tərəf öhtəsinə alır ki, "Polat Yol Yapı ve Ticaret Anonim Şirkəti"nin Azərbaycan Respublikasındakı Filialının Ucar-Zərdab-Ağcabədi Yolunun Bərpasının İstehsal Sahəsinin yerləşdiyi ərazidə yaranacaq zibil və məişət tullantılarının vaxtı-vaxtında avtomatına yüklənib daşınmasını təmin edəcək.

2. İkinci tərəf öhtəsinə alır ki, "Polat Yol Yapı ve Ticaret Anonim Şirkəti"nin Azərbaycan Respublikasındakı Filialının Ucar-Zərdab-Ağcabədi Yolunun Bərpasının İstehsal Sahəsinin yerləşdiyi ərazidə 01 mart 2019-cu il tarixdən - 01 mart 2020-ci il tarixinədək yaranacaq zibil və məişət tullantılarının il ərzində hər m³-i 4.90 manat olmaqla Laçın Rayon Kommunal Mütəssisələr Kombinatının fəhlələrinin gücü ilə görülmüş işin dəyərini ödəməsin təmin edəcək.

3. Bu müqavilə 01 mart 2019-cu il tarixdən qüvvədədir.

4. Müqavilə 01 mart 2020-cu il tarixə kimi qüvvədədir.

5. Müqavilə qüvvədə olma müddətinin başa çatmasına 1 (bir) ay qalmış tərəflərdən biri müqavilənin ləğv edilməsi barədə yazılı təşəbbüs göstərmədikdə, bu müqavilənin müddəti növbəti 1 (bir) il üçün uzadılmış hesab olunur.


6. Bu müqavilə tərəflərin hər birində 1 (bir) nüsxə olmaqla eyni hüquqi qüvvəyə malik 2 (iki) nüsxədə tərtib edilmişdir.


7. Tərəflərin hüquqi ünvanları və bank rekvizitləri.


"İcraçı"	"Sifarişçi"
Laçın Rayon Kommunal Mütəssisələr Kombinatı H/h: AZ94AİIB33010019449200203192 VÖEN: 6200023671 A1.Emiten/ödəyən/bank Adı: Kapital bankın Laçın r-onfilialı Kodu: 200929 VÖEN: 9900003611 M/h: AZ37NABZ01350100000000001944 S.V.İ.F.T.Bik AİİBAZ 2X	"Polat Yol Yapı ve Ticaret Anonim Şirkəti" VÖEN: 1500968811 A1.Emiten/ödəyən/bank Adı: Kapital Bank ASC Nəsimi filialı VÖEN: 9900003611 Kodu: 200112 M/h: AZ37NABZ01350100000000001944 SWIFT. Bik: AİİBAZ2


Laçın Rayon K.M.K-nın rəisi:

"Polat Yol Yapı ve Ticaret Anonim Şirkəti"nin Azərbaycan Respublikasındakı Filialının Ucar-Zərdab-Ağcabədi Yolunun Bərpasının İstehsal Sahəsinin müdiri:

M.Y.  C.Q. Hüseynov

M.Y.  Altan Şərbətin





ANNEX D. Lot 1 Camp Site.



Camp offices



Washing area



Watering the construction site against dust emission

ANNEX E. Lot 2 Camp Site



Camp offices



Fire Extinguisher



Safety posters



Water sprinkling against the dust



Storage area



Washing area



Road safety signs

ANNEX F. Lot 1 Plants



Asphalt Plant

Lot 2 Plants



Crushing Plant

ANNEX G. Lot 1 Borrow pits



Garamaryam borrow pit

Lot 2 Borrow Pits



Shahmali borrow pit

ANNEX H. Lot 1 Monitoring Results



"Körpü-Bina-Tikinti" MMC-nin
direktoru
cənab Xaliq Göyüşova

Hörmətli Xaliq müəllim,

Məlumat üçün bildiririk ki, Azərbaycan Respublikası Prezidentinin 2020-ci il 27 mart tarixli 975 nömrəli Fərmanı ilə təsdiq edilmiş Azərbaycan Respublikası Ekologiya və Təbii Sərvətlər Nazirliyi yanında Milli Hidrometeorologiya Xidməti yaradılmışdır. Bununla da həmin Xidmət Ətraf Mühit üzrə Milli Monitoring Departamentinin hüquqi varisi olaraq çıxış edəcək.

Qeyd edilənləri nəzərə alaraq, Ətraf Mühit üzrə Milli Monitoring Departamenti ilə "Körpü-Bina-Tikinti" MMC arasında bağlanmış 24 iyun 2019-cu il tarixli 06 nömrəli müqaviləyə əsasən aparılacaq ekoloji monitoring işlərinin davam etdirilməsi məqsədi ilə göstərilən məntəqələrdə aparılmış suyun, havanın keyfiyyəti, səs və vibrasiya çirklənməsinin monitoringi nəticələrini Sizinə təqdim edirik.

Qoşma: Təhlillərin nəticələri 5 vərəq, akt 2 nüsxə, hesab-faktura 1 vərəq, elektron qaimə 1 vərəq.

Hörmətlə,

Milli Hidrometeorologiya Xidmətinin
reis müavini:

Vasif Əliyev

To – Mr.Khalig Goyushov
'Korpu-Bina-Tikinti' LLC

General Manager.

Dear Mr. Khalig

Please be noted that, the National Hydro Meteorological Service under the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan was established by the approved decree № 975 of the President of Azerbaijan Republic dated 27.03.2020.

Hence, The Service will function as a legal-heir of National Environmental Monitoring Department.

Considering the mentioned above, in accordance with contract N 6 dated 24.06.2019 between National Environmental Monitoring Department and "KBT" LLC, in order to carry out ecological monitoring activities, we submit the test results report of indicated points for Air Quality, Water Quality, Noise and Vibration pollution monitoring.

Enc: Test Results Report (Analysis).

Yours faithfully,

Deputy-chief of the National Hydro Meteorological Service.

Vasif Aliyev.

Concentration of pollutants in atmosphere air (mg/m³)

Monitoring points	Ingredients	Quantity of ingredients (Point 1)	Available consistence limit
Ujar district. Garabork village (km 00+500)	PM 2.5	0.019	0.025
	PM10	0.043	0.050
Ujar district. Khalaj village (17+500)	PM 2.5	0.019	0.025
	PM10	0.034	0.050
Zardab district. Challi village (km 20+300)	PM 2.5	0.018	0.025
	PM10	0.034	0.050
Zardab district (km 30+500)	PM 2.5	0.022	0.025
	PM10	0.039	0.050

Noise level (dB)

Monitoring points	Parameters	Measurement results, dB (Point 1)	Available noise limit, dB
Ujar district. Garabork village (km 00+300)	noise	53.2	70
Ujar district. Gazian village (km 3+800)	noise	51.2	70
Ujar district. Khalaj village (17+500)	noise	65.8	70
Zardab district. Challi village (km 20+300)	noise	59.8	70
Zardab district (km 30+500)	noise	60.2	70

Vibration level (dB)

Monitoring points	Parameters	Measurement results (Point 1)	Available noise limit
Ujar district. Garabork village (km 00+300)	noise	64.1	77
Ujar district. Gazian village (km 3+800)	noise	59.3	77
Ujar district. Khalaj village (17+500)	noise	64.5	77
Zardab district. Challi village (km 20+300)	noise	63.3	77
Zardab district (km 30+500)	noise	63.2	77

The results of physical-chemical and microbiological analysis held on water samples (mg/l)

Ingredients	Unit of measurement	Zardab city Garasu river	Zardab city Canal	Available consistence limit
Smell, organoleptic met.	_____	No smell		—
Color, organoleptic met.	_____	No color		—
Solved oxygen in water	(Mg/l,%)	5.1 62.6	5.1 61.2	≥4.0
biochemical consumption of oxygen	mgO ₂ /L	2	3.7	<3.0
Turbidity	FTU(NTU)	77.8	5.5	<5.0
Limpidity	cm	1	27	30
Electrical conductivity	X10 ⁻³ S/cm	0.639	4.280	-
Hydrogen Index pH	_____	7.8	7.7	6.5-8.5
Roughness	Mg-equiv/l	4.7	35.5	7.0
Calcium ions, Ca ²⁺	Mg/l	52.1	541.1	-
Magnesium ions, Mg ²⁺	Mg/l	25.5	103.4	-
Chloride ions, Cl ⁻	Mg/l	50.8	956.1	350.0
Sulfate ions, SO ₄ ²⁻	Mg/l	125.4	677.6	500.0
Bicarbonate ions, HCO ₃ ⁻	Mg/l	261.3	370.0	-
Carbonate ion, CO ₃	Mg/l	0	0	-
Na ⁺ + Ka ⁺ ions	Mg/l	86.9	314.0	-
Ammonium ion, NH ₄ ⁺	Mg/l	0.07	0.5	0.5
Nitrate ions, NO ₃ ⁻	Mg/l	5.1	43.7	45.0

Nitrite ions, NO ₂ ⁻	Mg/l	0	1.1	3.3
Phosphate ion PO ₄ ³⁻	Mg/l	0.4	1.6	3.5
Oil and oil products	Mg/l	0.03	0.02	0.05
Sum of ions, Σ	Mg/l	610.2	3011.1	<1000
Escherichia coli (E.coli-bacteria that causes conventional disease)	number/l	31000	14000	1000

ANNEX I. Lot 2 Monitoring Results



AZERBAIJAN REPUBLIC
EKOLOGIYA VƏ TƏBİİ SƏRVİTLƏR NƏZİRLİYİ
ƏTRAF MÜHİT ÜZRƏ MİLLİ MONİTORİNG DEPARTAMENTİ
LABORATORİYA MƏRKƏZİ
AZ 1123 Bakı, Xətai rayonu, Xudu Məmmədov küçəsi 3
Telefon: (+9942) 379-40-21, Faks: (+9942) 379-40-21
E-poçt: mlaboratoriya@gmail.com
<http://eco.gov.az/e-lab.php>

№ 19-01/86
"3" dekabr 2019-cu il

"Polat Yol Sanaye ve Ticaret A.Ş.
şirkətinin baş icraçı direktoru
Özök Zafer Kemala

Ətraf Mühit üzrə Milli Monitoring Departamentinin Laboratoriya Mərkəzinin "Polat Yol Sanaye ve Ticaret A.Ş." şirkəti ilə bağlanmış 05.09.2019-cu il tarixli, 3 nömrəli müqavilə əsasında 28.11.2019-cu il tarixində Laboratoriya Mərkəzinin əməkdaşı tərəfindən ölkə ərazisində dövlət əhəmiyyətli yol infrastrukturunun təkmilləşdirilməsi işlərinin tərkib hissəsi olan Ucar-Zərdab-Ağcabədi Yolunun Bərpası ilə əlaqədar sözügedən ərazidə ekoloji səviyyənin (havanın, suyun keyfiyyəti, ses və vibrasiyanın səviyyəsinin yoxlanılması) monitorinqi aparılmışdır.

Monitorinq zamanı əvvəlcədən müəyyən olunmuş koordinatlar üzrə götürülmüş nümunələr üzərində aparılan analizlərin nəticələri Sizə təqdim olunur.

Qoşma: "4" vərəq

Hörmətlə,

Reis :

Vasif Əliyev

Azerbaijan Republic
Ministry of Ecology and Natural Resources
National Environment Monitoring Department
Laboratory Center

To: Ozkok Zafer Kemal
Executive Director of
"Polat Yol Yapı Sanayi ve Ticaret"

Based on the contract #3 dated 05.09.2019, signed between National Environment Monitoring Department Laboratory Center and "Polat Yol Yapı Sanayi ve Ticaret", on 10.09.2019 the specialist of the Laboratory Center has conducted an ecological monitoring (air and water quality, noise and vibration level) of Reconstruction of Ujar – Zardab – Ağcabədi Road (R32), Zardab – Ağcabədi Section Lot 2 km37.00- km70.50 project area functioning as an integral part of the work on improving the state road infrastructure in the country.

We are submitting you the results of the analyses conducted on the samples taken from the pre-determined coordinates during monitoring.

Enclosure: 5 pages

Sincerely,
Chief Vasif Aliyev

Table 1. Water quality sample

Sample code	Name of the sample/ area	Date of the sample	Time of the sample	Incoming date	Incoming time
1-1	Kura river (km 50+060)	5/19/2020	14:30	5/21/2020	12:15
1-2	Upper Garabakh channel (km 58+074)	5/19/2020	15:30	5/21/2020	12:15

Table 1. Measurement of Air quality

Measurement code	Name of the measurement/ area	Date of the measurement	Time of the measurement	Incoming date	Incoming time
2-1	Gorugbagı (km 47+590)	5/19/2020	14:45	5/21/2020	12:15
2-2	Najafgulubeyli village (km 52+750)	5/19/2020	14:55	5/21/2020	12:15
2-3	Camp area (km 59+000)	5/19/2020	15:15	5/21/2020	12:15
2-4	Kehrizli - Sherefexanli area - Borrow pit area	5/19/2020	15:45	5/21/2020	12:15

Table 1. Measurement of Noise and Vibration

Measurement code	Name of the measurement/ area	Date of the measurement	Time of the measurement	Incoming date	Incoming time
3-1	Gorugbagı (km 47+590)	5/19/2020	15:00	5/21/2020	12:15
3-2	Najafgulubeyli village (km 52+750)	5/19/2020	15:35	5/21/2020	12:15
3-3	Camp area (km 59+000)	5/19/2020	16:00	5/21/2020	12:15
3-4	Kehrizli - Sherefexanli area - Borrow pit area	5/19/2020	16:35	5/21/2020	12:15

Noise level

#	Monitoring point	Parameters	Measurement result	Allowable consistency limit
1	Gorugbagi (Km 47+590)	Noise	28	70
2	Najafgulubeyli village (Km 52+750)	Noise	34	70
3	Camp area (Km 59+000)	Noise	59	70
4	Kehrizli – Sherefkhanli area Borrow pit	Noise	51	70

Head specialist of lab center: Rustem Askerov

Vibration level

#	Monitoring point	Parameters	Measurement result	Allowable consistency limit
1	Gorugbagi (Km 47+590)	Vibration	32	77
2	Najafgulubeyli village (Km 52+750)	Vibration	40	77
3	Camp area (Km 59+000)	Vibration	24	77
4	Kehrizli – Sherefkhanli area Borrow pit	Vibration	38	77

Head specialist of lab center: Rustem Askerov

Results of the physical – chemical analyses of the water samples brought on 19.02.2020

Type of the sample, place of sample: water, 2 pieces

Name of the submission of the samples to the lab: 21.05.2020

Date of the report submission: 22.05.2020

Analyze methods: Fomin, Gosstandm Russia, Semenov 1977, Standard Methods for the Examination of Water and Wastewater, American Public Health Association, 1995

No.	Name of the ingredient	Unit of measurement	Kur river (50+060km)	Upper Garabagh channel (58+074)	Permissible hardness limit
1	Hydrogen indicator Ph	-	7.5	7.2	6.5-8.5
2	Transparency	Sm	22	25	≥30
3	Turbidity	NTU	44	38	≤ 5
4	Electrical conductivity	X10 ³ Sm/sm	1.100	0.957	--
5	Color	Colorless			
6	Oxygen soluble in water	MqO ₂ /l	6.0 45.5	6.7 55.9	≥4.0
7	Kalsium ionu CA ²⁺	Mq/l	108.9	120.8	-
8	Maqnezium ionu Mg ²⁺	Mq/l	40.8	30.5	-
9	Xlorid ion Cl	Mq/l	150.9	300.4	350.0
10	Sulfat ion SO ₄ ²⁻	Mq/l	250.5	320.2	500.0
11	Hidrocarbonate ion HCO ₃	Mq/l	120.1	180.4	-
13	Na ⁺ K ⁺ ionu	Mq/l	95.0	130.5	-
14	Ammonium NH ₄	Mq/l	0	0	0.5
15	Nitrites NO ₂	Mq/l	1.5	0.8	3.3
16	Nitrites NO ₃	Mq/l	7.6	6.9	45.0
17	Roughness	Mq/l	5.8	6.0	7.0
18	Total ions	Mq/l	1.5	0.8	≤ 1000
			689.5	744.9	

Conclusion for analyses: according the initial analyses on the samples brought to the lab, the samples are odorless and colorless. Roughness of the samples from Kur is 1.3, and from Upper Garabagh channel is 1.5 times more than the norms. The other sample are in norm.

Head specialist of the laboratory center

Noise level

#	Monitoring point	Parameters	Measurement result	Allowable consistency limit
1	Gorugbagi (Km 47+590)	Noise	28	70
2	Najafgulubeyli village (Km 52+750)	Noise	34	70
3	Camp area (Km 59+000)	Noise	59	70
4	Kehrizli – Sherefkhanli area Borrow pit	Noise	51	70

Head specialist of lab center: Rustem Askerov

Vibration level

#	Monitoring point	Parameters	Measurement result	Allowable consistency limit
1	Gorugbagi (Km 47+590)	Vibration	32	77
2	Najafgulubeyli village (Km 52+750)	Vibration	40	77
3	Camp area (Km 59+000)	Vibration	24	77
4	Kehrizli – Sherefkhanli area Borrow pit	Vibration	38	77

Head specialist of lab center: Rustem Askerov

Residues of pollutants in the atmosphere

#	Monitoring point	Ingredients Mg/m ³	Amount of the component	Allowable consistency limit
1	Gorugbagi (Km 47+590)	PM 10	0.025	0.050
2	Najafgulubeyli village (Km 52+750)	PM 10	0.038	0.050
3	Camp area (Km 59+000)	PM 10	0.035	0.050
4	Kehrizli – Sherefkhanli area Borrow pit	PM 10	0.024	0.050

Head specialist of the lab center:

Rustem Askerov