
Terms of Reference

Supervision of Civil Works under the Georgia Innovation, Inclusion and Quality Project

A. Background and Objective

Background

Municipal Development Fund of Georgia (MDF) was established in 1997. The fund is cooperating with all large investment banks and financial institutions operating in Georgia. It is coordinated by the Supervisory Board approved by the Government of Georgia and Ministry of Regional Development and Infrastructure of Georgia. MDF is a Legal Entity under Public Law (LEPL) with the objective of assisting with enhancement of institutional and financial capacities of local self-governmental bodies, making investments in local infrastructure and services, and improvement of main economic and social conditions for the local population. MDF implements significant infrastructural projects such as: urban renovation of the cities, arrangement of tourist infrastructure near cultural heritage monuments, construction and rehabilitation of schools and kindergartens, improvement of infrastructure aimed at preventing the natural disasters, creation of sustainable economic base for IDPs, rehabilitation of WS and WSSs, construction of shelters for homeless animals, arrangement of the cable ways, renovation of sports infrastructure, and enhancement of the component in support of State and Private Sector Investments (PPI).

The Government of Georgia has signed (June 18, 2019) the Loan Agreement (90 million Euro) for financing the implementation of Georgia Innovation, Inclusion and Quality Project (**Project**) with the World Bank. The Project development objectives are to (i) expand access to preschool education; and (ii) improve the quality of education and the learning environments. The project became effective on November 27, 2019 and is scheduled for completion on March 31, 2026.

MDF is one of the implementing partners for the project, in charge of the infrastructure related components.

The Project consists of the following key components and subcomponents:

Component 1- Improving Quality of and Access to Early Childhood Education and Care: support to facilitate expanded access to quality pre-school education in selected pre-schools.

Component 2 – Fostering Quality Teaching and Learning in General Education: Support to provide a learning environment that is conducive to quality education in selected general education schools.

Component 3 – Strengthening Financing Options and Promoting Internationalization in Higher Education: Support to improve the quality and international competitiveness of higher education.

Component 4 – System Strengthening and Stakeholder Communication: Support to facilitate a shift in attitude towards learning.

Component 5 – Supporting Project Management, Monitoring, and Evaluations: Support capacity building for effective management and monitoring of the Project including provision of Operating Costs, Training, outreach and awareness campaigns, consulting services, M & E and Project audits.

The Project will be implemented over a six-year period by the Ministry of Education and Science of Georgia (MES) and its subordinate government agencies and by the Municipal Development Fund of Georgia (MDF).

The Project Management Unit (PMU) will be created within (MES) to support the implementation of the Project and Project Management Team (PMT) will be created within MDF to support implementation of infrastructure activities under the Project.

The Terms of Reference describes consulting services for the supervision of civil works under the project. The consulting services ("the Services") include day-to-day review and supervision of civil works. These works include both reconstruction/rehabilitation/renovation and construction of public school buildings with particular attention to structural works and implementation of the energy efficiency measures. The purpose of the civil works supervision is to execute control over the rehabilitation and construction works in order to ensure high quality of construction, adherence to the terms of work execution provided in the construction contracts that is in compliance with the detailed design and specification requirements, within costs and approved calendar of works.

In addition, as part of supervision of the civil works, the Consultant will conduct the full design review of the project including Bill of Quantities (in compliance with drawings) during the design preparation stage, to ensure that the design firms could revise the drawings accordingly. The purpose of design review is to execute control over the detailed design preparation in order to ensure high quality of design, adherence to the detailed design terms of reference, international design standards, and national legislation (construction codes, safety norms, building and environmental permits, etc.).

The Consultant on behalf of the Employer will ensure the following:

- a) Prepared detail designs are of high quality in adherence to the valid standards, regulations and laws of Georgia and international standards and best practice;
- b) Construction/rehabilitation works is of high quality in adherence to the valid standards, regulations and laws of Georgia and international standards and best practice;
- c) Completion of works in accordance with the construction schedules, budget of the works contracts and required quality, which should result in long-term sustainability and efficient operation of the completed works.

Objective

The objective of this assignment is to provide high quality civil works supervision and design review services under the project. This assignment will cover **60 schools** from Project **Component 2 – Fostering Quality Teaching and Learning in General Education**

B. Scope of Consulting Services

Organization and Communication

Overall, the administration, execution and oversight of the “Civil Works” will be organized through contract with three standard roles: the Employer, a Contractor, and a Project Manager (**The Consultant**). MDF as **the Employer**, on behalf of the government of Georgia, will act as the implementing agency to perform day-to-day management and administration of the project.

Contractor (s), selected construction companies through open and transparent process, will be executor of the “Civil Works” under the **Project**.

Moreover, **The Consultant**, MDF’s legal representative, as identified in the contract between Employer and Contractor, will have overall responsibility to professionally supervise the **Contractor’s** activities and works – on behalf of the Employer (MDF).

Therefore, MDF is looking forward to selecting a qualified and experienced entity (Consultant), which will provide the stated Consulting Services and diverse expertise that is necessary to fulfill the contractual role.

The Consultant, representing **the Employer** will administer the construction contract and ensure that the works are conducted in accordance with the provisions of the construction contract. The Consultant will make all engineering decisions required for the successful and timely implementation of the civil works contract and will have all of those powers defined by the Employer-Contractor Agreement and the Employer-Consultant Agreement.

The Consultant is directly responsible for day-to-day supervision of the civil works by actively cooperating and working with the Contractor. **Consultant** should closely work with MDF’s dedicated staff to solve ongoing issues of a project.

The Consultant should ensure that **Contractors** adhere to the requirements/Employers requirements of detailed designs, technical specifications and environmental requirements.

The Consultant should provide all necessary personnel on site (engineers, supervisors, quality inspectors, environmental specialists, health and safety engineer etc.) for the supervision of works, inspection and installation of the equipment, testing of construction materials, monitoring the implementation of environmental requirements etc. **The consultant** should monitor that works and goods are delivered according to specifications, calculations and terms and conditions of civil works and supply contracts. If necessary, **The Consultant** should assist **Contractors** in preparation and correction of drawings. Moreover, after the completion of civil work **the Consultant** is liable to monitor the facilities for defects during the liability period and confirm that defects are remedied.

The Consultant should conduct a comprehensive, critical review of the proposed designs during design preparation stage – and present written conclusions in the report regarding any necessary changes and/or corrections, so that the design firms could revise drawings according to submitted report.

Should a construction contract require a change, a Consultant shall prepare a “change order”, agree a price for the change with a Contractor, draft an amendment to the Bill of Quantities and submit all to the Employer for approval. This shall be done over a ten-day period after a change is called to the attention of a Consultant.

The Consultant shall submit the detailed work plan of the construction supervision (including scope of duties of each specialist of Consultant’s team) considering construction phases and tentative terms of implementation as well as costs estimates indicating estimation of work days of the specialists and covering all the costs related to supervision execution.

General Tasks

The Consultant should ensure that the construction and rehabilitation works are conducted in accordance to tender documents and specifications, and are performed at high quality standard, according to the predefined social, environmental and quality assurance system. As necessary, the Consultant will assist MDF with overall contract management and approve "as built" drawings prepared by Contractors.

The consultant shall perform a comprehensive and critical design review and civil works supervision services for the 60 schools identified below:

1	Rustavi N21 School	32	Marneuli Municipality, Keshalo Public School
2	Rustavi N2 School (Shota Rustaveli)	33	Mtskheta Municipality, D.Guramishvili Saguramo Public School
3	Rustavi N3 School	34	Axalkalaki Municipality, Vachiani Public School
4	Marneuli Municipality, Sadakhlo School N1	35	Ninotsminda Municipality, Didi Khanchali Public School
5	Ozurgeti Municipality, Kvemo Natanebi School	36	Lagodekhi Municipality, Kharajala Public School
6	Ozurgeti Municipality, Daba Naruji School	37	Telavi N7 Public School
7	Terjola N1 School	38	Gurjaani Municipality, Velistsikhe Public School
8	Tkibuli N1 School	39	Khashuri Municipality, E.Takaishvili Daba Surami N2 Public School
9	Kutaisi N28 School	40	Kaspi Municipality, Ferma Public School
10	Chiatura N7 School	41	Marneuli Municipality, Meore Kesalo Public school
11	Baghdati N1 School	42	Lanchkhuti Municipality, Supsa Public School
12	Mtskheta Municipality, Tsikhisdziri School	43	Kutaisi N19 Public School
13	Batumi N4 School	44	NinoTsminda N3 Public School
14	Batumi N5 School	45	Batumi N16 Public School
15	Telavi N2 School	46	Kobuleti Municipality, Chakvi N1 Public School
16	Akhmeta Municipality, Duisi School	47	Tbilisi Tsothe Dadiani N113 Public School
17	Kareli Municipality, Daba Agara School	48	Tbilisi N63 Public School
18	Kareli N1 School	49	Tbilisi N84 Public School
19	Khashuri N2 School (David Kakiashvili)	50	Tbilisi N62 Public School
20	Zugdidi N7 School (Ilia Chavchavadze)	51	Tbilisi N89 Public School
21	Khobi Municipality, Shua Khorgi School	52	Rustavi N6 Public School
22	Abasha N2 School	53	Nintsminda N2 Public School
23	Khobi N2 School	54	Ninotsminda Municipality, Gandza N2 Public Shool
24	Senaki N3 School	55	Ninotsminda Municipality, Diliti Public Shool
25	Poti N5 School (Korp 1) (Ilia Chavchavadze)	56	Tskaltubo Municipality, Opshkviti Public School
26	Senaki N1 School	57	Kutaisi N35 Public School
27	Mestia Municipality, Etseri School	58	Tbilisi N99 Public School
28	Mestia Municipality, Nakri School	59	Tbilisi N50 Public School
29	Mestia Municipality, Idliani School	60	Tbilisi N24 Public School
30	Tsageri Municipality, Orbeli School		

31	Tsageri Municipality, Bardnali School (Lado Asatiani)		
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Civil works will include various types of structural reinforcement, construction, and rehabilitation works, including introduction of energy efficiency measures.

The below table presents the tentative timeframe and estimated costs of construction/rehabilitation works for 60 schools:

Public School #	Planned start date of Detail Design Preparation	Planned completion of Detail Design Preparation	Planned construction/rehabilitation start date	planned construction/rehabilitation completion date (MDF estimated 1 year)
Rustavi N21 School	June 2021	Feb 2022	Aug 2022	12 Months
Rustavi N2 School (Shota Rustaveli)	June 2021	Feb 2022	Aug 2022	12 Months
Rustavi N3 School	June 2021	Feb 2022	Aug 2022	12 Months
Marneuli Municipality, Sadakhlo School N1	June 2021	Feb 2022	Aug 2022	12 Months
Ozurgeti Municipality, Kvemo Natanebi School	June 2021	Feb 2022	Aug 2022	12 Months
Ozurgeti Municipality, Daba Naruji School	June 2021	Feb 2022	Aug 2022	12 Months
Terjola N1 School	June 2021	Feb 2022	Aug 2022	12 Months
Tkibuli N1 School	June 2021	Feb 2022	Aug 2022	12 Months
Kutaisi N28 School	June 2021	Feb 2022	Aug 2022	12 Months
Chiatura N7 School	June 2021	Feb 2022	Aug 2022	12 Months
Baghdati N1 School	June 2021	Feb 2022	Aug 2022	12 Months
Mtskheta Municipality, Tsikhisdziri School	June 2021	Feb 2022	Aug 2022	12 Months
Batumi N4 School	June 2021	Feb 2022	Aug 2022	12 Months
Batumi N5 School	June 2021	Feb 2022	Aug 2022	12 Months
Telavi N2 School	June 2021	Feb 2022	Aug 2022	12 Months
Akhmeta Municipality, Duisi School	June 2021	Feb 2022	Aug 2022	12 Months
Kareli Municipality, Daba Agara School	June 2021	Feb 2022	Aug 2022	12 Months
Kareli N1 School	June 2021	Feb 2022	Aug 2022	12 Months
Khashuri N2 School (David Kakiashvili)	June 2021	Feb 2022	Aug 2022	12 Months
Zugdidi N7 School (Ilia Chavchavadze)	June 2021	Feb 2022	Aug 2022	12 Months
Khobi Municipality, Shua Khorgi School	June 2021	Feb 2022	Aug 2022	12 Months
Abasha N2 School	June 2021	Feb 2022	Aug 2022	12 Months
Khobi N2 School	June 2021	Feb 2022	Aug 2022	12 Months
Senaki N3 School	June 2021	Feb 2022	Aug 2022	12 Months
Poti N5 School (Korp 1) (Ilia Chavchavadze)	June 2021	Feb 2022	Aug 2022	12 Months
Senaki N1 School	June 2021	Feb 2022	Aug 2022	12 Months
Mestia Municipality, Etseri School	June 2021	Feb 2022	Aug 2022	12 Months
Mestia Municipality, Nakri School	June 2021	Feb 2022	Aug 2022	12 Months
Mestia Municipality, Idliani School	June 2021	Feb 2022	Aug 2022	12 Months
Tsageri Municipality, Orbeli School	June 2021	Feb 2022	Aug 2022	12 Months
Tsageri Municipality, Bardnali School (Lado Asatiani)	June 2021	Feb 2022	Aug 2022	12 Months
Marneuli Municipality, Keshalo Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Mtskheta Municipality, D.Guramishvili Saguramo Public School	Dec 2021	Aug 2022	Dec 2022	12 Months

Axalkalaki Municipality, Vachiani Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Ninotsminda Municipality, Didi Khanchali Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Lagodekhi Municipality, Kharajala Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Telavi N7 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Gurjaani Municipality, Velistsikhe Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Khashuri Municipality, E.Takaishvili Daba Surami N2 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Kaspi Municipality, Ferma Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Marneuli Municipality, Meore Kesalo Public school	Dec 2021	Aug 2022	Dec 2022	12 Months
Lanchkhuti Municipality, Supsa Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Kutaisi N19 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
NinoTsminda N3 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Batumi N16 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Kobuleti Municipality, Chakvi N1 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Tbilisi Tsotne Dadiani N113 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Tbilisi N63 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Tbilisi N84 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Tbilisi N62 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Tbilisi N89 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Rustavi N6 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Nintsminda N2 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Ninotsminda Municipality, Gandza N2 Public Shool	Dec 2021	Aug 2022	Dec 2022	12 Months
Ninotsminda Municipality, Diliti Public Shool	Dec 2021	Aug 2022	Dec 2022	12 Months
Tskaltubo Municipality, Opshkviti Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Kutaisi N35 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Tbilisi N99 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Tbilisi N50 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months
Tbilisi N24 Public School	Dec 2021	Aug 2022	Dec 2022	12 Months

The tasks of the Consultant will include, but are not limited to the following:

A: Detail Design review Phase:

1. Conducting a comprehensive, critical review of each stage of the proposed detail designs (Whether each stage of proposed detail design is in compliance with the detail design TOR) and present written conclusions in the report regarding any required changes and/or corrections in the designs;

B: Pre-construction Phase:

2. Preparing a construction supervision program and reporting mechanisms, after two weeks of Commencement of Services (contract), the services should foresee regular visits to the sites, together with the Employer representative.

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3. Ensuring that the construction methods and materials proposed by Contractor are adequate and satisfactory;
 4. Supervising progress of preparation works to be executed by Contractors, including construction of temporary structures in compliance with the work execution program and adherence to the terms provided for in the schedule; confirming Contractors' receipt of all necessary permits and approvals from national and local governments, as well as utilities serving the respective communities; and reporting, in writing, to the MDF during preparation works;

C: Construction Phase:

5. Undertaking technical inspection of and making measurements to check work quantities, recording and registration of rehabilitation works and certify in accordance with the typical forms (including daily, weekly, monthly recording and reporting tables) elaborated by the Consultant and approved by the MDF;
6. Reviewing and approving Contractors' payment certificates;
7. Providing technical assistance in the resolution of disputes, as necessary;
8. Inspecting correspondence between quantities, quality and specification of executed works; supervising adherence to the program and schedule of works to be executed by Contractors; Controlling adherence of ongoing civil works to the prescribed technologies, including contractor's temporary facilities;
9. Ensure compliance with safety regulations of the works, property and personnel, and general public, the health and safety plan and waste management plans. Carrying out safety, social and environmental monitoring once in every two weeks;
10. Checking the compliance certifications of the construction materials consumed in construction (cement, aggregates, additives, reinforcement, metal constructions, precast concrete and etc.), checking compliance of entrepreneurs' factory sample analysis and laboratory testing data with requirements of technical specifications; if necessary request from contractor for additional testing materials in the local laboratories.
11. Making a daily technical supervision register of works, implemented by the supplier and/or Contractor and information on arrangements for correcting defects (if any) together with notes and photographs regarding construction quality; receiving and concluding the phases of completed works with proper documents (certifications for latent works, tests and other documentation);
12. Examining and reviewing sampling measurements and observe the testing (such as pressure tests for leaks) of any work that is about to be covered or put out of view;
13. Ensuring Contractors' good command of the requirements laid out in project documentation, tracking adherence of Contractors' performance with the environmental requirements, and advising Contractors on the corrective actions in case of identified environmental incompliances.
14. If required consultant is obliged to update/prepare detailed design drawing or sketch drawing for the required solution for the project and submit to the designer for approval if necessary;
15. Reviewing and approving shop drawings of equipment and fabrications to be provided as required by the technical specifications and ensure that installed equipment meets the specifications;
16. Working with contractors in updating their initially approved work plan. Discussing with MDF and approving it.
17. Reviewing, verifying and submitting final version of variation or change orders. Making recommendations to MDF for any requests for variation or change orders, and Contractors' claims.
18. As required organize and chair site meetings with stakeholders and all involved parties and prepare minutes of meetings.

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19. Submitting periodic reports to MDF in accordance with the requirements outlined in the Chapter C – “Reporting” and Chapter D “Preparation of Reports and Submission Dates” of the TOR.
 20. Reviewing and inspecting Contractors’ training programs (if any) and associated records (training program reports, Operations & Maintenance Check-Lists/ Annual Budgets, etc.) related to the types of works delivered under contracts with the MDF; assessing sufficiency of the delivered training, identifying possible gaps, and advising on the outstanding training needs.

D: Post-Construction Phase:

There will be a 12 months Defects Liability Period (DLP) for general equipment and structure. Depending on whether all or part of the DLP falls within the project end date, the Consultant shall maintain sufficient technical presence to inspect and monitor the clearance of outstanding defects by contractor against an agreed remedial works schedule.

The Consultant shall provide full time on-site supervision of the Contractor’s operations during the first month of the Defects Notification Period corresponding to the last section of the Project accepted as completed.

During the remaining 11 months of the Defects Notification Period the Consultant will be responsible for monitoring the Contractor’s operations and for issuing any required certificates. For the purpose of carrying out the services, the Consultant shall carry out quarterly site visits to monitor the rectifications on unattended/uncompleted activities, identifying issues/defects, preparing reports and submit to the contractor and request updated work plan for rectification of works. Copy all the reports to the Employer.

On defects if any, supervising the remedial works and preparing and issuing the Final Payment Certificate. During this period the Consultant shall be required to draw the attention of the contractor to any defects if and when noticed and shall supervise such remedial works.

The purpose of these visits will be to assess the status and operational performance of the site. Subsequent to each visit, the Consultant shall produce a visit report, recording all observations, for the Employer’s consideration. These visits shall continue until the end of the DLP (applicable only if within Project period and period of performance of this contract), at which time a final report shall be produced for the Employer with relevant recommendations.

For proposal purposes, the Consultant shall assume the 12-month DLP. For the extended DLP of the specific equipment, the services of the Consultant, if required, will be remunerated on the basis of the rates contained in the proposal. The responsibility of the Consultant shall be for, but not limited to, the following tasks:

1. Checking “as built” drawing prepared by Contractors for all works as construction processes;
2. Inspect and Monitor the clearance and correction of any outstanding defects by the contractor against agreed remedial works list and schedule, in particular during the Defects Notification Period;
3. Prepare the Final Project Completion report including certification that all equipment and works conform to the specifications and the performance guarantees (such as the Performance

Certificate, etc.), and upon reviewing the Contractor Final Statement and issue the Final Payment Certificate

Specific Tasks

The Consultant shall provide the following services under the direct guidance of the MDF:

1. Inspect quality and quantity of earthworks: dimensions of foundation pits, trench's cross sections, sand bedding, backfilling, quality of compacted fills, as well as road pavement restoration;
2. Inspect Contractors' camps and temporary structures/buildings, storage areas, equipment and machinery;
3. Inspect quality of foundations preparation works (leveling, compaction, sand and gravel beds, lean concrete layers, dewatering and etc.);
4. Supervise progress of concrete and reinforced concrete works. Inspect form dimensions, installation accuracy, quality, location of reinforcement and embedded parts, review of mix design, proper placement of concrete and testing resultant concrete strength;
5. Supervise installation and repairs to the precast reinforced concrete constructions as well as inspection of dimensions, quality and placement of reinforced concrete elements, joint fillers, pads, water stops and other materials;
6. Inspect reconstruction-restoration of school buildings (architectural and structural parts); check conformance of supplied materials to the design requirements, specifications, and quality standards; inspect the workmanship of architectural and decorative elements of buildings; ensure application of the specified and approved technologies and materials; supervise strengthening of fundaments, supporting structures, seismic belts, change of roofs, building façade improvement containing brick finishing, plastering, changing of cornices, etc., rehabilitation of wooden, metallic and concrete balconies; rehabilitation of roofs (tile; soft roof, metal), rehabilitation of doors and windows, masonry works;
7. Supervise and inspect rehabilitation works of school territory: roadway pavement (different materials) layout of sidewalks, curbs; school territory furniture and playgrounds, layout of benches; lighting; arranging of decorative garbage cans, landscaping, and planting of decorative trees etc.
8. Inspect installation of power cables, electrical equipment, lighting of territory;
9. Inspect installation works of pressure and gravity pipelines (water supply, sewage, storm water) constructed of various materials (steel, cast iron, r/concrete, PE, PVC, etc.) including inspection of gradients, joints, fittings and other accessories in accordance with construction codes and contract specifications and including the observance and certification of pressure and other relevant tests to ensure that leakage, if any, does not exceed limits as provided under the technical specifications;
10. Supervise progress of installation and dismantling steel constructions, mechanical and electrical equipment; after completion of interim phases of construction, test equipment together with Contractors and the MDF 's representative and certify that the tests met the requirements of the technical specifications;
11. Inspect certificates of construction materials and equipment used during construction (electrical and mechanical equipment, pipes, valves, fire hydrants, flow meters, fittings, cement, inert materials, admixtures, reinforcement steel, metal-ware, pre-cast reinforced concrete elements, wooden and ceramic materials, road pavement materials and etc.); correspondence of data on sample analysis (carried out by the manufacturer in the factory) and laboratory tests to the requirements of the technical specifications and correspondence of construction materials used for

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- restoration/conservation of physical cultural resources to the specifications and technological requirements of such works;
12. Inspect compliance of as built drawings submitted by Contractors (endorsed by signature and sealed) with the executed works;
 13. Monitor implementation of Environmental requirements in the course of works at each construction site; promptly notify the MDF on any deviations/violations of environmental requirements, on any complaints from local communities related to ongoing works, and on any unforeseen issues affecting environment and/or cultural heritage which may emerge in the course of works; recommend remedial and/or corrective measures to the MDF and follow up on their application upon the MDF's approval;
 14. Monitor health and safety activities (all relevant trainings and protocols) once in every two weeks.
 15. Oversee temporary on-site storage and final disposal of construction waste to the formally assigned sites or landfills and on the reinstatement of work sites upon completion of activity at any given one;
 16. Notify the MDF on any complaints from the population or any other parties affected by ongoing civil works;
 17. Keep engineering supervision book (which would include a file of digital images) including daily registering works executed by Contractors as well as remarks related to the construction quality and elimination of defects. Certifying the phases of completed works in compliance with the form worked out by the Consultant and approved by the MDF Monitoring Specialist; upon the approval of the MDF, organize and supervise any supplemental, unforeseen independent testing to verify final quality compliance of the Contractor's works;

C. Reporting

The consultant shall propose a reporting system (systematic registration and submission of the appropriate documents) which will be approved by MDF in order to provide regular, complete and detailed information to MDF on progress and quality of rehabilitation works.

Design review:

The consultant should conduct a comprehensive review of each part of a detailed design project during design preparation stage and provide comments and recommendations to MDF.

MDF will send submitted comments/recommendations to design company, in order to make relevant changes into the detailed design.

- After MDF submits to consultant detailed design documentation for the review, a consultant is obliged to revert back with comments and recommendations within 7 calendar days.

Periodic reports:

The Consultant will prepare the following reports:

1. Daily reports summarizing daily activities (with measurement and photos of daily executed works and listed in the report) of the contractor. If construction is suspended for any reasons (bad weather conditions, etc.), explain reason and include it in daily reports.
2. Monthly Progress Report summarizing progress with the construction activities, problems encountered, updated planning, status of environmental compliance and any outstanding issues deemed important by a Consultant. These reports shall have appended to them the daily technical

supervision register of works (See item 14 of General Tasks), and filled out monthly environmental monitoring forms.

3. Inputs Monitoring Table with the updated estimated inputs for each Key and Non-key Expert per school and updated estimates of reimbursable expenses per school. The Consultant shall submit the updated Inputs Monitoring Table for the approval of the Client’s Project Manager on quarterly basis or earlier, if necessary (Note: If the original time-input estimates for any expert is altered by more than 10% or one week, whichever is larger, the Parties shall sign a Contract amendment, as per Clause GCC 29);
4. Special reports as may be required if there are problems that require immediate attention of MDF.
5. Quarterly report on the period of work indicating progress on each subproject, course of activities, implementation of Environmental requirements, and any proposed changes to the work plan;
6. Compliance report of As built-drawings with executed works prepared by Contractors and confirmed by Consultant;
7. Quarterly report during the defect liability period. To access and monitor the current situation on site.
8. Final Project Completion report including certification that all equipment and works conform to the specifications and meet the performance guarantees.

D. Preparation of Reports and Submission Dates

The above reports should be presented with the following requirements:

1. All reports should be prepared in Microsoft Word and/or Excel, and presented to the MDF as bound documents according to agreed quantities (see table hereafter), in both hard copies and electronic files.
2. Drawings will also be provided in hard copies and electronic forms (AutoCAD or compatible software). A PDF version of each drawing should also be provided. Reports should include the attachments such as video recordings and images illustrative of the activity progress.

Reports	Number of Copies		Date
	English	Georgian	
1. Daily report	0	1	End of each working day.
2. Weekly report	0	1	Within 2 days of each week
3. Monthly report	1	1	Within 7 days of each month
4. Quarterly report	1	1	Within 7 days of each quarter
5. Final Completion Report including confirmed as-built drawings	1	1	Within 7 days after receiving of signed hand over agreement

E. Duration of the Assignment

The tentative duration of the assignment is until the construction of each facility is completed and the handover certificate is obtained, and it is estimated as 43 months.

F. Inputs by MDF

MDF shall provide the Consultant detailed design documentation, technical specifications and other available documents needed for design revision and proper implementation of a construction supervision.

MDF will assign specialists for each subproject to work closely with the Consultant during supervision

G. Consultant's Qualification and Input

The Consultant shall provide a team of personnel of proven competence and experience to undertake the tasks defined by these Terms of Reference and to finally achieve the overall and the specific objectives of the project, in terms of time, costs and quality. Team members shall have the prerequisite experience specified in relation to their assignments, and shall have an overall background in civil engineering and urban infrastructure projects.

All Key Staff should have obtained minimum a bachelor's degree or equivalent qualifications from a reputed higher education establishment.

Key experts - Team Leader/civil engineer should meet the minimum qualification requirements as specified in the table below – “Narrative Qualification Requirements for Key Experts”.

Broad experience of civil engineering procured under financing arrangements with government agencies or international financial institutions will be considered as advantage.

The Consultant shall include adequate administrative staff (secretary, drivers, accountant, lawyer, translator, etc.) in his team, needed to support thematic specialists of the Consultant.

The Consultant should consider the active participation of local professional skills where available, and a suitable mix of international and local staff on a Consultant's team. All members of a Consultant's team must be independent and free from conflicts of interest in the responsibilities accorded to them.

The selection procedures used by a Consultant to select all other experts shall be transparent, and shall be based on pre-defined criteria, including professional qualifications, language skills and work experience. The selection of experts shall be subject to approval by the Employer.

A team proposed by the Consultant should be composed of skilled and experienced specialists, who will carry out necessary services. The team should be, at a minimum, composed of the following staff:

N	Consultant's Staff	Number	Month	Input, person*month
1	Key Experts			
1	Team Leader/Civil Engineer	1	43	43
2	Architect	1	16	16
3	Structural Engineer	1	32	32
4	Energy Efficiency Expert	1	6	6
	Subtotal 1	4		97
2	Non-key experts			

1	Deputy Team Leader/Civil Engineer	1	43	43
2	Architect	1	16	16
3	HVAC Engineer	1	32	32
4	Mechanical/ Electrical engineer	1	32	32
5	Water Supply/Sewer Engineer	1	32	32
6	Site Inspector/Quantity Surveyor	27	15	405
7	Health and Safety Specialist	2	19	38
8	Environmental and Social Safeguards Specialist	2	19	38
9	Cost Estimator	2	6	12
10	Inclusive Educational Expert	1	6	6
	Subtotal 2	39		654
	Total 1+2	43		751

As current assignment is focused on the construction supervision and design review. All Site Inspectors/Quantity Surveyors are required to carry out daily works supervision. Health and Safety Specialist and Environmental Specialist are required to conduct site visit once per week to monitor ongoing civil works. It is highly recommended that Team Leader and Deputy Team Leader are present in the field minimum once per month.

Team Leader and other staff are required to be permanently present in Georgia during the project implementation. Team Leader should have overall responsibility for the project execution and in particular for the timely mobilization and demobilization of supervision staff between the school sites.

All experts who have a crucial role in implementing of the contract are referred as key experts. Key experts will be evaluated according to Qualification Requirements given in the table below.

Narrative Qualification Requirements for Key Experts

Title	Specific experience (Years)	Area of Specialization, Qualification	Overall scope of work, but not limited to
Team Leader/Civil Engineer	10	<p>Civil Engineering – Construction Supervision and Management experience of implementation of similar size and type projects;</p> <p>Minimum Bachelor’s degree in civil engineering;</p> <p>Knowledge of international and local design and construction codes/regulations/standards</p> <p>In-depth overall knowledge in detailed design and construction supervision for large, and medium sized civil works projects</p>	<ul style="list-style-type: none"> • Oversee and critical review of detailed design documentation • Overall responsibility for implementing the project and managing the Consultant’s team; • Review and certify engineering variation orders, Contractors’ applications for subcontracting parts of the works, and monthly payments to Contractors for submission to the MDF; • Evaluation and settlement of variations and claims and disputes with Contractors; • Monitor performance, deadlines, progress, and assist in the development of a risk management plan to avoid any unexpected incidence that may have a negative impact on implementation of subprojects; • Coordinate and liaison with Local Government/Employer; • Report writing and oral presentation.
Lead Architect	7	<p>Architect with experience in detailed design for construction and rehabilitation of educational and public buildings;</p> <p>Minimum bachelor’s degree;</p> <p>Knowledge of construction codes and regulations active in Georgia;</p>	<ul style="list-style-type: none"> • Oversee and review Detailed Design documentation; • Oversee the construction/rehabilitation/repair works of buildings, compliance of the architectural part to the design and specifications requirements; • Oversee the arrangement of recreation areas and landscaping. • Update/prepare detailed design drawing or sketch drawing for the required solution for the project and gain the designers approval.

Lead Structural Engineer	7	<p>Civil Engineering —structural Engineering with experience in construction and rehabilitation of buildings;</p> <p>Experience in implementation of similar size and type projects;</p> <p>Minimum bachelor’s degree in civil engineering</p>	<ul style="list-style-type: none"> • Oversee the buildings and structures construction; • Inspection of quality of materials used by Contractors; • Structures condition assessment and design review Reporting; • Review of Detailed Designs. • Update/prepare detailed design drawing or sketch drawing for the required solution for the project and gain the designers approval.
Lead Energy Efficiency Expert	5	<p>Experience in implementation and /or audit of Energy Efficiency measures;</p> <p>Experience with energy auditing of public buildings;</p> <p>Minimum bachelor’s degree;</p> <p>Knowledge of construction codes and regulations active in Georgia</p>	<ul style="list-style-type: none"> • Review of Energy audits prepared by a design consultant; • Review of Detailed Designs in terms of Energy Efficiency and ensure that measures proposed by the energy audit are incorporated into the detailed design; • Ensure that energy efficiency indicators are achieved. • Review and check capability with design specifications, proposed materials from the contractor

Narrative Qualification Requirements for Non-Key Experts

Title	Specific experience (Years)	Area of Specialization, Qualification	Overall scope of work, but not limited to
Deputy Team Leader/civil engineer	10	<p>Civil Engineering – Construction Supervision and Management;</p> <p>Minimum bachelor’s degree in civil engineering; knowledge of construction codes and regulations active in Georgia</p> <p>In-depth overall knowledge in design and construction</p>	<p>In cooperation with Team Leader:</p> <ul style="list-style-type: none"> • Review and certify engineering variation orders, Contractors’ applications for subcontracting parts of the works, and monthly payments to the Contractors for submission to the MDF; • Monitor performance, deadlines, project progress, and assist in the development of a risk management plan to avoid any unexpected incidence that may have a

		<p>supervision for medium sized and small infrastructure projects.</p> <p>Knowledge of the local and international standards of construction regulations</p>	<p>negative impact on the project development;</p> <ul style="list-style-type: none"> • Coordinate and liaison with Local Government/Employer; • Report writing and oral presentation • Prepare requirements of Contractors' Quality assurance plan; • Ensure application of Quality assurance plan by Contractors Quality Control; • Review of Detailed Designs
Deputy Architect	5	<p>Architect with experience in detailed design for construction and rehabilitation of educational and public buildings;</p> <p>Minimum bachelor's degree;</p> <p>Knowledge of construction codes and regulations active in Georgia;</p>	<ul style="list-style-type: none"> • Oversee and critical review of detailed design documentation; • Oversee the construction/rehabilitation/repair works of buildings, compliance of the architectural part to the design and specifications requirements; • Oversee the arrangement of recreation areas and landscaping. • Update/prepare detailed design drawing or sketch drawing for the required solution for the project
Mechanical /Electrical engineer	5	<p>M&E Engineering – design of mechanical and electrical equipment, construction supervision;</p> <p>Minimum bachelor's degree in engineering;</p> <p>Knowledge of construction codes and regulations active in Georgia.</p>	<ul style="list-style-type: none"> • Inspection of M&E works; • Supervision of installation of electrical wiring and appliances; • Supervision of start-up and commissioning activities • Oversee and critical review of detailed design documentation • Review and check capability with design specifications, proposed materials from the contractor
Water Supply/Sewage Engineer	5	<p>Specific experience of plumbing engineering - designing of plumbing networks, construction supervision</p> <p>Minimum bachelor's degree in engineering;</p> <p>Knowledge of construction codes and regulations active in Georgia</p>	<ul style="list-style-type: none"> • Oversee the construction of water supply/sewage networks; • Oversee and critical review of detailed design documentation. • Review and check capability with design specifications, proposed materials from the contractor

HVAC Engineer	5	<p>Specific experience in design of HVAC systems and supervision of HVAC installation/arrangement</p> <p>Minimum bachelor's degree in engineering field</p> <p>Knowledge of construction codes and regulations active in Georgia</p>	<ul style="list-style-type: none"> • Critical review of detailed design HVAC projects and provide recommendation for the efficient operation of HVAC system; • Supervision of installation of HVAC systems. • Review and check capability with design specifications, proposed materials from the contractor
Cost Estimator	7	<p>Experience in construction cost estimates and preparation of bill of quantities;</p> <p>Minimum bachelor's degree in engineering;</p> <p>Knowledge of construction codes and regulations active in Georgia</p>	<ul style="list-style-type: none"> • Review the BOQs and unit rates; • Ensure that the BOQs are in compliance with the Detailed Design.
Inclusive Educational Expert	7	<p>Knowledge and Experience of Universal Design for learning and development.</p> <p>Minimum Bachelor's Degree in Relevant Field</p>	<ul style="list-style-type: none"> • Review compliance of the design documentation with Norms and Standards for Disabled People. • Supervision of implementation of measures proposed in design during construction. • Oversee and critical review of detailed design documentation
Site Inspectors/ Quantity Surveyors	5	<p>Minimum bachelor's degree in Civil Engineering</p> <p>Experience in construction supervision and quality control of infrastructural works</p> <p>Knowledge of construction codes and regulations active in Georgia</p>	<ul style="list-style-type: none"> • Supervision of works; • Sampling; • Quantity surveys according to design and specification; • Reporting; • Field surveying.
Environmental Specialist	5	<p>Experience in environmental impact assessment</p> <p>Minimum bachelor's degree</p>	<ul style="list-style-type: none"> • Field environmental and social supervision of ongoing works and documentation of status at each active construction site using monthly field monitoring sheets

		Knowledge of international and local regulations for environmental protection	<ul style="list-style-type: none"> • Producing quarterly reports on environmental and social performance under the ongoing sub-projects, providing supporting photo evidence, and sharing such drafts with the International Environmental Specialist of the team for quality review and submission to MDF • Prompt notification to MDF on any accidents, emergencies, and unforeseen issues which may occur in the course of works and directly or indirectly affect environment, physical cultural resources, personnel of works providers, and or communities residing in the vicinity of a project site. • Oversee and critical review of detailed design documentation
Health and Safety Specialist	7	<p>Knowledge and Experience in industrial hygiene, health physics or other related discipline.</p> <p>Minimum Bachelor's Degree in Relevant Field</p>	<ul style="list-style-type: none"> • Critical review of Design Documentation to ensure that they follow safety standards and government regulations. Prepare written reports on their findings. • Oversee and critical review workplace environments, equipment, and practices to ensure that they follow safety standards and government regulations. Prepare written reports on their findings. • Review workplace processes and procedures that help protect workers from hazardous work conditions. Prepare written reports on their findings. • Supervision of Demonstration of the correct use of safety equipment. • Investigate incidents and accidents to identify what caused them and how they might be prevented.

Speaking of Georgian language is mandatory for those experts who are on field or are involved in design review procedures.