TERMS OF REFERENCE

CONSULTING SERVICES FOR CONSTRUCTION SUPERVISION OF BATUMI-SARPI ROAD

A. Project Description

- 1. Georgia lies on the historically significant and increasingly important intersection of trading routes that link Turkey and other countries to the south with Russia to the north, and Europe to the west with Asia to the east. The Government of Georgia is investing substantial amounts in the infrastructure needed to take advantage of its location, with the assistance of the international development partners community, including the Asian Development Bank (ADB).
- 2. The Batumi–Sarpi Road Project connects the newly constructed Batumi Bypass with the Border to Turkey at Sarpi. The project includes interchanges for connection to the Batumi Airport, Custom Clearance Area, and coastal resorts and settlements. The total length of the project is 11 kilometers (km) and it includes a 7.6 km long tunnel, a 1.47 km long bridge, two interchanges, coastal and river protection works, retaining structures etc. The design speed is 90km/h on the section (except at interchanges).
- 3. The project starts at the last interchange of the newly constructed Batumi Bypass project with a south - southwest direction. Within a length of approximately 1km, the proposed road project reaches the north bank of the Chorokhi river, which is crossed with a 1.47km long bridge. In the section before the bridge there is the main interchange of the project which provides the connection to the Custom Clearance area, the Airport and the popular coastal resorts and settlements. The south abutment of the bridge is in the village of Akhalsopeli. The road corridor continues in the same direction and within less than 100m from the abutment of the bridge, enters the 7.6km long Tunnel. This tunnel bypasses from the east side the main settlements of Gonio and Kvariati. The project road exits from the tunnel at the location of the St. Andrew waterfall, and slightly changes orientation from southwest to south, where it runs along the steep coastal area. In this area, for approximately 500m the project includes coastal protection measures with a retaining wall and arrangement of 15-ton Tetrapods. At the portal of the tunnel there is an arrangement of an interchange which provides a connection to the coastal resorts from the south. This interchange also includes a bridge for crossing the St. Andrew Waterfall. In this area the design also includes rockfall protection measures with a combination of retaining walls and high tensile wire nets. The project ends before the entrance to the Sarpi Settlement where there it connects to the existing road.
- 4. In areas where the road is on embankment, the road mainly includes 4 driving lanes, while in the tunnel and the bridge, the project includes only 2 driving lanes with a bi-directional flow. In the first section of the project before the bridge, the road includes 2 driving lanes per direction and acceleration lanes as per the requirements of the interchange. In this section, the opposing directions are separated with single sided concrete barriers and a center island. In the last section, from the south tunnel portal to the end of the project, the layout is similar, however, to reduce the footprint of the project, instead of a single sided barrier and the island, a double-sided barrier is adopted.
- 5. The road on the bridge includes 2 x 3.75m wide lanes and 1.75m wide hard shoulder while in the tunnel, the shoulder is reduced to 0.25m. In both cases the design foresees a 0.5m wide

separation safety strip outlined with road marking. The design includes flexible asphalt pavement in the open sections, and concrete pavement in the tunnel due to relevant safety regulations.

- 6. The project's detailed design has been prepared for the Roads Department of Georgia by international consultants financed by the Asian Development Bank, and the tasks included in addition to the detailed design an alternative alignment analysis and feasibility study, economic analysis, cost estimates, procurement documentation, environment impact assessment and a land acquisition and resettlement plan.
- 7. The Government of Georgia has applied for loan financing from ADB for the project. The executing agency for the project will be the Ministry of Infrastructure (MOI) and the implementing agency will be its Roads Department (RD). RD will be the Employer for the civil works contract.
- 8. The project will be implemented through one civil works contract. The RD is procuring this contract under the open competitive bidding procedures of Procurement Regulations for ADB Borrowers. The contract will be based on "Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer ("Red book") Second edition 2017" published by the Federation Internationale Des Ingenieurs Conseils (FIDIC). The Contract Period will be 48 months from the commencement date. The Defects Notification Period will be 36 months.
- 9. These Terms of Reference (TOR) will be used by the RD to select a construction supervision consultant (CSC), in accordance with the procedures set out in ADB Procurement Regulations for ADB Borrowers (2017, as amended from time to time). Consultant selection will be based on quality and cost criteria, with a quality: cost ratio of 90:10. The resulting contract will be time-based.

B. Scope of Work and Required Outputs

10. The consulting services will comprise the following tasks and associated deliverables:

Task 1	Design Review
Task 2	Contract Supervision
Task 3	Environment, and Health and Safety Support and Monitoring
Task 4	Resettlement and Social Safeguards Monitoring
Task 5	Project Management
Task 6	Review the Connection between the Project Road and the Customs
	Clearance Area from Traffic Management and Road Safety Perspectives

Task 1 Design Review

11. The CSC will review the project design in conjunction with technical specifications and bills of quantities and recommend improvements or changes as necessary to ensure fitness for purpose of the detailed design. This review will include preparing for the RD's consideration an improved arrangement for public access to the St Andrew's waterfall area.

Task 2 Contract Supervision

12. The CSC will supervise the civil works contractor and equipment suppliers, if applicable. Tasks will include the following:

https://www.adb.org/sites/default/files/institutional-document/367151/procurement-regulations-adb-borrowers.pdf



- (i) administering the civil works contract as the Engineer, and undertaking the duties of the Engineer, as defined in the civil works contract;
- (ii) checking contractor's bank securities' compliance with the contract and tracking their validity;
- (iii) ensuring that the contractor's insurances are in line with the contract and tracking their validity;
- (iv) conduct a Pre-Construction Cultural Heritage Survey² prior to the commencement of construction and submit a report within 2 months from the effective date of the Contract:
- (v) based on contract designs, identify all public utilities that are to be relocated, or marked to be protected to avoid damage and provide the Employer with schedules of these for its interaction with the relevant utility agencies to arrange for the affected utilities' relocation from the project-affected area of the right-of-way;
- (vi) carry out road safety audits during the design review stage within 8 weeks from the commencement date and again 3 months prior to the completion of the works and as necessary instruct the contractor to amend completed works or undertake additional works to comply with the findings of the audits;
- (vii) ensuring that the contractor's topographical surveys to be used, working drawings, as-built drawings and measurement purposes comply with the requirements of the specifications;
- (viii) checking and approving the contractor's method statements, working drawings, and programs for both temporary and permanent structures;
- (ix) developing a comprehensive system of inspection checking and recording to ensure compliance of all works with contract requirements;
- (x) developing measurement and payment systems; establishing a monitoring system for costs to date, and costs to completion; providing a system for the preparation of interim and final payment certificates; providing advice on the evaluation of claims and extensions of time, providing advice on the preparation of variation orders, and for monitoring variation orders; establishing a claims monitoring, evaluation and reporting system; and assisting and advising the Employer on all matters pertaining to the contract and to disputes;
- (xi) providing day-to-day supervision and inspection of works on site; maintaining by the supervision staff of a site diary covering all contractor's activities, and recording site conditions;
- (xii) prior to commencement of works, approving the contractor's method statements and working drawings including pre-works conditions of the sites, permits and clearances per applicable national legislations, site-specific and/or work-specific risk assessments, site-specific environmental management plans, occupational and community health and safety plans, traffic management and traffic control arrangements, proposed locations for campsites, officers, storage areas, waste holding areas, borrow locations, working areas, materials stockpile areas,

The main objectives of the Cultural Heritage Study are to allow, within the resources available, the preservation of known and unknown (archaeological) cultural heritage sites the presence and nature of which could not be established (or established with sufficient accuracy) in advance of construction. More specifically, the Study shall; (1) Ensure the Contractor follows his Cultural Heritage Management Plan and follows the Chance Find Procedure; (2) Be present during site clearance (i.e. clearing, Topsoil stripping, grading, etc.) and earthworks to assist with the initial evaluation of archaeological chance finds, helping to distinguish archaeological finds from non-archaeological anomalies and to communicate initial data on such findings to appropriate the Contractor's project personnel, the Engineer's Team Leader / Resident Engineer and the RD, and (3) be responsible for visual inspection of above ground cultural heritage that could be affected by vibration or other impacts as outlined in the EIA.



- materials preparation, and processing areas, public and private haul and access routes, together with the contractor's arrangements for maintenance and reinstatement of areas disturbed or used during works to pre-works or better conditions, etc.;
- (xiii) reviewing, commenting upon, and accepting the contractor's quality assurance plans and procedures; assisting the contractor with establishing on-site and laboratory-based quality control, testing, and reporting procedures for all construction, workmanship, and materials; supervising the contractor in implementation of their approved quality assurance plans;
- (xiv) prior to the commencement of construction, approving the contractor's Construction, Environment, Health and Safety, and Labor Management Plans, and during construction ensure that the contractor complies with the requirements of these plans;
- (xv) commenting on and ultimately approving the contractor's Site-Specific Environmental Management Plans (SSEMPs) and, thereafter, monitoring and reporting compliance with these plans;
- (xvi) monitoring the contractor's plans, programs and costs to completion and providing advice to the Employer on procedures necessary to complete the works within the time and cost stated in the works contract;
- (xvii) reviewing and approving the contractor's program of works (POW), monitoring it during implementation, alerting the RD of lags with reasons thereof, and actions taken with and by the contractor;
- (xviii) reviewing, commenting, and approving the contractor's extension of time requests and ensuing time claims, if applicable, and the consequent revisions in the POW using agreed software consistent with contemporary project management practices, including the use of Building Information Modelling (BIM) software. The aim of this is to ensure that the works are well planned and timely delivered, and that the unforeseen actions requiring revision of the POW are adequately incorporated;
- (xix) preparing reports and providing assistance, as necessary and as required, to the Disputes Board if appointed, and during any subsequent arbitration procedures;
- (xx) conducting monthly Contract Site Meetings to be attended by representatives of the Employer and the contractor, and preparing the minutes of such meetings and circulating them among the participants; attending and making presentations at progress coordination meetings and similar progress reviews;
- (xxi) providing the Employer with complete records and assisting the contractor with providing "As Built" drawings for the contract; certifying completion and taking over of part or all the works;
- (xxii) preparing Final Payment Certificate, Taking Over Certificate, and Performance Certificate, to the timing of, and as required by, the contract, and advising the Employer on the release of all contractor's securities and retentions; and
- (xxiii) Use BIM models to verify that construction aligns with approved designs and specifications, monitor project timelines and budget adherence using BIM-enabled scheduling and cost data; identify potential delays or cost overruns early through BIM insights; identify risks and potential issues on-site by cross-checking construction with BIM models; maintain up-to-date project documentation, including BIM model revisions, use BIM for quality assurance inspections, ensuring installation accuracy and compliance with design intent; leverage BIM data to track defects or non-conformities and monitor corrective actions, integrate BIM into the supervision workflow to enhance efficiency and transparency.

- (xxiv) Review and provide advice on any proposed changes to the Original Design submitted by the Contractor (for example: tunnel elements variation, bridge variation or any kind of technical proposal). In doing so, the Consultant will compare the proposed changes with the Original Design, analyze the advantages and disadvantages of the proposed changes and advise the Client on their reasonableness and feasibility.
- (xxv) In case the necessity for redesign/design adjustment arises and the contractor fails to submit such, the Engineer will provide redesign services and make adjustments to the Original Design as instructed by the Client. In such case the Consultant will present: (i) a description of the consultancy assignment and the specific scope and expertise required; (ii) An estimation of the required team with a breakdown of the number of months per each specialist to carry out the activity, (iii) a schedule of the activities for the consultancy assignment

Task 3 Environment Health and Safety Support and Monitoring

13. The CSC will ensure the compliance of the contractor with applicable safeguard requirements and relevant laws, rules, and regulations on environment, health and safety. The CSC shall ensure full implementation of the Project's Environmental Management Plan (EMP), which is part of the civil works contract and also part of project's Environmental Impact Assessment (EIA), contractor's SSEMPs, and all related documents. The specific tasks will include the following:

Prior to commencement of the works:

- (i) review of project's EIA, ADB requirements, applicable safeguard requirements and relevant laws, rules, and regulations on environment, health and safety, and prepare the Project's Environmental Supervision and Monitoring Guidance Manual including a compliance monitoring system relative to requirements on environment, health and safety, monitoring and corrective action forms and checklists, inspection procedures, and documentation procedures;
- (ii) organize an orientation program for MOI and RD staff on how the environmental aspects of the project will be monitored and topics such as but not limited to the CSC's Environmental Supervision and Monitoring Guidance Manual, SSEMP evaluation, compliance monitoring of construction activities and preparation of corresponding reports; supervision responsibilities and interaction with contractor; and documentation, resolution and reporting of non-compliance issues and complaints;
- (iii) collate and review all relevant safeguard documents (EIA, approved permits, clearances), laws, rules, regulations, etc, and provide RD with checklists and timebound actions to be provided to the contractor for guidance, compliance and monitoring:
- (iv) ensure safeguard documents are consistent with the contract's technical specifications and drawings, conduct pre-works site inspections, identify potential impacts that have not been covered in the EIA if any, and if needed, inform RD of any updates required prior to contractor's start of preparation of the SSEMPs;
- (v) undertake initial site walkover surveys to establish whether further investigation is required;
- (vi) organize an induction program for CSC team members and contractors, on project requirements related to environmental safeguards, health, safety, and relevant national laws, rules, regulations, compliance monitoring system to be used,

- notification of non-compliance, and the process of requiring the contractor to implement corrective measures when necessary;
- (vii) provide assistance to RD on the environmental and social aspects of the project;
- (viii) prepare and implement the pre-works ambient environmental monitoring program at different areas that will be affected by the project and at control points (areas not affected) considering parameters specified in the EIA or as may be required in environmental permits/clearances;
- (ix) prepare the ambient environmental monitoring program for use during and after completion of works to include sampling locations and maps, parameters, frequency, quality assurance/control, standards to be followed, reporting, and linkage to corrective action planning;
- (x) provide guidance to the contractor on preparation of pre-works site conditions report, hazard and risk assessments, SSEMPs, and other plans as may be required to meet requirements of permits, clearances, and of national laws, rules, and regulations;
- (xi) evaluate environment, health and safety information of the contractor's method statements and working drawings and pre-works site conditions report, hazard and risk assessments, SSEMPs, permits and clearances; and recommend corrective actions needed, if any, to ensure compliance with the project's environmental and social requirements;
- (xii) assess and approve use of temporary construction areas identified during construction such as camps, laydown areas, access roads, etc.;
- (xiii) provide guidance to the contractor on how their respective SSEMPs will be implemented including the: (a) requirements for each mitigation measure, and (b) implementation schedule of each mitigation measure taking into consideration the general requirement that no specific construction activity will be approved to be commenced if the associated mitigation measures for such activity are not ready before work commences;
- (xiv) assist the RD with establishing and operating the grievance redress mechanism, including creating a grievance chart (format to be agreed with the RD) which is to be updated on a weekly basis;
- (xv) prepare new or revise existing terms of reference for studies and/or experts on environment, health, and safety as may be required by RD;
- (xvi) assist RD and social safeguards team in organizing and conducting public consultations, focus group discussions and/or activities related to stakeholders engagement and dissemination of project information;
- (xvii) perform tasks/activities as may be required or identified in the project's EIA and/or permits and clearances relevant to start of construction activities; and
- (xviii) conduct a Pre-Construction Survey on cultural heritage prior to the commencement of construction and submit a report on Cultural Heritage.

During implementation of the works:

(i) regularly review and assess contractor's SSEMPs to verify its applicability and the resources (staff and budget) are allocated by the contractor, require the contractor to update their respective SSEMPs when necessary and recommend to RD

- actions to ensure compliance with requirements on environment, health, and safety;
- (ii) conduct regular refresher training or sessions to ensure the contractor fully understands the CSC's Environmental Supervision and Monitoring Guidance Manual and compliance monitoring system;
- (iii) supervise the implementation of the SSEMPs, the project EMP, SSEMP, other relevant topic-specific management plans, and the contractor fully comply with applicable national laws, rules and regulations on environment, health and safety;
- (iv) undertake daily inspection, monitoring and reporting of activities and contractor's measures at construction sites and construction-related facilities such as but not limited to workers' camps, asphalt batching plants, concrete batching plants, borrow pits, topsoil storage areas, disposal sites for tunnel and other spoil and unsuitable materials, equipment maintenance areas, fuel and materials storage sites, project-specific quarries and crushers, etc.;
- (v) undertake environmental monitoring per approved ambient environmental monitoring program, or if the environmental monitoring will be conducted by independent third-party contractors, prepare the monitoring report with analysis of the results, comparison with the pre-works or baseline conditions, and required actions;
- (vi) evaluate the contractor's submitted works activities and schedules relative to the requirements of the approved SSEMPs, and recommend corrective actions as may be required;
- (vii) monitor the contractor's compliance with health and safety requirements of the project as stipulated in the contract documents and their approved health and safety plans and require the contractor to provide updated plan when necessary;
- (viii) record the non-conformance cases, inform contractor of corrective actions needed, respond to contractor's proposals, prepare corrective action plans for contractor, and monitor their implementation;
- (ix) assess and approve use of temporary construction areas identified during construction such as camps, laydown areas, access roads, diversion roads, etc that have not been approved prior to start of works;
- (x) maintain a database and photo-documentation of all sites and facilities, including properties and lands leased/rented by the contractor that is associated with the project, and ensure environmental mitigation measures are applied to avoid pollution or contamination of these sites and facilities;
- (xi) include information on environment, health and safety in all project progress reports and monitoring reports for submission to the RD;
- (xii) prepare environmental monitoring reports (EMRs), as required by ADB;
- (xiii) prepare reports as may be required by applicable national laws, rules and regulations on environment, health and safety;
- (xiv) provide support to external environmental monitoring team and ensure access to sites and records for preparation of external monitoring reports;
- (xv) ensure safeguard documents are available on-site and accessible to stakeholders and affected people in language and form they understand;
- (xvi) support and participate in public consultations, focus group discussions, information dissemination, and/or activities per project's Stakeholders Engagement Plan or RD's activities related to engaging with stakeholders;
- (xvii) assist in addressing grievances or complaints and prepare action plans as may be required to address, monitor, and close grievances or complaints;
- (xviii) provide technical, administrative and logistical support to RD, CSC team members, and contractors to plan, organize and implement relevant plans on environment,

- health and safety that may be identified to address unanticipated impacts or implementation of corrective action plans;
- (xix) deploy cultural heritage monitor (CHM) on-site in locations close to known cultural heritage sites, or in areas with high potential as identified during the preconstruction phase; and (i) ensure the Contractor follows his Cultural Heritage Management Plan and follows the Chance Find Procedure; (ii) be present during site clearance (i.e. clearing, Topsoil stripping, grading, etc.) and earthworks to assist with the initial evaluation of archaeological chances find, helping to distinguish archaeological finds from non-archaeological anomalies and to communicate initial data on such findings to appropriate the Contractor's project personnel, the Engineer's Team Leader / Resident Engineer and the RD; and (iii) be responsible for visual inspection of above ground cultural heritage that could be affected by vibration impacts as outlined in the EIA;
- (xx) design and implement monitoring tools using IT or similar technology that will aide in the monitoring and reporting of environment, health and safety measures, complaints/grievances, etc.; and
- (xxi) perform tasks/activities as may be required or identified in the project's EIA and/or permits and clearances relevant to construction activities.

Upon completion of the works:

- (i) prepare a post-construction environmental audit report which will include information on restoration and rehabilitation of the impacted sites, disposal sites for the construction wastes and excess materials, pending/open non-conformances recorded in logs/records, EMRs, pending/open complaint regardless if this is environment or social-related, lands used by contractor regardless if state- or private-owned land, property or facility used by the contractor regardless of ownership, point-wise environmental permits/clearance conditions and status of compliance, action plan for any uncompleted or open item, and lessons learned that may help RD in their environmental monitoring of future projects;
- (ii) ensure sites and facilities have been cleaned up, restored, and/or rehabilitated to pre-works conditions or better, prior to the demobilization of the contractor;
- (iii) ensure databases, records and reports are properly handed over to RD; and
- (iv) prepare inputs on environment section of overall project completion report.
- 14. The CSC's International Environment Specialist (IES) will undertake the initial monthly monitoring, working with the National Environmental Specialist (NES). Subsequent daily monitoring will be carried out by the NES. The IES will undertake semi-annual monitoring and report preparation working with the NES. The required semi-annual environmental report, in a format to be agreed with ADB, will be based on the results of daily monitoring.

Task 4 Resettlement and Social safeguards Monitoring and Social Development

- 15. The CSC's social management tasks will cover:
 - (i) Involuntary Resettlement Management
 - (ii) Stakeholder engagement, Communications and Participation Planning and Implementation
 - (iii) Road Safety Awareness Campaigns
 - (iv) HIV/AIDS and Human Trafficking Awareness Campaigns

(v) Gender and Equal Opportunity.

16. **Involuntary resettlement management.** The CSC will support the RD with:

- updating the project resettlement plan, if needed and/or requested by RD in (i) accordance with Government and ADB requirements, prior to commencement of construction in a section of a road, including: (a) guiding and supporting the planning and implementation of the detailed measurement surveys, if not already completed, (b) updating the socio-economic surveys, if required, (c) guiding and supporting the updated replacement cost surveys to ensure that compensation rates are based on full replacement cost at time of compensation, (d) supporting the preparation of detailed relocation and income restoration strategies, in consultation with affected households, civil society and relevant Government agencies, (e) ensuring meaningful consultation and participation of affected households, civil society stakeholders, community-based organizations, and relevant government agencies in the planning and implementation of the resettlement plans, (f) supporting the RD and relevant Government agencies to ensure appropriate disclosure of the resettlement plan, and (g) preparing and supporting the RD in the finalization of the updated resettlement plan to the stage where they are endorsed by the Government and receive ADB concurrence;
- (ii) providing the RD with detailed schedules and allocation of responsibilities for demolition or relocation of structures, compensation, and assistance to affected households, and monitoring their implementation to ensure that the notice to proceed to the contractor for any given section cannot proceed until the RD confirms in writing that payment has been fully disbursed to the displaced and/or affected people, and rehabilitation measures are in place, already compensated or assisted displaced people have cleared the area, and the area is free of any encumbrances confirmed through the Compliance Report by Independent External Monitor and cleared by ADB;
- preparing updates and supplementary resettlement plans and or corrective action (iii) plans (CAP) in accordance with the Government and ADB requirements to cover any changes in the scope of works covered by the resettlement plans and ensure their implementation and monitoring prior the civil works on subject areas/sections. This shall cover (a) planning and implementation of the detailed measurement surveys, (b) census and socio-economic surveys, (c) valuation of compensation for lost assets by independent valuator as per replacement cost principle of ADB Safeguard Policy Statement (2009) (d) preparation of detailed relocation and income restoration strategies, in consultation with affected households, civil society and relevant Government agencies, (e) ensuring meaningful consultation and participation of affected households, civil society stakeholders, communitybased organizations, and relevant government agencies in the planning and implementation of the supplementary resettlement plans/CAPs, (f) supporting the RD and relevant Government agencies to ensure appropriate disclosure of the supplementary resettlement plans/CAPs, and (g) supporting the RD in the finalization of the supplementary resettlement plans/CAPs to the stage where they are endorsed by the Government and receive ADB concurrence;
- (iv) monitoring of implementation of resettlement plans and income restoration activities, and reporting on a quarterly basis;
- (v) recommending corrective actions on non-compliance issues, and reporting on their implementation;

- (vi) coordinating the works of the Independent External Monitor, which RD will contract to carry out a 100% monitoring of affected people, including preparing Compliance Reports:
- (vii) supporting the RD and relevant Government agencies to establish an effective grievance redress mechanism and ensure it is operational;
- (viii) support social safeguards team on resolving complaints/grievances and in activities related to public consultations, focus group discussions, etc.;
- (ix) providing capacity building training on project social safeguards requirements, implementation arrangements and monitoring requirements;
- (x) monitor the project's labor and human resource management performance, ensure compliance with ADB Safeguard Policy Statement requirements;
- (xi) monitor the contractor's compliance with labor requirements of the project as stipulated in the contract documents and their approved labor plan and require the contractor to provide updated plans when necessary;
- (xii) closely coordinate with the environment team to timely address any environment-induced social impacts and risks; and
- (xiii) draft semi-annual social safeguard monitoring reports, as required by ADB.
- 17. **Project communications plan.** The CSC will develop and implement a Project Communications Plan, in line with the Stakeholder Engagement Plan developed under the project. The Project Communication Plan will include:
 - (i) **Stakeholder relations.** The CSC will assist the RD with holding stakeholder outreach meetings in the project area to update local communities and other stakeholders with project progress. Specific communications materials will be provided to community members in Georgian, describing the project, relevant governing ADB policies and procedures, benefit entitlements (for affected people), grievance redress mechanism, HIV/AIDS, safe working conditions, etc. A comprehensive tracking system will be maintained to record consultation activities, the provision of project information, to register concerns and/or complaints received, and to track follow-up action.
 - (ii) **Road user information.** The CSC will ensure that clear and updated information is provided to road users about current and future disruptions caused by the works.
- 18. Road safety awareness program. The CSC will design road safety awareness campaigns for communities in the vicinity of the project. The CSC will subcontract the implementation of the campaigns to a local consultant or non-governmental organization and assist it with developing the capacity to undertake this task.
- 19. **HIV/AIDs** and human trafficking awareness program. The contractor will be required to design a gender-sensitive HIV/Aids and Human Trafficking Awareness program, for the CSC's review and approval. The contractor will subcontract the implementation of the campaign to a local consultant or non-governmental organization. The CSC will facilitate and monitor implementation of the program.
- 20. **Gender and equal opportunity.** The CSC will design, manage and monitor activities related to strengthening/safeguarding equality of opportunity, and ensure that these are implemented and monitored using appropriate resources and indicators.

Task 5 Project Management

- 21. The CSC will support the RD in the following aspects of Project management:
 - (i) Contract management assistance
 - (ii) Document management
 - (iii) Project reporting to RD in a format agreed with the RD, and preparing for ADB missions
 - (iv) Project completion report
- 22. **Contract management assistance.** The CSC will provide day-to-day assistance to the RD in interpretation of contract clauses, sharing best practices on contractual issues, countermeasures to the non-compliance by contractor, etc. under FIDIC-based contracts.
- 23. **Project reporting.** The CSC will prepare the reports in accordance with Table 3: Reporting Requirements below in a format agreed with RD and ADB.
- 24. **Document management.** The CSC will establish a document management and sharing system enabling efficient recording, storage, and access of all communications regarding contract procurement and management, project management, financial management, and safeguards, among others, and efficient information sharing between the contract parties, and with ADB.
- 25. **Project completion report.** The CSC will prepare a project completion report in accordance with ADB's format and content for such reports. This will require among others (a) conducting a baseline survey prior to construction commencing and final survey of the project road, to include an assessment of classified traffic volumes, average speeds, number and severity of accidents, International Roughness Index and pavement condition on the existing road, (b) conducting a baseline and final survey of freight transport and public transport costs on the project road, and (c) carrying out an economic analysis of the completed project road.

TASK 6 Review Connection with Customs Clearance Area

- 26. The project design includes an interchange by which international truck traffic proceeding to and from the project road to the existing Customs Clearance Area will join the existing road connecting these locations.
- 27. The CSC will prepare a study of likely traffic movements between the project road and the Customs Clearance Area from the perspective of effective traffic management and operational safety. The study will take into account: (i) projected increases in traffic volumes over the project's service life, based on the traffic studies undertaken as part of the project's original design; (ii) the requirement that trucks should not queue while waiting for clearance on any part of the project road, and that two-lane access would be available at all times along this road; and (iii) traffic safety provisions not less than those that apply to the project road be maintained at all times.
- 28. The CSC will provide the RD with a report setting out the findings of the study, to include suggestions for ensuring that the project road-Customs Clearance Area interface should be efficiently and safely managed. These suggestions will address key operational challenges such as truck queuing, traffic flow, and congestion control to minimize delays and improve overall throughput. Suggestions may encompass strategies for optimizing queue management and

implementing effective traffic control measures. The goal of these measures is to prevent traffic bottlenecks and enhance safety.

- 29. RD will decide on the suggestions, and should the RD decide to proceed with any of these suggestions, the CSC will prepare the required estimates, etc. as needed for RD to execute such works.
- 30. Unless the RD advises otherwise, the CSC's study would commence about 6 months after the civil works contract commencement and be completed within 3 months.

C. CSC Personnel

31. The indicative staffing requirements for the CSC services are presented in Tables 1 and 2 below. Qualifications and term of reference (TOR) for each of the key staff are provided in **Annex 1**. The civil works contract period is 48 months + 36 months defects notification period (DNP).

Table 1: International Personnel

Ref	Position	CS	DNP	Total
1.	Team Leader (Note 1)	48.00	12.00	60.00
2.	Senior Resident Engineer	48.00		48.00
3.	Senior Quality Assurance/Quantity Survey Engineer	45.00	12.00	57.00
4.	Senior Bridge Engineer	33.00	6.00	39.00
5.	Senior Tunnel Engineer	45.00	12.00	57.00
6.	Senior Tunnel Systems Specialist – Electrical, Mechanical, Safety	16.00	6.00	22.00
7.	Senior Geotechnical Engineer	36.00	-	36.00
8.	Senior Occupational Health and Safety Specialist	12.00	-	12.00
9.	Senior Materials Engineer	24.00	-	24.00
10.	Senior Resettlement/ Social Development Specialist	12.00	2.00	14.00
11.	Senior Environmental Specialist	12.00	2.00	14.00
12.	Senior Contract Specialist	12.00	3.00	15.00
13.	BIM (Building Information Modelling) Engineer	8.00	-	8.00
	Total	351.00	55.00	406.00

Table 2: National Personnel

Ref	Position	CS	DNP	Total
	Key staff			
1.	Deputy Team Leader / Resident Engineer	48.00	12.00	60.00
2.	Tunnel Engineer	45.00	12.00	57.00
3.	Bridge Engineer	33.00	6.00	39.00
4	Geotechnical Engineer	24.00	-	24.00
5.	Quality Assurance Engineer	48.00	6.00	54.00
6.	Quantity Survey Engineer	48.00	6.00	54.00
7.	Environment Specialist	48.00	4.00	52.00
8.	Resettlement/ Gender/Social Development Specialist	48.00	4.00	52.00
9.	Occupational Health and Safety Specialist	48.00	-	48.00
10.	Road Safety Engineer	6.00	-	6.00
11.	Planning Specialist	48.00	-	48.00
	Total	444.00	50.00	494.00
	Total key staff (international and national)	795.00	105.00	900.00

Note 1: The Team Leader is to be full-time staff of the Consultant

- 32. Tables 1 and 2 set out the Client's estimate of the minimum key staff input required for the assignment. If a consultant considers that additional involvement of the key staff is required, it is free to include such input in its proposal. If no additional input is included in the proposal, it will be understood that the Consultant is satisfied with the minimum input for key staff provided above and takes full responsibility to fulfil all obligations as set out in the TORs with the indicated inputs.
- 33. Apart from the Key Staff listed above, the Consultant is fully responsible to determine and provide (in its proposal) any and all additional experts (as Non-key staff) that might be necessary for proper implementation of the duties prescribed by the TOR.
- 34. Such experts, among others, might include but not be limited to a cultural heritage monitor, site engineers, survey engineers, laboratory technicians, CAD Specialists, drivers, translators etc. However, the non-key expert Cultural Heritage Monitor is mandatory for the CSC, and a time input of 6 person-months is to be provided.
- 35. A Transport Economist will be included in the home office support provided by the firm's head office with an input of 6 person-months.
- 36. Curricula vitae must be provided with consultants' proposals for all key positions. Proposal evaluation will be based on all international positions (Table 1), and for national personnel nominated for key national positions (Table 2) identified above as key staff. The remaining national staff will be discussed and agreed with the selected consultant during contract negotiations or during implementation, and replacements may be requested at that time. Home office support as required will be provided by the Consultant.
- 37. The civil works contract will include provision for provision and operation of the CSC's site offices, office equipment, laboratories with technicians, equipment and other support services, survey technical support with survey equipment, and other support as required. However, the cost

for providing and maintaining vehicles for the CSC's use are to be included in the consultants' financial proposals. See Sections V and VII below for relevant information.

D. Reporting Requirements

38. Table 3 sets out the CSC reporting requirements. All reports will be submitted in English in hard copy to the RD (2 copies) and in electronic form as PDF files through an appropriate large file transfer application. The English reports shall also be supported by Georgian translations. The RD and ADB will agree on suitable formats for the progress reports prior to the submission of the first such report.

Table 3: Reporting Requirements

Report	Content	Submission Date
Inception Report	Report will contain a detailed work program, a brief description of the updated work methods proposed for carrying out the services in accordance with the Terms of Reference. The report will also identify any major issues and	4 weeks after effective date
Design Review Report	problems likely to be encountered. The CSC shall undertake a detailed engineering review of the design as included in the civil works contract to identify any defects/omissions, which affect the completeness, consistency, and fitness for purpose of the design. This review shall be carried out after the services commence and a detailed Design Review Report shall be submitted to the Employer. This report will set out all findings and recommendations for making good any defects/omissions identified in the engineering design.	Within 2 months from the effective date
Report on Cultural Heritage	The report will include methodology and findings of the pre-construction survey, potential impacts of the road construction on the identified cultural resources, recommendations for mitigation measures, summary of findings and recommendations	The Cultural Heritage Monitor will conduct a Pre-Construction Survey prior to the commencement of construction and submit a report within 2 months from the effective date of the Contract.
Report on Connection with Customs Clearance Area	The report will provide the information set out in the detailed TOR for Task 6 and will be the basis for RD and ADB to consider the road connection to the Customs clearance Area	Task 6 will commence within 6 months of the commencement of the CSC services, and the report will be submitted within 3 months of Task 6 commencement.
Monthly Reports	Monthly Report to summarize the progress of the project and of the civil works contract, the work accomplished, any problems encountered during the month, environmental and resettlement and social safeguards status, GAP, a work plan for the next month, and minutes of site meetings. The report will present progress information in graphical form, relative to the contractor's approved contract schedules.	Within 10 calendar days after the end of each month
Annual Reports	Annual reports to present the overall status of all aspects of the project, including progress achieved by project outputs measured against the targets of the design and monitoring framework (DMF), updated procurement plan, compliance with loan covenants, etc.	Within 2 months after the end of the contract year to which the report refers

Report	Content	Submission Date
Environmental Supervision and Monitoring Guidance Manual	Environmental Supervision and Monitoring Guidance Manual including a compliance monitoring system relative to requirements on environment, health and safety, monitoring and corrective action forms and checklists, inspection procedures, and documentation procedures	Within 30 calendar days upon mobilization of the CSC
Environmental Monitoring Reports	Environmental monitoring report to include status of compliance with the project EMP, records of related activities, status of grievance redress mechanism, issues and solutions, results of environmental baselines and monitoring.	Within 15 calendar days after the end of each 6-month reporting period
Social and Resettlement Monitoring Reports	Social and resettlement monitoring report to include status of compliance with resettlement plans, records of social and resettlement activities, status of grievance redress mechanism, communication/consultation and issues and solutions.	Within 15 calendar days after the end of each 6-month reporting period
Road Safety Audit Reports	Detailed findings and recommendations of the road safety audits	(i) Within 8 weeks from the commencement date. (ii) 3 months prior to the completion of the works. (iii) In the first month after taking over of the works.
Safeguards Completion Reports	Final status of compliance, summary records of activities, grievance redress mechanism and monitoring results with reference to baselines.	No later than 3 months after the completion of all civil works (for environmental reports), no later than 3 months after the completion of all resettlement activities (for resettlement reports).
Draft Completion Report	The report will be based on the standard ADB format for project completion reports and will provide additional information relevant to the overall project implementation.	Not later than 3 months prior to completion of the civil works contracts.
Final Project Completion Report	This report will update the draft report with contract completion information, and will reflect comments provided on the draft completion report	Not later than 3 months after completion of the last of the civil works contracts.

E. Location of Services

- 39. It is anticipated that for the duration of the project the locations for the CSC establishments will be as follows:
 - (i) Khevlachauri; and
 - (ii) Sub-offices at project sites, for example the southern portal of the tunnel if needed.

F. Schedule

40. The civil works implementation period will be 48 months from the commencement date. The DNP will be 36 months.

G. Support, Counterpart Personnel, and Information

1. Services and Facilities to be Made Available to the CSC

- 41. The following facilities will be provided through the civil works contract at no cost to the CSC:
 - (i) field offices for the CSC field team. The offices will be fully furnished, maintained and serviced, including all office equipment, computers, software and printers, all consumables, and security; and
 - (ii) materials testing laboratories, fully equipped, serviced and maintained, including equipment for field and laboratory testings, computers, software and printers and all consumables, and with appropriate technical personnel.
- 42. Except for the items stated above in para 41, all other costs (necessary for implementation of the services) should be provided for in the Consultant's Financial Proposal (i.e. vehicles for supervision services, any office/residential accommodation except site office, etc.)

2. Counterpart Personnel to be Assigned by RD to the CSC

43. The RD will provide counterpart staff to work with the CSC. The counterpart staff are to be trained by the CSC to gain hands-on experience in all aspects of project management and contract supervision. The counterpart staff will not work as members of the CSC team for delivering the services and they will be paid salaries by the Government. The cost of these counterpart staff will not be included in the Consultant's proposal and subsequent contract agreement.

3. Reports and Information

44. The RD will provide all relevant existing reports and available documents to the CSC during the implementation of the services. The RD will assist with facilitating access of the CSC to other government agencies for communications, collecting of relevant information, data, documents, etc. and other activities related to the services.

ATTACHMENT 1: POSITION TERMS OF REFERENCE AND QUALIFICATIONS

A. International Consultants

- 1. **Team Leader.** Professionally qualified civil engineer, with Project Management Professional (PMP) certification, preferably with 20 years and minimum 10 years' experience in projects similar to the project including hard rock tunnelling and major bridge works, implemented under FIDIC or similar contracts, and 10 years' experience as a project manager. The team leader will be responsible to RD as the Employer, for the successful implementation of the project, and for managing the CSC team. The team leader will also assist RD as required with matters related to the project, including providing responses to ADB's requests, and preparing for ADB missions. The Technical Proposal of the Company if shortlisted will include the copies of the requested certificate (s).
- 2. **Senior Resident Engineer.** Professionally qualified civil engineer, with PE (Professional Engineer) and/or Chartered Engineer (CEng), and/or EUR ING (European Engineer) certification or licensed by engineer chambers or by the relevant organizations registered with ministries or professional entities, preferably with 15 years' and minimum 8 years of experience in projects similar to the project, implemented under FIDIC or similar conditions, and preferably with 5 years of experience in the construction of tunnels. The Senior Resident Engineer will be responsible to the Team Leader and for managing the consultant's team members. The Technical Proposal of the Company if shortlisted will include the copies of the requested certificate (s).
- 3. **Senior Quality Assurance/Quantity Survey Engineer.** Professionally qualified civil engineer or equivalent, preferably with 10 years' and minimum 5 years' experience in projects similar to the project, including establishing and implementing quality assurance systems, measurement and payment systems, document management systems, and other related systems, preferably for projects financed by ADB or similar funding agencies. The Senior QA/QS Engineer will be responsible to the Team Leader for all matters related to overall quality assurance and contract measurement and payments, document management, processing contractor's interim payment certificates for certification, and assisting the RD as required with processing ADB financing applications.
- 4. **Senior Bridge Engineer.** Professionally qualified civil engineer, with PE (Professional Engineer) and/or Chartered Engineer (CEng), and/or EUR ING (European Engineer) certification or licensed by engineer chambers or by the relevant organizations registered with ministries or professional entities, preferably with 10 years' and minimum 5 years' experience in projects involving the construction of major bridges similar to the project bridges, reviewing contractor's method statements and working drawings, etc. The Senior Bridge Engineer will be responsible to the Team Leader for all activities related to the project's bridge and related works and will support the Senior Resident Engineer for the structural aspects of the contract supervision task. The Technical Proposal of the Company if shortlisted will include the copies of the requested certificate (s).
- 5. **Senior Tunnel Engineer.** Professionally qualified civil engineer, with PE (Professional Engineer) and/or Chartered Engineer (CEng), and/or EUR ING (European Engineer) certification or licensed by engineer chambers or by the relevant organizations registered with ministries or professional entities, preferably with 10 years' and minimum 5 years' experience in projects similar to the project, to include tunnels constructed using NATM methodologies. The Senior Tunnel Engineer will be responsible to the Team Leader and to the Senior Resident Engineer for

all activities related to the construction of the project's tunnels. The Technical Proposal of the Company if shortlisted will include the copies of the requested certificate (s).

- 6. **Senior Tunnel Systems Specialist (Electrical, Mechanical, Safety).** Professionally qualified electrical or mechanical engineer or equivalent, preferably with 10 years' and minimum 5 years' experience in projects similar to the project. The specialist will be responsible for overseeing all activities related to the project's tunnel electrical, mechanical, communications, emergency systems, and related works. The Senior Tunnel Engineer will be responsible to the Team Leader and to the Senior Resident Engineer for all activities related to project tunnels electrical, mechanical, and other systems.
- 7. **Senior Geotechnical Engineer**. Professionally qualified civil engineer with PE (Professional Engineer) and/or Chartered Engineer (CEng), and/or EUR ING (European Engineer) certification or licensed by engineer chambers or by the relevant organizations registered with ministries or professional entities with a major in geology or a professionally qualified geologist, preferably with relevant postgraduate qualifications and with preferably 15 years' and minimum 8 years experience in projects similar to the project, to include geological conditions similar to those existing in the project area, and with major excavations and tunnels constructed through rock. Experience with tunnels in rock constructed using drill and blast/NATM techniques is required. The Senior Geotechnical Engineer will be responsible to the Team Leader and to the Senior Resident Engineer for all activities related to the geotechnical aspects of the project. The Technical Proposal of the Company if shortlisted will include the copies of the requested certificate (s).
- 8. **Senior Occupational Health and Safety Specialist.** Professionally qualified specialist with National Examination Board in Occupational Safety and Health (NEBOSH) certification, possessing experience in all health and safety aspects of major civil works construction, including tunnels, high level bridgeworks, and road works involving the use of explosives, preferably with 10 years and minimum 5 years' of experience with projects similar to the project. The specialist will be responsible to the Team Leader for ensuring that all aspects of the project comply with the health and safety provisions of the project's civil works contract, and with relevant Georgian laws and regulations. The Technical Proposal of the Company if shortlisted will include the copies of the requested certificate (s).
- 9. **Senior Materials Engineer**. Professionally qualified civil engineer, or equivalent, preferably with 15 years' minimum 8 years' experience as a materials engineer in climatic and geotechnical conditions similar to Georgia. The Materials Engineer will be responsible to the Team Leader for all investigation, testing, and reporting related to materials to be used on the project, including oversight of contractor's laboratories, site testing activities, review and approval of concrete and asphalt mix designs, etc, and for the work of the CSC's materials team.
- 10. **Senior Resettlement/ Social Development Specialist.** Qualified BSc. or equivalent in social development or related field, with preferably 10 years' and minimum 5 years' experience in resettlement management, implementation of gender, social safeguards, and complaints resolution. The specialist should have prepared or assisted in the preparation of at least 3 resettlement plans for infrastructure projects and have been engaged in preferably 3 similar projects in resettlement monitoring and implementation of social safeguards in IFI-funded projects. The specialist will be responsible to the Team Leader with all resettlement aspects of the project, including monitoring and reporting on compliance with the project's resettlement plan. The specialist will regularly monitor the Project's labor and human resource management performance, ensure the compliance with ADB Safeguard Policy Statement requirements and

help enhance the capacity of the contractor/sub-contractor to adequately manage labor risks during the project implementation. He/she will review the human resources policies, practices and management systems that apply to the Project workforce, including employees of all sub-contractors or core suppliers within project scope. He/she should have technical expertise in the practical application of international labor standards and proven track record conducting workplace labor assessments within the region for IFIs. Certification to SA8000 / ISO 26000 Lead Auditor is an advantage.

- 11. **Senior Environment Specialist.** Professionally qualified BSc. or equivalent in environment or related field with preferably 10 years' and minimum 5 years' experience in supervision and monitoring. of projects with similar scope and geographic location and having actual experience on internationally-funded projects will be an advantage. The specialist will have prepared or assisted in the preparation of at least 3 environmental impact assessments or equivalents for infrastructure projects financed by ADB or similar agencies. The specialist will be responsible to the Team Leader for all environmental aspects of the project, including ensuring that the project's environmental management plan is implemented effectively. The specialist will prepare a detailed action plan including environmental monitoring checklists to be completed by the National staff. He/she will work closely with the Contractor Environmental Specialist and will work on more general environment focused tasks such as conducting environmental training and briefings on Project environmental safeguards policies, requirements and standard operating procedures in conformity with the government's regulations and international practice for project and RD Safeguards staff; ensure baseline monitoring and reporting of Contractor's compliance with contractual environmental mitigation measures during the construction phase.
- 12. **Senior Contract Specialist.** Professionally qualified Engineer, lawyer or related field with preferably 10 years and minimum 5 years' of contract management experience under projects financed by International Financial Organizations (IFIs). The specialist will possess experience in management of FIDIC based contracts.
- 13. **BIM (Building Information Modelling) Engineer.** Professionally qualified civil engineer or equivalent with relevant experience in road construction or infrastructure projects using BIM technology, with preferably 5 years and minimum 3 years of experience in using BIM for infrastructure projects, particularly for road design and construction and proficiency in BIM software such as AutoCAD Civil 3D, Revit, Navisworks, Bentley Open Roads, or other relevant software used in road construction and infrastructure projects.

B. National Consultants – Key Staff

- 14. **Deputy Team Leader/Resident Engineer.** Professionally qualified civil engineer, or equivalent, preferably with 15 years' experience in road construction, of which preferably 10 years should be spent on site in the administration and supervision of road and bridge works. Experience with tunnel works would be an advantage. The Deputy Team Leader will be responsible to the Team Leader for the effective implementation of the project, for overall management of the national consultant team members, and for facilitating the relationship between the CSC and the RD.
- 15. **Tunnel Engineer.** Professionally qualified civil engineers, or equivalent, preferably with 10 years' experience in major infrastructure construction, of which preferably 5 years should have involved substantial tunnel works. The Tunnel Engineer will be responsible to the Senior Tunnel Engineer for all tunnel-related aspects of the works.

- 16. **Bridge Engineer.** Professionally qualified civil engineer, or equivalent, preferably with 10 years' experience in bridge design and supervision of major bridge construction. The Bridge Engineer will be responsible to the Senior Bridge Engineer for all bridge-related aspects of the works.
- 17. **Geotechnical Engineer.** Professionally qualified civil engineer, or equivalent, preferably with 10 years' experience in the geotechnical aspects of major infrastructure projects, preferably including tunnel construction. The Geotechnical Engineer will be responsible to the Senior Geotechnical Engineer for all geotechnical-related aspects of the works.
- 18. **Quality Assurance Engineer.** Professionally qualified civil engineer, or equivalent, with preferably 10 years' experience in all the phases of quality assurance process of construction for major infrastructure projects and a thorough understanding and experience of international standards and best practices of modern quality control technology,
- 19. **Quantity Survey Engineer.** Professionally qualified civil engineer, or equivalent, with preferably 10 years' experience and having extensive computer skills, to be responsible to the Senior QA/QS Engineer for managing contracts record keeping, contract payment systems, contract cost projections, and all similar tasks for the project's contracts
- 20. **Environment Specialist.** Professionally qualified BSc in environment or related field or equivalent qualification with preferably 5 years of relevant experience in supervision and monitoring of internationally funded projects. The Specialist will work with the Senior Environmental Specialist in environmental management and monitoring of the project to ensure compliance with the environmental aspects of the project's civil works contracts.
- 21. **Resettlement/Gender/Social Development Specialist.** Professionally qualified BSc or equivalent in social sciences, gender studies, anthropology, social development or related field, with 5 years' relevant experience and preferably 3 years of relevant experience in IFI funded infrastructure projects. The specialist will be responsible to the Team Leader and for ensuring the timely and quality implementation of resettlement and all other aspects of the project's social safeguards tasks. The specialist should demonstrate experience in mainstreaming gender and inclusive social development in project designs, implementation, monitoring and reporting. The specialist should further demonstrate ability to engage closely with affected people, especially with vulnerable and disadvantage groups and other project stakeholders (government, affected communities, CSOs etc.) and help manage and resolve project-related complaints in a timely manner. Excellent communication skills are required.
- 22. Occupational Health and Safety Specialist. Professionally qualified specialist in all health and safety aspects of major civil works construction, including tunnels, high level bridgeworks, and road works involving the use of explosives, with relevant Georgian Certification as available in Georgia and preferably with 5 years of experience with supervision and monitoring of internationally funded projects similar to the project. The specialist will be responsible to the Team Leader for ensuring that all aspects of the project comply with the health and safety provisions of the project's civil works contract, and with relevant Georgian laws and regulations.
- 23. **Road Safety Engineer.** Professionally qualified civil engineer or equivalent with relevant experience, to work with Team Leader and Resident Engineer in road safety operations and procedures, and to manage the day-to-day implementation of the project's road safety awareness program.

- 24. **Planning Specialist.** Qualified Planning Specialist with preferably with 5 years' experience in project planning, data analysis, resource allocation, project progress monitoring, The Specialist will ensure alignment with project goals and timelines, track project progress against the PoW, identify delays and propose corrective actions.
- 25. **Cultural Heritage Monitor (CHM).** The CHM shall have a Degree or qualification in Archaeology and preferably with 5 years' experience in conducting cultural heritage / archaeological monitoring surveys and implementation of cultural heritage management plans during implementation of projects in Georgia.

ATTACHMENT 2: PAYMENT ADJUSTMENT SYSTEM

- 1. It is expected that the Consultant's team as proposed and evaluated during the selection process and approved prior to the Contract signature in accordance with ADB's Procurement Regulations will be engaged for the entire duration of the Contract without replacement of any of its members. This especially refers to the replacement of Key Experts whose replacement should be avoided. The replacement of the experts might be acceptable only in justified and exceptional cases such as death, disability, diseases objectively hindering performance of services assigned, parental leave or resignation from the company for company's staff members.
- 2. At any stage of project implementation, each request from the Consultant for replacement of a member of the Key Expert Team, which the Employer will approve will be sanctioned as follows:

Replacement of the Member of the Consultant's Team	Permanent Deduction
International Key Experts	2 times the monthly rate
National Key Experts	1 time the monthly rate

- 3. The payment adjustment system will not apply in case of replacement when: (a) replacement is requested by the Client in accordance with the Contract; and (b) replacement is caused by reasons as stated in para 1, evidenced by relevant supporting documents.
- 4. In case the Consultant fails to provide as a replacement a person of equivalent or better qualifications and experience and at the same rate of remuneration within 1 month from the date when the expert declares in writing that he/she is leaving the project or replacement is declared, the sanctions stated in Para 2 above shall apply for the second time. The application of the sanctions will continue every month until the replacement is acceptable for the Client.
- 5. The reports to be prepared by the Consultant as of **Table 3: Reporting Requirements** (see above) will be subject to the following sanction in case submission of the reports is overdue:

GEL 5,000 for each report submitted after the submission dates stipulated in Table 3. Reporting Requirements.