

DATE: 16/05/2023

REQUEST FOR PROPOSAL: HCR/IRQ/COE/2023/RFP-044 FOR

LOT1:

Construction of Three Classrooms at Tarin Primary School, Construction of Two WASH Facility Units and One Classroom at Payman School, and Re-Construction of the Sewerage System and Rehabilitation for the WASH Facility Units at Raber Primary School in Erbil Governorate, Iraq.

LOT2:

Re-Construction of the Sewerage System and Rehabilitation for the Wash Facility Units at Aweza Primary School, and Construction of Three Classrooms at Kobani Primary School in Erbil Governorate, Iraq.

CLOSING DATE AND TIME: - 23:59 HRS IRAQ Local Time on 06/06/2023

INTRODUCTION TO UNHCR

The Office of the United Nations High Commissioner for Refugees was established on December 14, 1950, by the United Nations General Assembly. The agency is mandated to lead and co-ordinate international action to protect refugees and resolve refugee problems worldwide. Its primary purpose is to safeguard the rights and well-being of refugees. It also has a mandate to help stateless people.

In more than five decades, the agency has helped tens of millions of people restart their lives. Today, a staff of some 6,600 people in more than 110 countries continues to help about 60 million persons. To help and protect some of the world's most vulnerable people in so many places and types of environments, UNHCR must purchase goods and services worldwide. For further information on UNHCR, its mandate and operations please see <http://www.unhcr.org>.

1. REQUIREMENTS

The Office of the United Nations High Commissioner for Refugees (UNHCR), Iraq Operations, invites qualified construction firms to make a firm offer for construction of **below LOT1 and LOT2** for UNHCR Iraq Operation.

LOT1:

Construction of Three Classrooms at Tarin Primary School, Construction of Two WASH Facility Units and One Classroom at Payman School, and Re-Construction of the Sewerage System and Rehabilitation for the WASH Facility Units at Raber Primary School in Erbil Governorate, Iraq.

LOT2:

Re-Construction of the Sewerage System and Rehabilitation for the Wash Facility Units at Aweza Primary School, and Construction of Three Classrooms at Kobani Primary School in Erbil Governorate, Iraq.

IMPORTANT: Bill of Quantities (BOQs) and Scope of the Work (SoW) are detailed in Annex (A & A1) of this document.
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2. BIDDING INFORMATION

2.1 RFP DOCUMENTS

The following annexes form integral part of this Request for Proposal.

Annex A: Scope of Work (SOW) LOT 1 & 2

Annex B: Bill of Quantity (LOT 1 & 2)

Annex C: Design and the structure (Drawings) (LOT 1 & 2)

Annex D: Detailed Technical Evaluation Criteria (LOT 1 & 2)

Annex E: Technical Proposal Form (LOT 1 & 2)

Annex F: Vendor Registration Form

Annex G: UNHCR General Conditions of Contracts for Civil Works (October 2000)
Annex H: Supplier's Code of Conduct.
Annex I: e-Tender Box Supplier user manual
Annex J: How to Join Microsoft Teams without account.
Annex K: Financial Offer Form (LOT 1-A, LOT1-B LOT1-C & LOT2-A, LOT2-B)
Annex L: Tentative calendar of activities
Annex M: Bid Data Sheet
Annex N: Submission Checklist

IMPORTANT: It is strongly recommended that this Request for Proposal and its annexes be read thoroughly.

2.2 ACKNOWLEDGEMENT

We would appreciate your informing us of the receipt of this RFP by return e-mail to IRQERPROC@unhcr.org CC: omerr@unhcr.org as to:

- Your confirmation of receipt of this RFP
- Whether or not you will be submitting a bid

IMPORTANT: Failure to send the above-requested information may result in disqualification of your offer from further evaluation.

2.3 REQUESTS FOR CLARIFICATION

Bidders are required to submit any request for clarification or any question in respect of this RFP by e-mail to IRQERPROC@unhcr.org CC: omerr@unhcr.org The deadline for receipt of questions is **23:59 HRS IRAQ Local Time on 31/05/2023**. Bidders are requested to keep all questions concise. UNHCR may, at its discretion, copy any reply to a question to all other invited firms.

All the emails sent requesting clarification **MUST** have the following subject otherwise UNHCR reserves the right **NOT TO REPLY**.

EMAIL SUBJECT: HCR/IRQ/CEO/2023/RFP-044 – Query

UNHCR will compile all questions and reply to the questions received as soon as possible by means of publication on the UNGM, UNHCR websites and by email to all bidders participating in the tender competition.

IMPORTANT: Please note that Bid Submissions are **NOT** to be sent to the e-mail address above. Bid Submissions sent directly to the e-mail addresses above will result in disqualification of the offer.

2.3.1 SITE VISIT:

All the participating construction companies/contractors are **MANDATORY** to inspect the construction site before submitting their offer. The contractors are required to send an email with detail of their Technical Staff for booking an appointment for the visit to the email address: IRQERPROC@unhcr.org CC: omerr@unhcr.org before **25/05/2023**. The dates of the site visits are **25/05/2023 & 28/05/2023** (the date and the time of the site visit is fixed no changes can be made to this date and time upon the request of a potential bidders).

- **1st Site Visit:**

Date/Time: **25/05/2023 (Starts at 9:30 a.m. – ending 10:30 a.m.)**

Venue: Dashti Hawler District-Shawes town

School Name: Payman primary school HC for boys & girls (Host Community School)

GPS Coordinator: 36.250777, 44.090483

- **2nd Site Visit:**

Date/Time: **25/05/2023 (Starts at 10:45 a.m. – ending 11:45 a.m.)**

Venue: Dashti Hawler District-Mala Omer town

School Name: Tarin primary school HC for boys & girls (Host Community School)

GPS Coordinator: 36.299178, 44.138252

- **3rd Site Visit:**

Date/Time: **28/05/2023 (Starts at 9:30 a.m. – ending 10:30 a.m.)**

Venue: Dashti Hawler District, Kasnazan town, Erbil

School Name: Raber primary school for Boys & Girls (Host Community School)
GPS Coordinator: 36.207158, 44.145864

- **4th Site Visit:**

Date/Time: **28/05/2023 (Starts at 10:45 a.m. – ending 11:45 a.m.)**

Venue: Erbil Nawand District, Erbil city-east (Gulan 2)

School Name: Kobani Primary School for Boys & Girls (refugee school, concrete building)

GPS Coordinator: 36.202175, 44.056192

- **5th Site Visit:**

Date/Time: **28/05/2023 (Starts at 12:00 p.m. – ending 01:00 p.m.)**

Venue: Dawrubar Hawler District-Mamzawa town

School Name: Aweza primary school HC for boys & girls (Host Community School)

GPS Coordinator: 36.122710, 43.965088

Please Note: UNHCR does not provide means of transport to the site.

For site visit information, please contact Mr. Hayder Salman at Tel No. +964 750 386 3549 or Mazin Al Nkhshbandi at Tel No. +964 751 038 0027

2.3.2 PRE-BID CONFERENCE:

UNHCR will organize a supplier pre-bid conference on MS Teams, on **29/05/2023 at 14:00 hrs.** A maximum of ONE representative (Technical Staff) per company is allowed. Name and contact details of the company's representatives must be provided, at least two working days in advance, by e-mail to IRQERPROC@unhcr.org CC: omerr@unhcr.org before **28/05/2023** Changes in staff need to be shared in advance; otherwise, they will not be able to participate.

Participation to the pre-tender conference shall be at the bidders' own expenses. There will be no reimbursement from UNHCR.

Participation to the pre-tender conference is **STRONGLY RECOMMENDED** given the complexity of the requirements. However, after the supplier conference, a Questions & Answers document will be prepared and posted on UNGM and/or distributed by email to all invited bidders.

IMPORTANT: Please note that Bid Submissions are not to be sent to the e-mail address above.

2.4 YOUR OFFER

IMPORTANT: Cancellation of Solicitation: UHCR reserves the right to cancel a Solicitation at any stage of the procurement process prior to final notice of award of a contract.

Your offer shall be prepared in English.

Please submit your offer using the Annexes provided. Offers not conforming to the requested formats may be not taken into consideration.

IMPORTANT: Inclusion of copies of your offer with any correspondence sent directly to the attention of the responsible buyer or any other UNHCR staff other than the manner of submission as specified in the tender document will result in disqualification of the offer. Please send your bid directly to the address provided in the "Submission of Bid" section 2.6) of this RFP.

Your offer shall comprise the following sets of documents:

- Technical offer
- Financial offer

2.4.1 Content of the TECHNICAL OFFER

IMPORTANT:

No pricing information should be included in the technical offer. Failure to comply may risk disqualification. The technical offer should contain all information required.

The Bill of Quantities for Construction of:

LOT1: Construction of Three Classrooms at Tarin Primary School, Construction of Two WASH Facility Units and One Classroom at Payman School, and Re-Construction of the Sewerage System and Rehabilitation for the WASH Facility Units at Raber Primary School in Erbil.

LOT2: Re-Construction of the Sewerage System and Rehabilitation for the Wash Facility Units at Aweza Primary School, and Construction of Three Classrooms at Kobani Primary School in Erbil.

All the details can be found in **Annex (A & B): Scope of Work (SOW) & Bill of Quantities.**

Your technical offer should be concisely presented and structured in the following order to include, but not necessarily limited to the following information:

Description of the company and the company's qualifications

A description of your company with the following documents: company profile, registration certificate and last audit reports:

- Year founded;
- If multi location company, specify headquarters location;
- Number of similar and successfully completed projects;
- Number of similar projects currently underway;
- Total number of clients; previous and current

- a. **Valid Registration Documents** / Certificate / Incorporation with the Government of Iraq (Federal Government or Kurdistan Region) as a construction or general contracting company, Company Age Not less than 3 years from the date of registration / incorporation.
- b. Your technical offer should contain your acknowledgement of the following applicable conditions either by signing the below documents or acceptance of the following in writing on its letterhead as part of your technical:

(i) Annex G: UNHCR General Conditions of Contracts for Civil works (October 2000)

However, please note that submitting an offer is deemed as full acceptance of UNHCR's General Conditions of Contracts for Civil Works (October 2000).

- c. **Bid Security:** Your technical offer should contain the sum of **USD 7,500** in the form of a Bank Guarantee or Certified Bankers Cheque issued from a local bank. The bid security must be valid for at least **180 Days** after the closing date of the tender. ***(Please include a scanned copy of bid security in your technical documents submitted through eTenderBox and keep the original. UNHCR may ask to submit original copy at later stage of the evaluation.)***

The bid security for the unsuccessful bidders will be released with the regret letter(s). The Bid Security for the successful bidder(s) will be released upon the submission of the Performance Bond and upon the signing of the Awarded Contract.

Your bid security may be forfeited: If you withdraw your offer during the period of the Bid Validity specified by you in your offer: or, In the case of a successful Bidder, if you fail to sign the Contract/Purchase Order - in which case, you would have refused the offer.

- d. **Award and Performance Bond (bank guarantee):**

The Firm that submits the successful Proposal will be notified by "Letter of Award" prior to the expiration of the validity period. The letter, referred to as the "Letter of Award" will state the sum of the fees to be paid to the Firm for the services rendered and will indicate the terms under which the Contract must be finalized. The

Contract must be signed within 14 days of the issuance of the Letter of Acceptance. The successful bidder will be required to furnish UNHCR with a **[10% BANK GUARANTEE]** of the contract value from a reputable bank in the next 7 days, valid for the entire period of the contract and the period for defects and liabilities period.

- e. List of Equipment owned by the firm to be mobilized for the execution of works described in **Annex A: Bill of Quantities & Scope of Work (SOW)**
- f. Frame-time for completion of the project including the main project milestones; Work Schedules; Gantt charts. Submission of a detailed and realistic work plan with +10% of the proposed duration of **90 Days**
- g. Past experience and performance records with other UN Agencies, NGOs or any other major clients and other credentials.
- h. Similar Past Experience (Copies of 3 Purchase Orders (POs), contract agreements, or work orders for **Construction, Rehabilitation and Sanitation Projects**, with proof of project completion in the **past ten (10) years**
- i. Project assumption's and constraints based on your understanding of the project;
- j. The methodology/approach to be used in addressing the issues outlined in the BoQ;
- k. Submit the latest 2 consecutive years' financial audited reports for the years **(2020-2021-2022)**; Audited Financial reports must include the Balance Sheet and must be certified by the Iraqi Association of Accountants, clearly demonstrating a minimum cumulative turnover of **USD 70,000.00**
- l. **Vendor Registration Form:** If your company is **not** already registered with UNHCR, you should complete, sign and submit with your technical proposal the **Vendor Registration Form (Annex E)** however in case if your company is registered, please clearly state your supplier/vendor ID. In case if you are not sure about the status of your company, please send you're a duly filled Vendor Registration Form.
- m. Any information that will facilitate our evaluation of your company's substantive reliability, financial and managerial capacity to provide the requested requirements by UNHCR as specified in **Annex A: Bill of Quantities & Scope of Work (SOW)**

Understanding of the requirements of the services requested in the solicitation documents such as: proposed approach, solutions, methodology and outputs.

Any comments or suggestions on the project, as well as your detailed description of the manner in which your company would respond to the BOQs:

- A description of your organization's capacity to provide the required services.
- A description of your organization's experience in undertaking / implementing the project.
- Compliance to the requirements stated on the in the BOQ and/or technical proposal form.

Proposed personnel to carry out the assignment

- The organization structure or organizational chart. List of key personnel and their qualifications with Curriculum Vitae of core staff.

Where deemed necessary a supplier visit may be required to complement the narrative of the technical evaluation.

IMPORTANT:

Companies not submitting the required documents with their proposal may be contacted by UNHCR and given one more opportunity (within 48 hours) to submit them (Only for the Administrative requirements **criterion no. 1, 2 & 3 (Site Visit Certificate, Bid security, and Business Registration Documents)**). Should these companies still not submit the missing documents, they will then be disqualified.

2.4.2 Content of the FINANCIAL OFFER

Your separate Financial Offer must contain an overall offer in United States Dollars (USD). The financial offer must cover all the services to be provided (price "all inclusive"). If no financial offer is received, the bid shall be automatically disqualified.

The Financial Offer is to be submitted as per the **Annex A & B: Bill of Quantities & Scope of Work (SOW) BIDS THAT HAVE A DIFFERENT PRICE STRUCTURE MAY NOT BE ACCEPTED.**

UNHCR is exempt from all direct taxes and customs duties. With this regard, **price has to be given without VAT.**

You are requested to hold your offer valid for a minimum of **180 days** from the deadline for submission. UNHCR will make its best effort to select a company within this period. UNHCR's standard payment terms are within 30 days after satisfactory implementation and receipt of documents in order.

The cost of preparing a bid and of negotiating a contract, including any related travel, is not reimbursable nor can it be included as a direct cost of the assignment. Any activity undertaken or expenses incurred in preparation of a contract before an actual contract is signed shall be borne by the Bidder. An advance notice or information of award is not to be considered as a contract.

UNHCR will not provide any advance payments or payments by letter of credit. The standard payment terms are by bank transfer net thirty (30) days after acceptance of contractor's invoice and delivery and acceptance of services by UNHCR in shape of a partial or substantial works completion certificate issued by the designated Project Manager / Engineer.

IMPORTANT: UNHCR can only facilitate payments through the local banks and not banks outside of Iraq and therefore the current market condition must be factored in before submitting your quote

IMPORTANT: Bidders are required to submit the financial offer both in PDF and Excel Sheet (Soft Copy) in the Template provided in Annex K: Financial Offer Form

2.5 BID EVALUATION:

Each proposal from a Bidder will be considered separately and independently. Bidders shall submit a complete proposal for each solicitation in which they wish to participate. References to previous or on-going proposals will be not considered. Award of a previous contract with UNHCR will not be considered in itself as a preference or guarantee for the award of future solicitations on the same subject.

2.5.1 Supplier Registration:

The qualified company (s) will be added to the Vendor Database after investigation of suitability based on the submitted Vendor Registration Form and supporting documents. The investigation involves consideration of several factors such as:

Financial standing;
Core business;
Track record;
Contract capacity.

2.5.2 Technical and Financial evaluation:

For the award of this project, UNHCR has established evaluation criteria which governs the selection of offers received. Evaluation is made on a technical and financial basis. The percentage assigned to each component is determined in advance as follows:

- **Technical Offer will be weighed at 60 points (or 60%)**
- **Financial Offer will be weighed at 40 points (or 40%)**

Technical Offer

The Technical offer will be evaluated using inter alia the following criteria and percentage distribution: **60% from the total score**, with a minimum passing score of **36 points**.

Evaluation Factors
Mandatory
Did the vendor send an engineer/technical staff to visit the site on the date and time and sign their company's name on the attendance sheet? <u>(The attendant should show any proof that he is an engineer).</u>
Has the bidder submitted a scanned copy of the Bid Security of USD 7,500 by "Good for Payment Cheque/Certified Cheque" made out in the name of UNHCR covering the offer's validity (180 days after the closing date of the bid)? It should be a certified cheque (not personal). <u>The cheque should indicate the RFP number and be issued under the company name.</u> The selected company would be required to submit the original cheque.
Is the company registered as a construction or general contracting company in IRAQ (Federal Government or Kurdistan Region)? <u>Companies aged under 3 years at the time of the submission will be disqualified.</u>

Scoring Criteria
General Company Qualification & experience (0-14 Point)
Relevant Experiences (0-8) marks
Technical Specification of Works (0-30) marks (Min Passing point is 20 Points)
Work Plan & Method of Implementation (0-8)
Total Marks (60)

The Technical offer score will be calculated according to the percentage distribution for the technical and financial offers. The cut-off points for submissions to be considered technically compliant will be 60% of the total technical weightage **36 out of the 60**

Financial Offer:

The Financial offer will use the following percentage distribution: **40%** from the total score. The financial component will be analyzed only for those suppliers that pass the technical evaluation. The maximum number of points will be allotted to the lowest price offer that is opened and compared among those invited firms. All other price offers will receive points in inverse proportion to the lowest price, e.g., $[\text{total Price Component}] \times [\text{US\$ lowest}] \setminus [\text{US\$ other}] = \text{points for other supplier's Price Component}$.

Clarifications of Proposals:

To assist in the examination, evaluation, and comparison of proposals UNHCR may at its discretion ask the Bidder for clarification about the content of the proposal. The request for clarification and the response shall be in writing and no change in price or substance of the proposal shall be sought, offered, or accepted. UNHCR reserves the right to award without clarifications and/or discussions. If there are arithmetic mistakes in the budget of the technically acceptable applicants, UNHCR will rectify these mistakes on the following basis:

- a) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected; and
- b) If there is a discrepancy between the amounts in figures and in words, advantage will be given to the amounts in words.

If the correction(s) leads to a different total cost, this new total cost will be evaluated against other technically acceptable Proposals and considered as being part of the Best Value evaluation and selection. UNHCR reserves the right to reject the Proposal if the technically acceptable applicant does not accept the correction of mistakes in the budget by UNHCR.

2.6 SUBMISSION OF BID:

The offers must bear your official letter head, clearly identifying your company. The Technical and Financial offers shall be clearly separated.

Please submit your proposal through an online eTenderBox Tool, which can be accessed at <http://etenderbox.unhcr.org>.

To submit a proposal against UNHCR tender, the bidder needs to register in eTenderbox system. Please refer to the eTenderbox user manual for bidders at **Annex I: e-Tender Box Supplier user manual**. You are requested to get familiar with this tool and create a login by registering your company in the system for access to the current and upcoming UNHCR tenders.

Once the login is created, the bidder will be given access to the UNHCR available tenders. Bidders can access the specific tender by clicking on the "tender reference number", the system will then navigate to the detailed tender review page, where the separate technical and financial submissions can be done

It is the bidder's responsibility to upload only technical documentation under the "Technical" category and Financial documentation under the "Financial" category. Failure to do so will result in disqualification. Note: The official submission of the selected files for upload is done by clicking the 'Save & Submit' button, therefore, this button has to be clicked before the deadline expires. If done so, the selected files will be submitted and uploaded successfully even if the deadline expires during the file upload. It is the Supplier's responsibility to ensure that all files of the final offer are submitted before the tender expiration deadline. In order to ensure the safe submission of the full and final offer, it is recommended to have all files uploaded well before the tender deadline.

Allowed extensions for files to upload are .doc, .docx, .xls, .xlsx, .rtf, .png, .jpg, .jpeg, .pdf, .txt, .zip, .ppt, .pptx, .bmp, .rar, .gif, .tif and .tiff, however **it is preferable to upload PDF files. Executable files** (.exe, .bat, .cmd etc.) should not be uploaded. All files should be clearly labeled. **The maximum size limit per file is 10MB.**

IMPORTANT: The technical offer and financial offer are to be sent in separate documents. Failure to do so may result in disqualification.

IMPORTANT: DEADLINE TO SUBMIT YOUR BID: **06/06/2023 BY 23:59 HOURS LOCAL TIME:** Any bid uploaded after this date and time will be rejected. UNHCR may, at its discretion, extend the deadline for the submission of bids by notifying through eTenderbox.unhcr.org and WWW.UNGM.ORG.

IMPORTANT: Any bid received after this date or sent to another UNHCR address may be rejected. UNHCR may, at its discretion, extend the deadline for the submission of bids, by notifying all prospective bidders simultaneously.

UNHCR will not be responsible for locating or securing any information that is not identified in the bid. Accordingly, to ensure that sufficient information is available, the bidder shall furnish, as part of the bid, any descriptive material such as extracts, descriptions, and other necessary information it deems necessary for a comprehensive understanding of its proposal by UNHCR.

IMPORTANT: The Financial offer will only be opened for evaluation if the supplier's technical part of the offer has passed the test and has been accepted by UNHCR as meeting the technical specifications.

2.7 BID ACCEPTANCE:

UNHCR reserves the right to accept the whole or part of your bid or allow split or partial awards on this project. It is however important to note that the construction project cannot be split unless the various components are defined by LOT. All other projects are to be awarded on an all or nothing basis.

Important: Any missing cost for a line in Bill of Quantities & Financial Offer will be considered invalid.

UNHCR may at its discretion increase or decrease the proposed content when awarding the contract and would not expect a significant variation of the rate submitted. Any such increase or decrease in the contract duration would be negotiated with the successful bidder as part of the finalization of the Purchase Orders for Services.

Please note that UNHCR is not bound to select any of the firms submitting bids and does not bind itself in any way to select the firm offering the lowest price. Furthermore, the contract will be awarded to the bid considered most responsive to the needs, as well as conforming to UNHCR's general principles, including economy and efficiency and best value for money.

Some of the reasons of disqualification:

Some of the reasons which may lead to such disqualification of your offer are as following: Proposal if:

1. The Applicant's qualification or data are proven to be false; The selected Applicant refuses to enter in to a contract.
2. The Applicant commits a proven unfair or dishonest act in order to acquire rights for agreement award.
3. The proposal is received through any other means of communication except as specified in this solicitation document under Article 2.6 SUBMISSION OF BID
4. The offer is received after the deadline for submission of bids stated in the tender documents; and/or Sent via the correct route after having been sent incorrectly.
5. Any changes made to the BOQ by the bidder may result in disqualification of the offer.

2.8 CURRENCY AND PAYMENT TERMS FOR PURCHASE ORDERS

Any Purchase Order (PO) issued as a result of this RFP will be made in the currency of the winning offer(s). Payment will be made in accordance to the General Conditions for the Provision of Goods and Services and in the currency in which the PO is issued. Payments shall only be initiated after confirmation of successful completion by UNHCR business owner.

Any Purchase Order (PO) issued as a result of this RFP will be made in USD. Payment will be as follows:

- a) **1st Payment (40%)** of contract value after completing **45% of the Scope of the work**.
- b) **2nd Payment (50%)** of contract value after completing **100% of the Scope of the work**.
- c) **Payment Retention: 10%** of the total project amount will be withheld from the Final Payment as a Retention Amount for a period of Defect Liability Period of **6 Months** after the completion of the project.

2.9 UNHCR GENERAL CONDITIONS OF CONTRACTS FOR CIVIL WORKS (OCTOBER 2000)

Please note that the **UNHCR General Conditions of Contracts for Civil works (October 2000) (Annex G)** will be strictly adhered to for the purpose of any future contract. The Bidder must confirm the acceptance of these terms and conditions in writing.

2.10 Liquidated Damages

- 2.10.1 In accordance with the provisions made in the Article 45 of (The UNHCR General Conditions of Contract for Civil Works (October 2000 version) and in Article 17 of the UNHCR Standard Contract for Construction Services. The Contractor acknowledges the requirement of UNHCR to be completed **in accordance with the time frames stipulated contract resulting from this solicitation process with the successful bidder**. The successful bidders will therefore be required to acknowledge, that time is of the essence in relation to performance of its obligations.
- 2.10.2 Should the Contractor be in delay, without prejudice to UNHCR's other rights and remedies, UNHCR may, at its sole option, demand liquidated damages for such delay, in an amount equal to **0.1%** for each [DAY for the portion of incomplete portion of the works] of delay beyond the date upon which the Services were due to be completed. The Parties agree and acknowledge that calculation of damages from a breach would be difficult to estimate accurately and that the foregoing [The assessment will not exceed 10 percent of the Contract value] is a reasonable approximation thereof and is intended as the fair allocation and liquidation of damages and not as a penalty against the Contractor.
- 2.10.3 UNHCR shall have the right to deduct any liquidated damages to which it is entitled under the terms of its standard contract for construction services from any monies due from UNHCR to a potential Contractor (resulting from this solicitation process), or to recover the same as a debt due from the Potential Contractor.
- 2.10.4 Liquidated damages shall be payable by virtue of the sole fact of the delay without the need for any previous notice or any legal or arbitral proceedings, or proof of damage, which shall in all cases be considered as ascertained.

Signature

Anwar ul Haq, Associate Supply Officer
UNHCR Representation Office IRAQ

The seal is circular with a blue border. Inside the border, the text "REPRESENTATION IN IRAQ" is written at the top and "SUPPLY - ERBIL" at the bottom. In the center, there is a logo featuring a stylized figure of a person with arms raised, flanked by two olive branches. Below the logo, the text "UNHCR" is written in large, bold letters, and "The UN Refugee Agency" is written in smaller letters below it.

Annex A: Scope of Work (SoW) **(LOT 1 & LOT 2)**

Brief Description of the Proposed Project:

This project is for constructing additional Classrooms for five Schools in Erbil to increase the buildings' capacity to absorb more students and provide educational access to the host community students living. Also, rehabilitate and renovate the sewerage system and WASH Facilities.

The classrooms are 4.5 X 7 and 5 X 7 meters.

The identified location is:

1. Construction of Three Classrooms at Tarin Primary School (LOT 1)
2. Construction of Two Wash Facility Units and One Classroom at Payman School (LOT 1)
3. Re-Construction of the Sewerage System and Rehabilitation for the Wash Facility Units at Raber Primary School (LOT 1)
4. Re-Construction of the Sewerage System and Rehabilitation for the Wash Facility Units at Aweza Primary School (LOT 2)
5. Construction of Three Classrooms at Kobani Primary School (LOT 2)

In addition, the demand for seats/ space in primary schools is solved by building new classrooms for the schools.

The Project includes the following works:

- Civil works consist of site preparation, excavation, backfilling, and compacting work.
- Concrete works include lean concrete, foundation-reinforced concrete, floor concrete, tie beam and slab-reinforced concrete.
- Masonry works include Solid Concrete Blocks (15x20x40) cm, Hollow Concrete Blocks (20x20x40) cm, Hollow Concrete Blocks (12x20x40) cm and Hollow Concrete Blocks (30x30x20) cm
- Electrical work includes supplying, installing, and testing the main distribution board, LED lights, cables, ceiling and exhaust fans, 13 A Switch Socket outlet, split AC unit, water cooler and water boiler.
- Sanitary (Plumbing) Works Include supply and installation of HDPE water tank, PPR and PVC pipes, Manholes with floor drain, wash basin and water mixer and rain drain GI pipes.
- Finishing work includes cement and gypsum plastering, porcelain and ceramic tiling, internal and external paint, false ceiling, roof treatment, Aluminum windows, and steel and wooden doors.

Important Note:

- All the works should be done according to the International & Iraqi General Technical & Specifications (IGTS), Instructions of the supervision Engineer, UNHCR General Conditions of Contracts for Civil Works.
- UNHCR supervision engineers and its third-party partner engineers inspect the quality of the works implemented by the contractor. The work must be within engineering specifications/standards and timeframe.
- All the works should be done according to the International & Iraqi General Technical & Specifications (IGTS), Instructions of the supervision Engineer, UNHCR General Conditions of Contracts for Civil Works.
- The daily work is overseen by UNHCR supervision engineers and its third-party partner engineers.
- The contractor shall submit samples/catalogues of the materials to be used in the project to the supervision engineers for approval, before the commencement of work.
- The supervision engineer can reject any material not complying with the specifications. The contractor should replace rejected materials without any extra cost.
- The Supervision Engineers can demand lab tests and a Certificate of Origin & Quality to ensure the quality of the material used and the work of the contractors.
- The contractor shall appoint a qualified site engineer and surveyor to represent him with 5 years of professional, relevant experience to work on such a project, who should remain full-time on the sites during the contract period.
- The contractor should submit daily and weekly progress reports, which will be endorsed by UNHCR supervision engineers and its third-party partner engineers.
- All the mentioned quantities in the BOQ are estimated and are subject to actual measurements after the completion of the project.
- The contractor shall fix all damages, if any, to the existing pipeline, electric poles & cables, houses, streets & sewerage channels during the project implementation in the area. The contractor shall remove all debris and site

waste after completion of works to dumping sites that are approved by the municipality.

- The contractor shall install (in full first) TWO steel signboards of 1.0 m x 1.2 m with calligrapher wages to achieve visibility of the project in accordance with UNHCR supervision engineers.
- The successful contractor will be required to complete all works as per the Drawings, Bill of Quantities, and Technical Specifications **within 90 days from the site handover.**
- **The defect liability period is 180 Days, including all civil, electrical, and mechanical works.**

Schedule of Requirements:

No	Detail of Works to be Carried Out	Description/ Specifications of Goods/Services	Related Services	Contract Duration (Calendar days)
1	LOT1: Construction of Three Classrooms at Tarin Primary School, Construction of Two WASH Facility Units and One Classroom at Payman School, and Re-Construction of the Sewerage System and Rehabilitation for the WASH Facility Units at Raber Primary School in Erbil. LOT2: Re-Construction of the Sewerage System and Rehabilitation for the Wash Facility Units at Aweza Primary School, and Construction of Three Classrooms at Kobani Primary School in Erbil.	As per BOQ (LOT 1-A, LOT1-B LOT1-C & LOT2-A, LOT2-B)	As per BOQ	270 Days (90+180 defect liability)
	• Further to the Schedule of Requirements in the preceding table, bidders are requested to take note that the project will be implemented according to the provision of IRAQI General Technical Specifications (IGTS), Instructions of the supervisor Engineer, UNHCR General Conditions of Contracts for Civil Works. • Other specific instructions are annexed in the Bill of Quantity (BOQ).			

Annex B: Bill of Quantities
LOT1-A Construction of Three Classrooms at Tarin Primary School in Erbil.

No.	Description	Unit	Qty.
A	Site Preparation		
A.1.1	Demolishing Works: Demolishing defective concrete at the play yard (11m*12m) and a part of the existing walkway (4.2m*11m) to get an adequate area for the construction of new classrooms and (25 m.l) existing fence wall, all debris, and demolished material should be transported to approved location by the municipality.	L.S	1
A.1.2	Excavation works: Excavation in all types of soils (even rock layers, asphalt, or existing foundation concretes), including backfilling with sub-base material and compaction according to requirements of section (2) of I.G.T.S. The price includes demarcating/cutting excavation part (New Classrooms) by cutter machine compaction of the excavation base by using Vibrator and according to details and instruction of site engineer.	M ³	25
A.1.3	Backfilling works: Supplying materials and filling with approved screened sub-base materials type A maximum size is 2" up to the DPC level for the building and where required within the area inside or outside such as aprons, walkways, Play yard etc.... with compaction (according to the specification) in layers 25 cm thickness, the compaction must be not less than 80% MDD, and using anti termite chemical (cloreddin) to prevent and treat the white termite according to the instructions of the manufacturer and site engineer with all necessary works for the final two layers.	M ³	113
B	CONCRETE WORKS: Including supply of materials (steel reinforcement, connection steel wires, Ready mix concrete , plastic cover for fixing the steel reinforcement in the proper level, bolts, nuts, washers, G. I. pipes, etc.), and all necessary works, according to the section (6) of I.G.T.S, drawings, and instructions of the site engineer. 1- all support for wooden forms work should be steel (jacks). 2- All steel bars must be according to ASTM A 615 Fy = 420 Mpa for all steel bars. 3. Allowable bearing capacity of soil = 120 KN / m ² (assumed). 4. concrete compressive strength at 28 days based on standard 150 mm cubes should not be less than 25MPa for slab and foundation and 30 Mpa for columns. 5. The reinforcement details should be according to ACI detailing manual 2004. 6. All formworks must be made of plywood or standard forms (not local way) for all structural parts. 7. using nylon under all the concrete works.		
B1	Plain Concrete: Supply materials and cast plain concrete (C10) 1:3:6 10cm (min. thickness) for wall footings to the required elevations after laying two layers of thick nylon. (The nylon should also cover the sides of excavation walls and extend on land for 50cm to both sides of the excavation).	M ²	7
B2	Play Yard: Providing materials and casting plain concrete (Smooth surface, using copter instrument) for the play yard thickness of 12cm with laying one layer of BRC 6mm Dia. (15cm*15cm) C/C, making expansion joints every 2.6 m in both directions or as the cutter instrument requires. The price includes using steel forms for the edges and nylon. The work should be done according to the site engineer's specifications, drawings, and instructions.	M ²	135
B3	Walkway: Providing materials and casting plain concrete (Smooth surface, using copter instrument) for the walkway thickness of 10cm with laying one layer of BRC 6mm Dia. (15cm*15cm) C/C, making expansion joints every 2.6 m in both directions or as required by the cutter instrument. The price includes using steel forms for the edges and nylon. The work should be done according to the site engineer's specifications, drawings, and instructions.	M ²	50
B4	Foundation and footing: Provide all materials and cast reinforced concrete (ready mix C 25) for the foundations, continuous footing , according to attached drawings. All casting works must be done with a vibrator.	M ³	12
B5	Slabs: Provide all materials and cast reinforced concrete(ready mix C 25) for slabs according specifications, and site engineer instructions. Note: All the roofs must be treated and smoothed by a copter instrument and using a vibrator during casting.	M ³	21
B6	Beams: Provide all materials and cast reinforced concrete (ready mix C 25) for beams, lintels according to drawings, specifications and instructions of site engineer.	M ³	7
B7	DPC-Tie Beams: Provide all materials and cast reinforced concrete (ready mix C 25) for DPC-Tie beams, according to drawings, specifications and instructions of site engineer.	M ³	2.5
C	Masonry works: Including provision of material, erection, pointing, curing with all necessary work according to section (5) of I.G.T.S., drawings, and instructions of the site engineer.		
C1	Solid concrete block works: Supply material & construction of walls with solid concrete blocks 15X20X40cm with cement, sand mortar(1: 3). The price includes flush pointing for outside and inside by cement sand 1:3.	M ³	14
C2	Hollow concrete block works: Supplying materials & construction of walls with hollow concrete blocks 20 X 20 X 40 cm with cement mortar(1: 3) for above D.P.C level the price includes filling vertical joints between blocks with cement and sand 1:3; the works should be done according to specifications and instructions of the site engineer.	M ³	44
D	ELECTRICAL INSTALLATIONS: Electrical points including provision and installation of all wiring (three lines Line, Neutral and earth 1.5 mm2 for illumination and 2.5 mm2 for the rest), inside PVC conduits 20-25 mm with thickness 1.8 mm galvanized boxes 0.9 mm thickness cables should be laid inside PVC pipes, all materials like switch's, circuit breaker..etc. It must be form the original brand and of good quality like BG, Mk, Panasonic ABB, Schneider, or equivalent quality. All work should be done according to the specifications and instructions of a supervisor engineer. - The contractor is responsible for designing all electrical boards and networks to submitting them to UNHCR TU for approval before starting the works.		
D1	Supply materials, install, connect and test electrical LED lights (60x60cm)(72 W) with all annexed parts using (2x1.5)mm2 wires inside false ceiling (daylight type) with switch on/off. All required work according to instructions of the supervisor Engineer.	Unit	18
D2	Supply, install and test lighting points LED 18Watt (outdoor) IP 65 with all required using (single wires 1.5mm ² with a suitable cable tray or cable conduit). The price includes the switch light. The price includes installing photocells.	Unit	15
D3	Supply, install and test socket 13 Amp. Using (wires 2.5mm ² .The work should be done according to the instruction of supervisor engineer.).	Unit	10
D4	Branch Circuit breaker 3 phase 60 A Schneiderquality or equivalent.	Unit	1
D5	Supply, install and test FDB Circuit breaker, 12 lines (Different circuit breakers), with main 125A, including connections, interconnections, painting, lettering, loop earth etc., as required. The price includes the provision of a protection box.	Unit	1

D6	Supply, install and test copper cable 4 X 10mm2+10mm2 inside 2.5" diameter PVC pipes in the ground or on the wall + installing above cable tray with all required and necessary works (such as hidden manholes) iron pipe 2" with an insulator.	ml	200
D7	Supply and install and test split points using copper cable 4x6mm2 inside PVC pipe with an electric switch 45 Amp best type, with using mini 32x3 Amp +10Amp with box, also install 3/4" PVC pipe inside the wall with fixing it to drain the water of the split outside the building.	Unit	3
D8	Supply, install and test electric Ceiling Fan (Panasonic, Philips, Toshiba) or equivalent (if the mentioned brands are unavailable) with the regulator; the price includes installing the electrical points by isolation copper wire 1.5 mm2 and 10mm steel bar for hanging the fan according to of instruction of supervisor electrical engineer.	Unit	6
D9	Supply, install and test split AC unit (24,000 BTU) (tosot, LG, or Gree) or equivalent (if the mentioned brands are not available) (INVERTER TECHNOLOGY). The work also includes installing a 32 Amp Residual current circuit breaker with Overcurrent Protection- RCBO (ABB, Siemens, Schneider) or equivalent (if the mentioned brands are not available) and connecting it with the electrical source using (2X4)mm2 cable with all accessories. The price also includes coring the wall using a proper machine (if needed) and filling the hole with foam and proper cover. The price includes fixing and suspending the outdoor unit on the wall or making a proper steel stand.	No.	3
E	FINISHING: Including provision of all necessary materials, works, and curing to do the finishing works. The works should be done according to sections 10, & 14 of I.G.T.S., drawings and instructions of the site engineer with all necessary works, and use SBR at a rate of 200 gr per m2.		
E1	Cement plastering: Providing materials, staff and plastering with cement sand mortar 1:3, three layers (cement splatter dash, kafmal, saf) 20mm thick min inside and outside the building. The final layer should be veroth, using straight aluminum edges for plastering guides. Using SBR at a rate of 200gr per m2, the price includes fixing steel wire mesh for the edges between walls and columns.	M ²	280
E2	Gypsum plastering for the block walls inside the rooms: Supplying materials and plastering with gypsum (using the best type of gypsum approved by the site engineer) in 2 layers with a minimum thickness of 15 mm using straight aluminum edges for plastering guides each 80 cm for walls and roofs and the area indicated in the drawings, also fixing steel wire mesh then using one layer of cement plastering for covering the wire mesh.	M ²	260
E3	Skirting: Supply materials and skirting using first-class ceramic tiles (15)cm height and tile adhesive materials (Kalakem flex type) in rooms according to the drawings and instructions of the site engineer.	ml	80
E4	Provide materials and cover the windows frame (four sides) with marble 3cm thick (best type), width 30cm; the price includes spin-off the outer edges of the granite and using kalakim paste FLEX type for fixing. The work should be done according to the site engineer's specifications, drawings, and instructions.	ml	42
E5	Acrylic internal paint: Provide materials and staff to paint the internal walls of the building with Acrylic painting (color approved by the site engineer) three layers after prime coat with all the required works to make the wall fare face before painting using paste or any required works as indicated by the site engineer. The work should be done according to IGTS. Note: the paint must be according to the international specification organization ISO 9001.	M ²	260
E6	External painting(Silicone): Provide materials and Painting with External painting and color approved by the site engineer) three layers after the prime coat for the areas indicated in the drawings (for exterior walls). The work should be done according to the site engineer's specifications, drawings, and instructions. Note: the paint must be according to the international specification organization ISO 9001.	M ²	280
E7	Satin painting 120 cm: Provide materials and Painting 120 cm Hight with satin painting and color approved by the site engineer) three layers for the areas indicated in the drawings (for walls).	M ²	100
E8	Roof Treatments: Provide materials and workers to treat the roof by using waterproof (UV resistant) Sika 3mm layer thickness with fibreglass mesh and prime caot. the price includes cleaning, treating and using prime coat before using roof guard and all the required works according to the site engineer.	M ²	135
E9	Suspended ceiling tile (false ceiling): Provide materials and fix acoustical panels 60 X 60 cm, fire rate Class A, edge SLT model for the classrooms. The price includes hanging beams (Skka 38 mm height) every 120cm by, a screw, steel fisher, rode 3mm, connecting the beams by skka 120cm,60cm long (32mm height), and all necessary works. The work should be done according to the specifications and instructions of the site engineer.	M ²	102
E10	Shade Construction: Supply material, required equipment, and skilled labor to construct the Shade for the connection part between the new class rooms and exited building; shade structure should consist of the following: Columns: Install iron hollow section square pipe or circular sized 100x100x3.0 mm of approved brand and quality and fix it on the ground excavation 50x50x60 cm cutting with concrete. The height of the columns is 3m, and they will be painted with a layer of anti-rust paint and two layers of oil paint; the work also includes concreting (Welding, washers, nuts, volts...etc.) Roof structure: The roof structure should be made of hollow section 80x40x2mm & 40*40*2mm steel in approved quality and fixing. The structure will be painted with a layer of anti-rust paint and two layers of oily blue paint. Roofing: The roofing consists of a steel structure and corrugated iron sheet trapezoidal shape (gauge 22), fixed on the purlins (4cm*2cm*2mm) by screw, with all necessary works according to specifications and instructions of the site engineer.	M ²	12
F	Doors & Windows: Providing all necessary materials and installing doors according to sections 11, 12, 13 of I.G.T.S, details, and instructions of site engineer with all necessary works, prior samples should be approved by site engineer.		
F1	Metal Door: Provide and install decorative metal doors approved, well-known origin and brand for the entrances and halls and rooms, double-faced of plate thickness 1.50mm including glass pans, door frame 13.5*4.5cm 2.5mm thickness, Film Coated Residential Steel Entrance Door Glassy Finished Style, including special switch best type, gate lock, door stopper, rubber, polycarbonate filled, special guard bar, thermal paint & metal frames 6*22cm, Mercury glass 15x40cm with 3 cm Styrofoam polystyrene inside the door, Central lock system, with additional horizontal a lock with three concealed hinges with all necessary works, samples required for final approval.	M ²	10
F2	Steel guard bars: Provide and install metal guard bars windows, with primer and two layers of best oil paint, using square bar 12 x 12 mm welded inside an angle frame 1.25*1.25*3mm, fixed by screw and fisha to the wall according to the details, and instructions of the site engineer.	M ²	12
F3	Aluminum Window: Supply material and install Aluminum windows wide section best type 2mm thickness. , Double glass pan (6mm+4mm) thickness, ordinary or mushajar , rubber, handle, flywire mesh for opening Areas, the price includes using EKOPLAST paste, cleaning the glasses by machine before composing, and all other required works according to the drawings and instructions of site engineer.	M ²	12

F5	Sign board: Supply and install steel sign board (2.5mX1.5m) plate gage 18, with steel angle frame (1.25x1.25) inch (3mm) thickness, with one layer of anti-rust paint and two layers of approved color oil paint (JOTIN) brand or equivalent, ISO 901, includes printing the name of the school with the foundation year in detail.	Unit	1
G	Flooring: (Including provision of materials, works, curing and installation) the work should be done according to the sections 6 and 9 of I.G.T.S. drawings, and instructions of site engineer with all necessary works.		
G1	Floor concrete:- Provide materials and cast plain concrete 10cm thickness, including grading and leveling of the foundation under the ceramic tile and laying one layer of thick nylon or a layer of crushed stone, according to the details for the ground floor.	M ²	102
G2	Supply materials and paving ceramic tile best quality first class (sample should be provided for approval), Wear-resistant, Non-slip, Acid-resistant, Low water-absorption 0.5% with all necessary works on a layer of cement sand mortar 1:3 mix ratio. The price includes cleaning the porcelain after the end of the work. The work includes using cement mortar and sealing the joints with white cement & lime grout and SPR color if required mixture), making a 1.0 cm expansion joint, each 25m2 filling with a flexible epoxy. All required works should be done according to the attached drawing and the supervisor engineer's instructions.	M ²	102

Annex B: Bill of Quantities

LOT1-B Construction of Two Wash Facility Units and One Classroom at Payman School in Erbil.

No.	Description	Unit	Qty.
A	Site Preparation		
A.1.1	Demolishing Works: Demolishing existing fence wall (22m.l * 2m* 20cm) to get an adequate area for the construction of #1 new classroom #2 wash facility units, all debris, and demolished material should be transported to the approved location by the municipality. The work also includes transporting existing prefab caravans (#3*9m*3m) to an opposite location for new construction in the school boundary.	L.S	1
A.1.2	Excavation works: Excavation in all types of soils (even rock layers, asphalt, or existing foundation concretes), including backfilling with sub-base material and compaction according to requirements of section (2) of I.G.T.S. the price includes demarcating / cutting excavation part (New Class Room & Toilet Units) by cutter machine, compaction of the excavation base by using Vibrator and according to details and instruction of site engineer.	M ³	32
A.1.3	Backfilling works: Supplying materials and filling with approved screened sub-base materials type A maximum size is 2" up to the DPC level for the building and where required within the area inside or outside such as aprons, walkways, Play yard etc.... with compaction (according to the specification) in layers 20 cm thickness, the compaction must be not less than 80% MDD, and using anti termite chemical (cloredidin) to prevent and treat the white termite according to the instructions of the manufacturer and site engineer with all necessary works for the final two layers.	M ³	25
B	CONCRETE WORKS: Including supply of materials (steel reinforcement, connection steel wires, Ready mix concrete, plastic cover for fixing the steel reinforcement in the proper level, bolts, nuts, washers, G. I. pipes, etc.), and all necessary works, according to the section (600) of I.G.T.S, drawings, and instructions of the site engineer. 1- all support for wooden forms work should be steel (jacks). 2- All steel bars must be according to ASTM A 615 Fy = 420 Mpa for all steel bars. 3. Allowable bearing capacity of soil = 120 KN / m2 (assumed). 4. concrete compressive strength at 28 days based on standard 150 mm cubes should be at least 25MPa for slab and foundation and 30 Mpa for columns. 5. The reinforcement details should be according to ACI detailing manual 2004. 6. All formworks must be made of plywood or standard forms (not local way) for all structural parts. 7. using nylon under concrete.		
B1	Plain Concrete: Supply materials and cast plain concrete (C10) 1:3:6 10cm (min. thickness) for wall footings, Manholes base & Septic tank base to the required elevations after laying two layers of thick nylon. (The nylon should also cover the sides of excavation walls and extend on land for 50cm to both sides of excavation).	M ²	65
B2	Foundation and footing: Provide all materials and cast reinforced concrete (ready mix C 25) for the foundations, continuous footing, according to the attached drawings. All casting works must be done with a vibrator.	M ³	17
B3	Slabs: Provide all materials and cast reinforced concrete (ready mix C 25) for slabs according to specifications and site engineer instructions. Note: All the roofs must be treated and smoothened by a copter instrument and using a vibrator during casting.	M ³	22
B4	Beams: Provide all materials and cast reinforced concrete (ready mix C 25) for beams and lintels according to drawings, specifications, and instructions of the site engineer.	M ³	5
B5	DPC-Tie Beams: Provide all materials and cast reinforced concrete (ready mix C 25) for DPC-Tie beams, according to drawings, specifications, and instructions of the site engineer.	M ³	3.0
C	Masonry works: Including provision of material, erection, pointing, curing with all necessary work according to section (5) of I.G.T.S., drawings, and instructions of the site engineer.		
C1	Solid concrete block works: Supply material & construction of walls with solid concrete blocks 15X20X40cm with cement, sand mortar(1: 3). The price includes flush pointing for outside and inside by cement sand 1:3.	M ³	13
C2	Hollow concrete block works: Supplying materials & construction of walls with hollow concrete blocks 20 X 20 X 40 cm with cement mortar(1: 3) for the above D.P.C level the price includes filling vertical joints between blocks with cement and sand 1:3; the works should be done according to specifications and instructions of the site engineer.	M ³	50
C3	Hollow concrete block works: Supplying materials & construction of walls with hollow concrete blocks 15 X 20 X 40 cm with cement mortar(1: 3) for above D.P.C level (Toilet Partition Walls, height 2m) the price includes filling vertical joints between blocks by cement and sand 1:3, The works should be done according to specifications and instructions of the site engineer.	M ³	8
D	ELECTRICAL INSTALLATIONS: Electrical points including provision and installation of all wiring (three lines Line, Neutral and earth. 1.5 mm2 for illumination and 2.5 mm2 for the rest), inside PVC conduits 20-25 mm with thickness 1.8 mm galvanized boxes 0.9 mm thickness cables should be laid inside PVC pipes, all materials like switch's, circuit breaker..etc. Must be form the original brand and of good quality like BG, Mk, Panasonic ABB, Schneider or equivalent quality. All work should be done according to the specifications and instructions of a supervisor engineer.		

	- The contractor is responsible for designing all electrical boards and networks to submitting them to UNHCR TU for approval before starting the works.		
D1	Supply materials, install, connect, and test electrical LED lights (60x60cm)(72 W) with all annexed parts using (2x1.5)mm2 wires inside false ceiling (daylight type) with switch on/off. All required work according to instructions of the supervisor Engineer.	Unit	20
D2	Supply, install and test lighting points LED 18Watt (outdoor) IP 65 with all required using (single wires 1.5mm ² with a suitable cable tray or cable conduit). The price includes the switch light. The price includes installing photocells.	Unit	15
D3	Supply, install and test socket 13 Amp using (wires 2.5mm ²). The work should be done according to the instruction of the supervisor engineer.).	Unit	5
D4	Branch Circuit breaker 3 phase 60 A Schneider quality or equivalent.	Unit	1
D5	Supply, install and test FDB Circuit breaker, 12 lines (Different circuit breakers), with main 125A Legrand Type, including connections, interconnections, painting, lettering, loop earth etc. as required. The price includes provision of a protection box.	Unit	1
D6	Supply, install and test copper cable 4 X 10mm2+10mm2 inside 2.5" diameter PVC pipes in the ground or on the wall + installing above cable tray with all required and necessary works (such as hidden manholes) iron pipe 2" with an insulator.	ml	60
D7	Supply and install and test split points using copper cable 4x6mm2 inside PVC pipe with electric switch 45 Amp best type, with using mini 32x3 Amp +10Amp with box, also install 3/4" PVC pipe inside the wall with fixing it to drain the water of split outside the building.	Unit	1
D8	Supply, install and test electric Ceiling Fan (Panasonic, Philips, Toshiba) or equivalent (if the mentioned brands are unavailable) with the regulator; the price includes installing the electrical points by isolation copper wire 1.5 mm2 and 10mm steel bar for hanging the fan according to of instruction of supervisor electrical engineer.	Unit	2
D9	Supply, install and test split AC unit (24,000 BTU) (tosot, LG, or Gree) or equivalent (if the mentioned brands are not available) (INVERTER TECHNOLOGY). The work also includes installing a 32 Amp Residual current circuit breaker with Overcurrent Protection- RCBO (ABB, Siemens, Schneider) or equivalent (if the mentioned brands are not available) and connecting it with the electrical source using (2X4)mm2 cable with all accessories. The price also includes coring the wall using a proper machine (if needed) and filling the hole with foam and proper cover. The price includes fixing and suspending the outdoor unit on the wall or making a proper steel stand.	No.	1
D10	Supply, install and test industrial Exhaust Fan size (8") mounted to the walls inside a wooden frame. The price includes supplying & installing until brake wire mesh, painting from outside, and control switch.	Unit	8
D11	Supply and install and test 200 Liters production storage capacity an electrical water heater element of 2000 Watt with a thermostat. The tank plate is galvanized with 3mm thick The work includes all wiring 4x3mm2 and 30 Amp electric switch, plumbing works, pipes, fittings, and complete fixtures. The unit's location should be as per the instructions of the Site Engineer.	Unit	2
D12	Supply and install and test 60 Liters production storage capacity an electrical water heater element (Suspended) of 2000 Watt with a thermostat. The tank plate is galvanized with 3mm thick The work includes all wiring 4x3mm2 and 30 Amp electric switch, plumbing works, pipes, fittings, and complete fixtures. The unit's location should be as per the instructions of the Site Engineer.	Unit	1
D13	Supply, install, and test 60 Liters, best type, production storage capacity, and an electric water cooler with two drains. The price includes connecting the water sources and electricity with all required materials and works.	Unit	4
E	FINISHING: Including provision of all necessary materials, works and curing to do the finishing works. The works should be done according to section 10, & 14 of I.G.T.S, drawings and instructions of site engineer with all necessary works, and use SBR at a rate of 200gr per m2.		
E1	Cement plastering: Provide materials, staff, and plastering with cement sand mortar 1:3, three layers (cement splatter dash, kamal, saf) 20mm thick min inside and outside the building the final layer should be very smooth, using straight aluminum edges for plastering guides. Using SBR at a rate of 200gr per m2, the price includes fixing steel wire mesh for the edges.	M ²	320
E2	Gypsum plastering for the block walls inside the rooms: Supplying materials and plastering with gypsum (using the best type of gypsum approved by site engineer) in 2 layers minimum thickness 15 mm using aluminum straight edges for plastering guides each 80 cm for walls and roofs and the area indicated in the drawings, also fixing steel wire mesh then using one layer of cement plastering for covering the wire mesh.	M ²	90
E3	Skirting: Supply materials and skirting using first class ceramic tiles (15)cm height and tile adhesive materials (Kalakem flex type), in rooms according to the drawings and instructions of site engineer.	ml	30
E4	Ceramic tile works: supply materials and erection of best quality ceramic tiles (as sample approved) using best type (first class) on two-layer of plastering of cement mortar (1: 2) using straight edge for toilet walls, above all washbasins and baths walls, kitchens according to the details (the places indicated in the drawing or by the site engineer). And use SBR at a rate of 200gr per m2. The price includes the erection of ceramic belts with suitable height and coating the backside of the tiles with a layer of cement splatter dash using SBR. the price consists of using Aluminum straights for corners.	M ²	250
E5	Provide materials and cover the windows frame (four sides) with marble 3cm thick (best type), width 30cm, the price includes spin-off the outer edges of the granite and using kalakim paste FLEX type for fixing. The work should be done according to the specifications, drawings, and instructions of the site engineer.	ml	50
E6	Acrylic internal paint: Provide materials and staff to paint the internal walls of the building with Acrylic painting (color approved by the site engineer) three layers after prime coat with all the required works to make the wall fare face before painting using paste or any required works as indicated by the site engineer. The work should be done according to IGTS. Note: the paint must be according to the international specification organization ISO 9001.	M ²	100
E7	External painting(Silicone): Provide materials and Painting with External painting and color approved by the site engineer) three layers after the prime coat for the areas indicated in the drawings (for exterior walls). The work should be done according to the specifications, drawings and instructions of the site engineer. Note: the paint must be according to international specification organization ISO 901.	M ²	250
E8	Satin painting 120 cm: Provide materials and Painting 120 cm Hight with satin painting and color approved by the site engineer) three layers for the areas indicated in the drawings (for walls).	M ²	40
E9	Roof Treatments: Provide materials and workers to treat the roof by using waterproof (UV resistant) Sika 3mm layer thickness with fibreglass mesh and prime caot. the price includes cleaning, treating and using prime coat before using roof guard and all the required works according to the site engineer.	M ²	130
E10	Suspended ceiling tile (gypsum false ceiling): Provide materials and fix acoustical panels 60 X 60 cm, fire rate Class A,	M ²	40

	edge SLT model for the classrooms. The price includes hanging beams (Skka 38 mm height) every 120cm by, a screw, steel fisher, rode 3mm, connecting the beams by skka 120cm,60cm long (32mm height), and all necessary works. The work should be done according to the specifications and instructions of the site engineer.		
E11	Suspended ceiling tile (plastic false ceiling): Provide materials and fix acoustical panels 60 X 60 cm, fire rate Class A, edge SLT model for the classrooms. The price includes hanging beams (Skka 38 mm height) every 120cm by, a screw, steel fisher, rode 3mm, connecting the beams by skka 120cm,60cm long (32mm height), and all necessary works. The work should be done according to the specifications and instructions of the site engineer.	M ²	55
F	Doors & Windows: Providing all necessary materials and installing doors according to sections 11, 12, 13 of I.G.T.S, details, and instructions of site engineer with all necessary works, prior samples should be approved by site engineer.		
F1	Metal Door: Provide and install decorative metal doors approved, well-known origin and brand for the entrances and halls and rooms, double-faced of plate thickness 1.50mm including glass pans, door frame 13.5*4.5cm 2.5mm thickness, Film Coated Residential Steel Entrance Door Glassy Finished Style, including special switch best type, gate lock, door stopper, rubber, polycarbonate filled, special guard bar, thermal paint & metal frames 6*22cm, Mercury glass 15x40cm with 3 cm Styrofoam polystyrene inside the door, Central lock system, with additional horizontal a lock with three concealed hinges with all necessary works, samples required for final approval.	M ²	10
F2	Steel guard bars: Provide and install metal guard bars windows, with primer and two layers of best oil paint, using square bar 12 x 12 mm welded inside an angle frame 1.25*1.25*3mm, fixed by screw and fisha to the wall according to the details, and instructions of the site engineer.	M ²	6
F3	Aluminum Window: Supply material and install Aluminum windows wide section best type 2mm thickness. , Double glass pan (6mm+4mm) thickness, ordinary or mushajar, rubber, handle, flywire mesh for opening Areas, the price includes using EKOPLAST paste, cleaning the glasses by machine before composing, and all other required works according to the drawings and instructions of site engineer.	M ²	9
F5	Sign board: Supply and install steel sign board (2.5mX1.5m) plate gage 18, with steel angle frame (1.25x1.25) inch (3mm) thickness, with one layer of anti-rust paint and two layers of approved color oil paint (JOTIN) brand or equivalent, ISO 901, includes printing the name of the school with the foundation year in detail.	Unit	1
G	Flooring: (Including provision of materials, works, curing, and installation) the work should be done according to sections 6 and 9 of I.G.T.S. drawings and instructions of the site engineer with all necessary works.		
G1	Floor concrete:- Provide materials and cast plain concrete 10cm thickness, including grading and leveling of the foundation under the ceramic tile and laying one layer of thick nylon or a layer of crushed stone, according to the details for the ground floor.	M ²	90
G2	Supply materials and paving ceramic Floor Tiles best quality first class (sample should be provided for approval), Wear-resistant, Non-slip, Acid-resistant, Low water-absorption 0.5% with all necessary works on a layer of cement sand mortar 1:3 mix ratio. The price includes cleaning the porcelain after the end of the works. The work includes using cement mortar and sealing the joints with white cement & lime grout and SPR color if required mixture), making a 1.0 cm expansion joint for each 25m2 filling with flexible epoxy; all required works should be carried out according to the attached drawing and supervisor engineer instruction.	M ²	90
H	Sanitary (Plumbing) Installation: Includes supply and installation of materials, pipes, all kinds of fittings, valves, mixers, bibcock taps, P-traps, gullies with cover, supports, hangers, plug and clips, all excavation with backfilling, placing concrete 1:2:4,15cm thick under and around pipes, workforce for the installation and internal connection of the water system to hot and cold water and the main water supply system. All water pipes should be Polypropylene (PPR). Composite water pipes of min. 3 Layers of side walls (PPR/AL/PPR/PE), PPR-C inner layer, and a special mixture of AL middle layer should be coated with an external layer of PE (Polyethylene Layer) dark grey/black color to protect against ultraviolet rays, Different Outside Diameter (OD) as below, Min.PN16 Bars, suitable for drinking purposes/food grade, approved samples with all required fittings and accessories, Egyptian best type PVC pipes for sewerage system with all the necessary fittings. All new WS and SS work items should be tested before covering. Note: All materials should be the best-approved type; the work of external water connection (3/4" dia.) includes repairing (if any) all Asphalt, concrete, and curb stone.		
H1	Providing materials and fixing industrial marble wash basin (best type) with mixer (Turkish Quality)or equivalent (if the mentioned brands are not available) + floor drains + Gully (Trap), using proper brackets and adhesive materials for fixing the basin with walls and fixing drain pipes inside walls(2.25"). the price includes making a square steel pipe 4"*4" frame 3mm thick with anti-rust paint.	M.L.	8
H2	Providing materials and fix Eastern W.C Ceramic ((Best Type, approved sample)) with hidden Siphon/in-wall tank. + Gully (Trap) and cleanout accessories .	No.	10
H3	Western W.C/Wall Hung/Mounted Toilet with the in-wall tank: provide, test, and install (Best Type, Such as GROHE, Hansgrohe, DURAVIT, Roca) or equivalent (if the mentioned brands are not available)with gully trap 4" dia, and flexible hose 5mm, handle tissue place complete in all respect.	No.	2
H4	Providing materials and fixing industrial (child size) ceramic wash basin with mixer + floor drains + Gully Trap, complete set (Vitra, ECA,Duravit) brand (sample should provided for approval), using proper brackets and adhesive materials for fixing the basin with walls and fixing drain pipes inside, all required works should be carried out according to the specification and instructions of the supervisor engineer.	No	2
H5	Supply and install (child size) ceramic toilet pan (eastern type) with siphon (Vitra, ECA) (Good Quality)(sample should provided for approval), with all necessary fittings and accessories and all required works should be carried out according to the specification and instructions of the supervisor engineer.	No	2
H6	Supply and install HDPE 1000 liter water tank; the work includes making an iron base support for the water tank and a layer of XPS under the tank, and drainage size ¾" locked by socket +Plug etc. and all the required fitting and works.	PCs	4
H7	Connecting the building with the main source of water using a normal PPR pipe of 32 mm OD & PN20. The price includes all fitting and necessary works such as connecting water tanks with wash facilities and water cooler.	M.L.	150
H8	PVC pipes (4)" diameter: Supply and install (4")dia. PVC pipes best/approved type, 4.20 mm wall thickness with all necessary materials and fittings, according to the section 1500 of I.G.T.S and the instructions of the site engineer with all necessary work the price includes casting concrete type C (1:2:4) around the pipes 15cm thick for all pipeline.	M.L.	40
H9	PVC pipes (6)" diameter: Supply and install (6")dia. PVC pipes best/approved type, 4.20 mm wall thickness with all necessary materials and fittings, according to the section 1500 of I.G.T.S and the instructions of the site engineer with all necessary work the price includes casting concrete type C (1:2:4) around the pipes 15cm thick for all pipeline.	M.L.	30
H10	Taps 1/2": Provide materials and installation of chrome taps (best-approved type such as GROHE, DURAVIT, ECA, or Vitra) or equivalent (if the mentioned brands are not available) size 1/2", for the required places and according to the site engineer's instructions.	Pcs	12

H11	Floor drain (PVC) 4" dia.: Provision of materials and erection of 4" dia. Floor drain. The work includes the excavations, crushed stone, lean concrete with a thickness of 20cm, and connection to the receiving manholes by PVC pipe 4" dia, with drain(Turkish Quality) nickel covers, with all necessary work.	No.	8
H12	Concrete block manholes: Supply materials and construction manholes of different depths with internal dimensions using solid concrete blocks size 15X20X40 cm for walls. The price includes excavation, supply, and laying of crushed stone with proper compaction, laying of plain concrete, block walls, plastering both sides (inner & outer), covering the inner side of the manholes with a mix of 1:2 water, SBR. Aheen covers due to drawings with the frame, according to the details shown in the drawings.		
H13	40x40cm and cover 40x40cm	No.	5
H14	60x60 cm and cover 60x60cm	No.	5
H15	80x80 cm and cover 80x80cm	No.	2
H16	Septic Tank: Provide materials and build a septic tank of internal dimension (L x W x D, 4m x 3m x 2.2m under inlet pipe level), according to attached technical drawings and Supervisor Engineer instructions. The work includes excavations, cast reinforcement concrete with wood shuttering for slab floor, side & partition walls, and manhole neck of 25 cm thick, C26 Mpa, 12 mm steel bars @ 20x20 cm C/C double layers, with a thick nylon layer under concrete. The partition baffle wall should be at 2/3 from the inlet side. The baffle should have at least two holes (length 40cm, height 20cm). Paving inside of the septic tank by using waterproof waste materials of the approved sample. Fit T-joints on both inlet and outlet pipes, T-joints to being 20cm long on both ends. Cast top slab by reinforced concrete, 20 cm thick, steel bars 12mm @ 15cm c/c. The slab must fit smoothly and tightly onto the RC walls. Leave openings in the top slab for two manholes (20x20) cm each with neck extension, positioned exactly over the inlet and the outlet pipes. Close with two heavy-duty cast iron/GRP type manhole covers. Install ventilation pipe PVC 2.5". If possible, fix it to a close wall. Install min. 3m of 6" connection pipe between the septic tank outlet and the cesspool. Make sure the septic tank is fully watertight. The work includes excavations of a hole of suitable dimensions with a flat bottom, leaving a space of at least 20/30 cm around the tank. In the case of heavy ground (e.g., clayey subsoil and/or groundwater, the distance must be at least 50 cm. Spread a 20/25 cm deep layer of 2/6 washed gravel (JALMOOD) on the bottom of the excavation to allow the tank to rest on a uniform and level base. Excavated material must not be used as backfill. The excavation must be a minimum of 1 m from any structures. The work includes all required works for avoiding surface runoff infiltration, uplift pressure, and keeping the tank safe from any external forces and loads, marking the boundary with suitable warning signs.	No.	1
H17	Construction of Cesspools:- Provide materials and drill/build cesspools 1.1 m outer diameter for septic tank effluent infiltration according to attached drawings, 8 m depth. Casing (6 m) using double wall corrugated pipes of inner diameter 80 cm minimum and 1 m from the top/ground level by a concrete ring of min.80 cm dia. Gravel pack between cesspool wall and casing pipe. Concrete seal around the concrete ring, 0.5 m down from the top of cesspool/ground, the cover should be round ductile cast iron manhole covers 60cm diameter.	No.	1
Demolishing & Rehabilitation of #2 Wash Facility Units to be Used as Classrooms			
No.	Description	Unit	Qty.
A	Demolishing Works		
A1	#1 Toilets: Supply machinery, tools, and labor for conducting demolishing works at one toilet unit, dimension is (5.5m*4.5m*3.1m); the work includes the following items: * Demolishing partition walls of the toilet (Concrete Block Walls); the dimension of each toilet is (1.1m*1.6m*2m). * Removing/demolishing existing ceramic tiles includes removing tile cement mortar until it reaches the surface of the concrete block wall. * Removing/demolishing existing floor ceramic tiles, including removing under-tile concrete, sewerage pipes, drains, and ceramic toilet pans. * Removing all existing electrical systems. * Removing / Demolishing existing cement plastering. * Removing all toilet doors, except the entrance door. All required works should be conducted according to the supervisor engineer.	L.S	1
A2	Partition Wall: Supply machinery, tools, and labor to demolish a wall (4m*3.1m) between storage and the school shop; the work process should be conducted carefully, installing iron columns under the slab during demolishing work and then installing I-Section 20cm at the mid of the slab. The work also includes the following: * Removing/demolishing existing floor ceramic tiles, including removing under-tile concrete, sewerage pipes, drains, and ceramic toilet pans. * Removing all existing electrical systems. * Removing / Demolishing existing cement plastering. * Removing all toilet windows. All required works should be conducted according to the supervisor engineer.	L.S.	1
B	Earth Work:		
B1	Excavation works Excavation in all types of soils (even rock layers, asphalt, or existing foundation concretes) for (the sewer pipes & manholes) according to the designed level. Under existing tile concrete (20cm thickness) at toilets and expanded room, the price includes compaction of the excavation base by using compactor according to requirements of section 3 of I.G.T.S. and instruction of site engineer.	M ³	15
B2	Backfilling works: Supplying materials and filling with approved screened sub-base materials type B maximum size is 2" up to the designed level for the building, and where required within the area inside or outside, etc..... with compaction (according to the specification) in layers 20 cm thickness, the compaction must be not less than 88% MDD according to the instructions of the site engineer with all necessary works for the final two layers.	M ³	15
B3	Provide materials and lay one layer of thick nylon under the concrete floors.	M ²	65
C	CONCRETE WORKS: Including supply of materials (steel reinforcement, connection steel wires, cement, aggregate, water, sand, plastic cover for fixing the steel reinforcement in the proper level, bolts, nuts, washers, G. I. pipes, cutter machines, binder machine, etc.), and all necessary works, according to the section (6) of I.G.T.S, drawings, and instructions of the site engineer.		
C1	Plain Concrete: Supply materials and cast plain concrete class (C10) 1:3:6 10cm (min. thickness) for under tiles, laying two layers of thick nylon. (The nylon should also cover the sides of excavation walls and extend on land for 50cm to both sides of excavation).	² M	60
D	Masonry works: Including provision of material, erection, pointing, curing, making expansion joint every (6m) with thickness 25mm with using of 25mm thickness compressed Polystyrene sheets, all necessary work according to section (500) of I.G.T.S., drawings, and instructions		

	of the site engineer.		
D1	Hollow concrete block works: Supplying materials & construction of walls with hollow concrete blocks 20 X 20 X 40 cm with cement mortar(1: 3) for the school shop. The price includes filling the vertical joints between blocks with cement and sand 1:3.	M³	6
E	ELECTRICAL INSTALLATIONS: Electrical points including provision and installation of all wiring (using excellent Jordanian type or KSA made) of wires 1.5 mm2 for illumination and 2.5 mm2 for the rest), inside Egyptian PVC conduits 20-25 mm with thickness 1.8mm galvanized boxes 0.9 mm thickness cables should be laid inside PVC pipes, all materials should be new (best type). All works should be done according to specifications and standard IEC76 and the instruction of a supervisor engineer.		
E1	Supply materials, installing, connecting, and testing electrical LED fluorescent lights (50W) with all annexed parts using (2x1.5)mm2 wires with switch on/off all (2-3) lamp controlled by one button.	No.	25
E2	Supply, install and test socket 13 Amp. (MK, B.G or Panasonic or equivalent) using (wires 2.5mm² (GC, GCCI, Hidayatm FTM, Edison) or equivalent. The work should be done according to the instruction of supervisor engineer.).	No.	6
E3	Supply, install and test electric Ceiling Fan (Panasonic, Philips, Toshiba) or equivalent (if the mentioned brands are unavailable) with the regulator; the price includes installing the electrical points by isolation copper wire 1.5 mm2 and 10mm steel bar for hanging the fan according to of instruction of supervisor electrical engineer.	Unit	4
F	FINISHING: Including provision of all necessary materials, works and curing to do the finishing works. The works should be done according to section 10, & 14 of I.G.T.S, drawings and instructions of site engineer with all necessary works, and use SBR at a rate of 200gr per m2.		
F1	Cement plastering: Providing materials, staff and plastering with cement sand mortar 1:3, three layers (cement splatter dash, kafmal, saf) 20mm thick min at inside and outside the building the final layer should be very smooth, using aluminum straight edges for plastering guides. Using SBR at a rate of 200gr per m2, the price includes fixing steel wire mesh for the edges.	M²	250
F2	Gypsum plastering for the block walls inside the rooms: Supplying materials and plastering with gypsum (using the best type of gypsum approved by site engineer) in 2 layers minimum thickness 15 mm using aluminum straight edges for plastering guides each 80 cm for walls and roofs and the area indicated in the drawings, also fixing steel wire mesh then using one layer of cement plastering for covering the wire mesh.	M²	230
F3	Skirting: Supply materials and skirting using first class ceramic tiles (15)cm height and tile adhesive materials (Kalakem flex type), in rooms according to the drawings and instructions of site engineer.	ml	60
F4	Ceramic tile works: supply materials and erection of (Turkish Quality) or equivalent (if the mentioned brands are not available) ceramic tiles (as sample approved) using best type(first class) on two-layer of plastering of cement mortar (1: 2) using straight edge for toilet walls, above all washbasins and baths walls, kitchens according to the details (the places indicated in the drawing or by the site engineer). And use SBR at a rate of 200gr per m2. The price includes the erection of ceramic belts with suitable height and coating the backside of the tiles with a layer of cement splatter dash using SBR. the price consists of using Aluminum straights for corners.	M²	5
F5	Provide materials and covering the windows frame (four sides) with marble 3cm thick (best type), width 30cm, the price includes spin-off the outer edges of the granite and using kalakim paste FLEX type. for fixing. The works should be done according to specification, the drawings and instructions of the site engineer.	ml	50
F6	Acrylic internal paint: Provide materials and staff to paint the internal walls of the building with Acrylic painting (color approved by the site engineer) three layers after prime coat with all the required works to make the wall fare face before painting using paste or any required works as indicated by the site engineer. The work should be done according to IGTS. Note: the paint must comply with the international specification organization ISO 9001.	M²	230
F7	Satin painting 120 cm: Provide materials and Painting 120 cm Hight with satin painting and color approved by the site engineer) three layers for the areas indicated in the drawings (for walls).	M²	80
F	Doors & Windows: Providing all necessary materials and installing doors according to sections 11, 12, 13 of I.G.T.S, details, and instructions of site engineer with all necessary works, prior samples should be approved by site engineer.		
F1	Iron Door Works: Supply material and workshop for repairing #3 entrance existed iron doors, it includes rendering door leafs & frames, painting one layer anti-rust and two layers of oily painting, re-placing door hinges, locker with kelone, all required works should be conducted according to supervisor engineer.	L.S.	1
F2	Metal Door: Provide and install metal door for the school shop room, double-faced of plate thickness 1.50mm including door frame 13.5*4.5cm 2.5mm thickness, including special switch best type, gate lock,metal frames with all necessary works.	M²	2
F3	Steel guard bars: Provide and install metal guard bars windows, with primer and two layers of best oil paint, using square bar 12 x 12 mm welded inside an angle frame 1.25*1.25*3mm, fixed by screw and fisha to the wall according to the details, and instructions of the site engineer.	M²	12
F4	Aluminum Window: Supply material and install Aluminum windows wide section best type 2mm thickness. , Double glass pan (6mm+4mm) thickness, ordinary or mushajar , rubber, handle, flywire mesh for opening Areas, the price includes using EKOPLAST paste, cleaning the glasses by machine before composing, and all other required works according to the drawings and instructions of site engineer.	M²	12
F5	Sign board: Supply and install steel sign board (2.5mX1.5m) plate gage 18, with steel angle frame (1.25x1.25) inch (3mm) thickness, with one layer of anti-rust paint and two layers of approved color oil paint (JOTIN, ISO 9001, includes printing the school's name with the foundation year by detail.	Unit	1
G	Flooring: (Including provision of materials, works, curing and installation) the work should be done according to the sections 6 and 9 of I.G.T.S. drawings, and instructions of site engineer with all necessary works.		
G1	Supply materials and paving Porcelain Floor Tiles 60x60 cm 10mm thickness best quality first class (sample should be provided for approval) Wear-resistant, Non-slip, Acid-resistant, Low water-absorption 0.5% with all necessary works on a layer of cement sand mortar 1:3 mix ratio, The price includes cleaning the porcelain after the end of the works. The work includes using cement mortar and sealing the joints with white cement & lime grout and SPR color if required mixture), making a 1.0 cm expansion joint for each 25m2 filling with flexible epoxy; all required works should be carried out according to the attached drawing and supervisor engineer instruction.	M²	60
H	Sanitary (Plumbing) Installation: Includes supply and installation of materials, pipes, all kinds of fittings, valves, mixers, bibcock taps, P-traps, gullies with cover, supports, hangers, plug and clips, all excavation with backfilling, placing concrete 1:2:4,15cm thick under and around pipes, workforce for the installation and internal connection of the water system to hot and cold water and the main water supply system. All water pipes should be Polypropylene (PPR). Composite water pipes of min. 3 Layers of side walls (PPR/AL/PPR/PE), PPR-C inner layer, and a special mixture of AL middle layer should be coated with an external layer of PE (Polyethylene Layer) dark grey/black color to protect against ultraviolet rays, Different Outside Diameter (OD) as below, Min.PN16 Bars, suitable for drinking purposes/food grade, approved samples with		

	all required fittings and accessories, Egyptian best type PVC pipes for sewerage system with all the necessary fittings. All new WS and SS work items should be tested before covering. Note: All materials should be the best-approved type; the work of external water connection (3/4" dia.) includes repairing (if any) all Asphalt, concrete, and curb stone.		
H2	Providing ceramic wash basin (wall mounted type) with mixer (Best Type, Such as GROHE, Hansgrohe, DURAVIT, Roca) or equivalent (if the mentioned brands are not available) + wall & floor drains + Gully (Trap)/room, using proper brackets and adhesive materials for fixing the basin with walls and fixing drain pipes inside walls & floor (2.25"). The price also includes provide and install ceramic (50cmx25cm) (best type) for the wall behind the wash basin with a dimension of (1m width x 150m height) using tile adhesive materials (Kalakem flex type) with all the accessories.	No	2
H3	Providing materials and fix Eastern W.C Ceramic ((Best Type, approved sample)) with hidden Siphon/in-wall tank. + Gully (Trap) and cleanout accessories .	No.	2
H9	PVC pipes (4") diameter: Supply and install (4")dia. PVC pipes best/approved type, 4.20 mm wall thickness with all necessary materials and fittings, according to the section 1500 of I.G.T.S and the instructions of the site engineer with all necessary work the price includes casting concrete type C (1:2:4) around the pipes 15cm thick for all pipeline.	M.L.	20
H10	PVC pipes (6") diameter: Supply and install (6")dia. PVC pipes best/approved type, 4.20 mm wall thickness with all necessary materials and fittings, according to the section 1500 of I.G.T.S and the instructions of the site engineer with all necessary work the price includes casting concrete type C (1:2:4) around the pipes 15cm thick for all pipeline.	M.L.	20
H11	Taps 1/2": Provide materials and installation of chrome taps (best-approved type such as GROHE, DURAVIT, ECA, or Vitra) or equivalent (if the mentioned brands are not available) size 1/2", for the required places and according to the site engineer's instructions.	Pcs	3
H12	Provide and install Sink basin Turkish marble type(two wings and two bowls), the price includes all accessories of pipes for cold and hot water with the chrome mixer tap(Turkish Quality) or equivalent (if the mentioned brands are not available) and also includes the Aluminum counter length 1.8m for the Sink base.	M.L.	5
H13	Floor drain (PVC) 4"dia.: Provision of materials and erection of 4" dia. Floor drain. The work includes the excavations, crushed stone, lean concrete with a thickness of 20cm, and connection to the receiving manholes by PVC pipe 4" dia, with drain(Turkish Quality) nickel covers, with all necessary work.	No.	4
H14	Construct a drain by iron grill (1m*0.3m) for evacuating the storm water at teachers room corridor, the price include demolishing the existed tile by cutter machine, excavation, PVC pipe (4"), bundling and connecting it with the nearest drain in the teachers toilet.	L.S	1
H15	Concrete block manholes: Supply materials and construction manhole(for evacuating storm water) of different depths with internal dimensions using solid concrete blocks size 15X20X40 cm for walls. The price includes excavation, supply, and laying of crushed stone with proper compaction, laying of plain concrete, block walls, plastering both sides (inner & outer), covering the inner side of the manholes with a mix of 1:2 water, SBR. Aheen covers due to drawings with the frame, according to the details shown in the drawings.		
H16	80x80 cm and cover80x80cm	No.	2

Annex B: Bill of Quantities

LOT1-C Re-Construction of the Sewerage System and Rehabilitation for the Wash Facility Units at Raber Primary School in Erbil.

No.	Description	Unit	Qty.
A	Demolishing Works		
A1	#2 Toilet Units: Supply machinery, tools, and labor for conducting demolishing works at two toilet units; the dimension of each unit is (6.5m*4.5m*2.3m). The work includes the following items: * Removing / Demolishing existing wall ceramic tiles, including removing tile cement mortar until it reaches the surface of the concrete block wall. * Removing/demolishing existing floor ceramic tiles includes removing under-tile concrete, sewerage pipes, drains, and ceramic toilet pans. * Removing all existing electrical systems. * Removing all existing aluminum doors, windows & grills. All required works should be conducted according to the supervisor engineer.	L.S.	1
A2	Drinks Area: Supply machinery, tools, and labor for conducting demolishing works at the drinking area, dimension is (3.5m*1.6m*1.3m); the work include the following items: * Removing/demolishing existing ceramic tiles includes removing tile cement mortar until it reaches the surface of the concrete block wall. * Removing / Demolishing existing mosaic tiles includes removing water supply system pipes, steel water tanks, and water filter devices with related water tanks. All required works should be conducted according to the supervisor engineer.	L.S.	1
A3	Sewerage System: Supply machinery for demolishing play yard concrete (7m*5m) & (4m*8m) around existing #2 (septic tank & cesspool); the work also includes demolishing the existing septic tank, cesspool, and #4 manholes, and removing all sewer pipes, the boundary of the demolished area should be demarcated/cut by cutter before demolishing will be started. All required works should be conducted according to the supervisor engineer.	L.S.	1

B	Earth Work:		
B1	Excavation works Excavation in all types of soils (even rock layers, asphalt or existing foundation concretes) for (the sewer pipes & maintenance holes) according to the designed level and under existing tile concrete (40cm thickness) at toilets; the price includes compaction of the excavation base by using compactor according to requirements of section 300 of I.G.T.S. and instruction of site engineer.	M ³	25
B2	Backfilling works: Supplying materials and filling with approved screened sub-base materials type B maximum size is 2" up to the designed level for the building, and where required within the area inside or outside such as aprons, walkways, toilet units, drinking area, around sewer pipes and around the septic tank with the cesspool, etc..... with compaction (according to the specification) in layers 20 cm thickness, the compaction must be not less than 88% MDD according to the instructions of the site engineer with all necessary works for the final two layers.	M ³	70
B3	Provide materials and lay one layer of thick nylon under the concrete floors of tiles, manholes, septic tanks, ...etc.	M ²	85
C	CONCRETE WORKS: Including supply of materials (steel reinforcement, connection steel wires, cement, aggregate, water, sand, plastic cover for fixing the steel reinforcement in the proper level, bolts, nuts, washers, G. I. pipes, cutter machines, binder machine, etc.), and all necessary works, according to the section (6) of I.G.T.S, drawings, and instructions of the site engineer. Note: 1- Use new plywood for all support for wooden forms work, with Adjustable Steel Scaffolding Props and Formwork Jack Support. 2- Fy = 276 Mpa for 10mm,12mm steel bars. FY=414Mpa for 16mm,20mm,25mm steel bars 3. Allowable bearing capacity of soil = 100 KN / m2 (assumed). 5. the reinforcement details should be according to ACI detailing manual 2004. 6. New Plywood or standard formworks must be used for all structural parts.		
C1	Plain Concrete: Supply materials and cast plain concrete class (C10) 1:3:6 10cm (min. thickness) for under tiles at (toilet units & drinking area), manhole foundation and septic foundation, laying two layers of thick nylon. (The nylon should also cover the sides of excavation walls and extend on land for 50cm to both sides of the excavation).	M ²	90
D	Masonry works: Including provision of material, erection, pointing, curing, making expansion joint every (6m) with thickness 25mm with using of 25mm thickness compressed Polystyrene sheets, all necessary work according to section (5) of I.G.T.S., drawings, and instructions of the site engineer.		
D1	Hollow concrete block works: Supplying materials & construction of walls with hollow concrete blocks 20 X 20 X 40 cm with cement mortar (1: 3) for the base of water tanks on the roof. The price includes filling the vertical joints between blocks with cement and sand 1:3.	M ³	2
E	ELECTRICAL INSTALLATIONS: Electrical points, including provision and installation of all wiring of wires 1.5 mm2 for illumination and 2.5 mm2 for the rest), inside PVC conduits 20-25 mm with thickness 1.8mm galvanized boxes 0.9 mm thickness cables should be laid inside PVC pipes, all materials should be new (best type). All works should be done according to specifications and standard IEC76 and the instruction of a supervisor engineer.		
E1	Supply, install and test lighting points LED 18Watt (outdoor) IP 65 with all required using (single wires 1.5mm ² with a suitable cable tray or cable conduit and switch). The price includes installing photocells.	No.	10
E2	Supply materials, install, connect, and test electrical LED fluorescent lights (50W) with all annexed parts using (2x1.5) mm2 wires with switch on/off all (2-3) lamps controlled by one button.	No.	20
E3	Supply, install and test socket 13 Amp. Using wires 2. 5mm ² .The work should be done according to the instruction of the supervisor engineer.).	No.	8
E4	Supply, install and test FDB Circuit breaker, 12 lines (Different circuit breakers), with main 100 Amp, including connections, interconnections, painting, lettering, loop earth etc. as required. The price includes the provision of a protection box.	Unit	1
E5	Supply, install and test copper cable 4 X 10mm2+10mm2 inside 2.5" diameter PVC pipes in the ground or on the wall or pass through the core in the wall + installing above cable tray with all required and necessary works (such as hidden manholes) iron pipe 2" with an insulator.	ml	20
E6	Supply, install and test industrial Exhaust Fan size (8") (Japanese, Malaysian Quality, or equivalents.) mounted to the walls inside a wooden frame. The price includes supplying & installing until brake wire mesh, painting from outside, and control switch.	Unit	6
E7	Supply and install and test 200 Liters production storage capacity of an electric water heater element of 2000 watts with a thermostat. The tank plate is galvanized with 3mm thick the work includes all wiring, 4x3mm2 and 30 Amp electric switch, plumbing works, pipes, fittings, and complete fixtures. The unit's location should be as per the instructions of the Site Engineer.	Unit	2
F	Sanitary (Plumbing) Installation: Includes supply and installation of materials, pipes, all kinds of fittings, valves, mixers, bibcock taps, P-traps, gullies with cover, supports, hangers, plug and clips, all excavation with backfilling, placing concrete 1:2:4,15cm thick under and around pipes, workforce for the installation and internal connection of the water system to hot and cold water and the main water supply system. All water pipes should be Polypropylene (PPR). Composite water pipes of min. 3 Layers of side walls (PPR/AL/PPR/PE), PPR-C inner layer, and a special mixture of AL middle layer should be coated with an external layer of PE (Polyethylene Layer) dark grey/black color to protect against ultraviolet rays, Different Outside Diameter (OD) as below, Min.PN16 Bars, suitable for drinking purposes/food grade, approved samples with all required fittings and accessories, Egyptian best type PVC pipes for sewerage system with all the necessary fittings. All new WS and SS work items should be tested before covering. Note: All materials should be the best-approved type; the work of external water connection (3/4" dia.) includes repairing (if any) all Asphalt, concrete, and curb stone.		
F1	Providing materials and fixing industrial marble wash basin (best type) with mixer + floor drains + Gully (Trap), using proper brackets and adhesive materials for fixing the basin with walls and fixing drain pipes inside walls(2.25"). the price includes making a square steel pipe 4"*4" frame 3mm thick with anti-rust paint.	M.L.	8
F2	Providing ceramic wash basin (wall mounted type) with mixer (Best Type, Such as GROHE, Hansgrohe, DURAVIT, Roca)or equivalent (if the mentioned brands are not available) + wall & floor drains + Gully (Trap)/room, using proper brackets and adhesive materials for fixing the basin with walls and fixing drain pipes inside walls & floor (2.25"). The price also includes providing and installing ceramic (50cmx25cm) (best type)for the wall behind the wash basin with a dimension of (1m width x 150m height) using tile adhesive materials (Kalakem flex type) with all the accessories.	No	2
F3	Providing materials and fixing industrial (child size) ceramic wash basin with mixer + floor drains + Gully Trap, complete set (Vitra, ECA, Duravit or equivalent) brand (sample should be provided for approval), using proper brackets and adhesive materials for fixing the basin with walls and fixing drain pipes inside, all required works should be carried out according to the specification and instructions of the supervisor engineer.	No	2

F4	Supply and install (child size) ceramic toilet pan (eastern type) with siphon (Vitra, ECA or equivalent) (Good Quality)(sample should be provided for approval), with all necessary fittings and accessories and all required works should be carried out according to the specification and instructions of the supervisor engineer.	No	2
F5	Providing materials and fix Eastern W.C Ceramic ((Best Type, approved sample)) with hidden Siphon/in-wall tank. + Gully (Trap) and cleanout accessories .	No.	10
F6	Western W.C/Wall Hung/Mounted Toilet with the in-wall tank: provide, test, and install (Best Type, Such as GROHE, Hansgrohe, DURAVIT, Roca) or equivalent (if the mentioned brands are not available)with gully trap 4" dia, and flexible hose 5mm, handle tissue place complete in all respect.	No.	2
F7	Supply and install HDPE 1000 liter water tank; the work includes making an iron base support for the water tank and a layer of XPS under the tank, and drainage size ¾" locked by socket +Plug etc. and all the required fitting and works.	PCs	16
F8	Connecting the building with the main source of water using a normal PPR pipe of 32 mm OD & PN20. The price includes all fitting and necessary works such as connecting water tanks with wash facilities and water cooler.	M.L	270
F9	PVC pipes (4)" diameter: Supply and install (4")dia. PVC pipes best/approved type, 4.20 mm wall thickness with all necessary materials and fittings, according to the section 1500 of I.G.T.S and the instructions of the site engineer with all necessary work the price includes casting concrete type C (1:2:4) around the pipes 15cm thick for all pipeline.	M.L	50
F10	PVC pipes (6)" diameter: Supply and install (6")dia. PVC pipes best/approved type, 4.20 mm wall thickness with all necessary materials and fittings, according to the section 1500 of I.G.T.S and the instructions of the site engineer with all necessary work the price includes casting concrete type C (1:2:4) around the pipes 15cm thick for all pipeline.	M.L	20
F11	Taps 1/2": Provide materials and installation of chrome taps (best-approved type such as GROHE, DURAVIT, ECA, or Vitra) or equivalent (if the mentioned brands are not available) size 1/2", for the required places and according to the site engineer's instructions.	Pcs	20
F12	Floor drain (PVC) 4"dia.: Provision of materials and erection of 4" dia. Floor drain. The work includes the excavations, crushed stone, lean concrete with a thickness of 20cm, and connection to the receiving manholes by PVC pipe 4" dia, with drain(Turkish Quality) nickel covers, with all necessary work.	No.	6
F13	Concrete block manholes: Supply materials and construction manholes of different depths with internal dimensions using solid concrete blocks size 15X20X40 cm for walls. The price includes excavation, supply, and laying of crushed stone with proper compaction, laying of plain concrete, block walls, plastering both sides (inner & outer), covering the inner side of the manholes with a mix of 1:2 water, SBR. Aheen covers due to drawings with the frame, according to the details shown in the drawings.		
F14	40x40cm and cover 40x40cm	No.	10
F15	60x60 cm and cover 60x60cm	No.	2
F16	80x80 cm and cover80x80cm	No.	2
F17	Septic Tank: Provide materials and build a septic tank of internal dimension (L x W x D, 4m x 3m x 2.2m under inlet pipe level), according to attached technical drawings and Supervisor Engineer instructions. The work includes excavations, cast reinforcement concrete with wood shuttering for slab floor, side & partition walls, and manhole neck of 25 cm thick, C26 Mpa, 12 mm steel bars @ 20x20 cm C/C double layers, with a thick nylon layer under concrete. The partition baffle wall should be at 2/3 from the inlet side. The baffle should have at least two holes (length 40cm, height 20cm). Paving inside of the septic tank by using waterproof waste materials of the approved sample. Fit T-joints on both inlet and outlet pipes, T-joints to being 20cm long on both ends. Cast top slab by reinforced concrete, 20 cm thick, steel bars 12mm @ 15cm c/c. The slab must fit smoothly and tightly onto the RC walls. Leave openings in the top slab for two manholes (20x20) cm each with neck extension, positioned exactly over the inlet and the outlet pipes. Close with two heavy-duty cast iron/GRP type manhole covers. Install ventilation pipe PVC 2.5". If possible, fix it to a close wall. Install min. 3m of 6" connection pipe between the septic tank outlet and the cesspool. Make sure the septic tank is fully watertight. The work includes excavations of a hole of suitable dimensions with a flat bottom, leaving a space of at least 20/30 cm around the tank. In the case of heavy ground (e.g., clayey subsoil and/or groundwater, the distance must be at least 50 cm. Spread a 20/25 cm deep layer of 2/6 washed gravel (JALMOOD) on the bottom of the excavation to allow the tank to rest on a uniform and level base. Excavated material must not be used as backfill. The excavation must be a minimum of 1 m from any structures. The work includes all required works for avoiding surface runoff infiltration, uplift pressure, and keeping the tank safe from any external forces and loads, marking the boundary with suitable warning signs.	No.	1
F18	Septic Tank: Provide materials and build a septic tank of internal dimension (L x W x D, 4.5m x 2.5m x 2.2m under inlet pipe level), according to attached technical drawings and Supervisor Engineer instructions. The work includes excavations, cast reinforcement concrete with wood shuttering for slab floor, side & partition walls, and manhole neck of 25 cm thick, C26 Mpa, 12 mm steel bars @ 20x20 cm C/C double layers, with a thick nylon layer under concrete. The partition baffle wall should be at 2/3 from the inlet side. The baffle should have at least two holes (length 40cm, height 20cm). Paving inside of the septic tank by using waterproof waste materials of the approved sample. Fit T-joints on both inlet and outlet pipes, T-joints to being 20cm long on both ends. Cast top slab by reinforced concrete, 20 cm thick, steel bars 12mm @ 15cm c/c. The slab must fit smoothly and tightly onto the RC walls. Leave openings in the top slab for two manholes (20x20) cm each with neck extension, positioned exactly over the inlet and the outlet pipes. Close with two heavy-duty cast iron/GRP type manhole covers. Install ventilation pipe PVC 2.5". If possible, fix it to a close wall. Install min. 3m of 6" connection pipe between the septic tank outlet and the cesspool. Make sure the septic tank is fully watertight. The work includes excavations of a hole of suitable dimensions with a flat bottom, leaving a space of at least 20/30 cm around the tank. In the case of heavy ground (e.g., clayey subsoil and/or groundwater, the distance must be at least 50 cm. Spread a 20/25 cm deep layer of 2/6 washed gravel (JALMOOD) on the bottom of the excavation to allow the tank to rest on a uniform and level base. Excavated material must not be used as backfill. The excavation must be a minimum of 1 m from any structures. The work includes all required works for avoiding surface runoff infiltration, uplift pressure, and keeping the tank safe from any external forces and loads, marking the boundary with suitable warning signs.	No.	1
F19	Construction of Cesspools:- Provide materials and drill/build cesspools 1.1 m outer diameter for septic tank effluent infiltration according to attached drawings, 8 m depth. Casing (6 m) using double wall corrugated pipes of inner diameter 80 cm minimum and 1 m from the top/ground level by a concrete ring of min.80 cm dia. Gravel pack between cesspool wall and casing pipe. Concrete seal around the concrete ring, 0.5 m down from the top of cesspool/ground, the cover should be round ductile cast iron manhole covers 60cm diameter.	No.	2
G	FINISHING: Including provision of all necessary materials, work, and curing. The works should be done according to sections 10 & 14 of I.G.T.S,		

	drawings, and instructions of the site engineer with all necessary works, and use SBR at a rate of 200gr per m2, the ratio of SBR to water(3-1).		
G1	Cement plastering: Providing materials and plastering with cement sand mortar 1:3 three layers for the parapet wall (1. cement spatter dash(sharbat),2.rendering coat and leveling (kafmal),3. finishing fine coat (saf)) 20mm thick min. and the final layer should be very smooth, using 3m straight aluminum edges for plastering guides for outer walls And use SBR at a rate of 200gr per m2.	M ²	80
G2	Ceramic tile works supply materials and erection of first-class ceramic tiles (as sample approved) using the best type(first class) on two-layer of plastering of cement mortar (1: 2) using straight edges for toilet walls, above all washbasins and baths walls, kitchens according to the details (the places indicated in the drawing or by the site engineer). And use SBR at a rate of 200gr per m2. The price includes the erection of ceramic belts with suitable height and coating the backside of the tiles with a layer of cement splatter dash using SBR. The price consists of using Aluminum straights for corners.	M ²	130
G3	Satin painting: Provide materials and Painting with satin painting (Betek) or equivalent (if the mentioned brands are not available) painting and color approved by the site engineer) three layers for the areas indicated in the drawings (for toilet units cieling), the price also includes re-pairing existed cieling plastering.	M ²	70
G4	Roof Treatments: Provide materials and workers to treat the roof of the toilet units by using waterproof (UV resistant) Sika 3mm layer thickness with fibreglass mesh and prime caot. the price includes cleaning, rendering the slab, treating cracks by polysulphide and using prime coat before using roof guard and all the required works according to the site engineer.	M ²	90
G5	Shade Construction: Supply material,required equipment and skilled labor to construct the Shade for the connection part between new class rooms and exited building, shade structure should consist of following: Columns: Install iron hollow section square pipe or circular sized 100x100x3.0 mm of approved brand and quality and fixing it on the ground excavation 50x50x60 cm cutting with concrete. The height of the columns is 3.5m and it will be painted with a layer of anti-rust paint and two layers of oil paint , the work includes concreting also(Welding ,washers , nuts, volts...etc) Roof structure: The roof structure should be made of hollow section 80x40x2mm & 40*40*2mm steel in approved quality and fixing . the structure will be painted with a layer of anti-rust paint and two layers of oily blue color paint. Roofing: The roofing consist of steel structure and corrugated iron sheet trapezoidal shape (gauge 22), fixed on the purlins (4cm*2cm*2mm) by screw. With all necessary works according to specifications and instructions of site engineer.	M ²	30
G6	Supply and install water filter (Ultra Filtration Membrane) , stainless steel, chinese made, both input & output are 1 inch Dia., water pumped through it by a water booster then to the taps, the sample should be approved and all system should be installed according to supervisor engineer instruction.	No.	1
H	Doors & Windows: Providing all necessary materials and installing doors according to sections 11, 12, 13 of I.G.T.S, details, and instructions of site engineer with all the required works, prior samples should be approved by the site engineer.		
H1	Aluminum Windows: Supply material and install Aluminum windows wide section 2mm thickness, fixing 4x3cm 3mm thickness steel pipes frame to the wall, Double glass pan (6mm transparent+4mm semi-transparent) thickness, ordinary or mushajar, rubber, handle, the price includes protect glasses by suitable wire mesh with frame.	M ²	3
H2	Aluminum Doors Works: Supply material and install Aluminum doors, double plate 2mm thickness. The price includes a double glass pan of 6mm thickness, ordinary or mushajar, rubber, handle, switch mortice best Turkish type, and door stopper.	M ²	19
H3	Steel Guard Bars: Provide and install metal guard bars windows using iron pipe (4x2)cm 2mm thickness with all the required works. The price includes painting all the iron with a layer of anti-rust and 2 layers of oil paint.	M ²	3
H4	Sign board: Supply and install steel sign board (2.5mX1.5m) plate gage 18, with steel angle frame (1.25x1.25) inch (3mm) thickness, with one layer of anti-rust paint and two layers of approved color oil paint1, includes printing the name of the school with the foundation year by detail.	PCs	1
I	Flooring: (Including provision of materials, works, curing and installation) the work should be done according to the sections 6 and 9 of I.G.T.S. drawings, and instructions of site engineer with all necessary works.		
I1	Supply materials and paving Ceramic Floor Tiles 10mm thickness, best quality first class (sample should be provided for approval) Wear-resistant, Non-slip, Acid-resistant, Low water-absorption 0.5% with all necessary works on a layer of cement sand mortar 1:3 mix ratio, The price includes cleaning the porcelain after the end of the works. The work includes using cement mortar and sealing the joints with white cement & lime grout and SPR color if required mixture), making a 1.0 cm expansion joint, each 25m2 filling with flexible epoxy, all required works should be carried out according to the attached drawing and supervisor engineer instruction.	M2	60

Annex B: Bill of Quantities

LOT2-A Re-Construction of the Sewerage System and Rehabilitation for the WASH Facility Units at Aweza Primary School in Erbil

No.	Description	Unit	Qty.
A	Demolishing Works		
A1	#2 Toilets: Supply machinery, tools, and labor for conducting demolishing works at two toilet units; dimension of each unit is (8.8m*4.5m*3.2m); the work includes the following items: * Demolishing partition walls of the toilet (Concrete Block Walls); the dimension of each toilet is (1.1m*1.6m*2m). * Removing/demolishing existing ceramic tiles includes removing tile cement mortar until it reaches the surface of the concrete block wall. * Removing/demolishing existing floor ceramic tiles, including removing under-tile concrete, sewerage pipes, drains, and ceramic toilet pans. * Removing all existing electrical systems. All required works should be conducted according to the supervisor engineer.	L.S.	1
A2	Drinks Area: Supply machinery, tools, and labor for conducting demolishing works at the drinking area, dimension is (11m*3.5m*3.2m); the work includes the following items:	L.S.	1

	* Demolishing separation wall (Concrete Block Walls), dimension is (3.5m*3.2m*0.2m). * Removing/demolishing existing ceramic tiles includes removing tile cement mortar until it reaches the surface of the concrete block wall. * Removing/demolishing existing floor ceramic tiles, including removing under-tile concrete, sewerage pipes, and drains. * Removing all existing electrical systems. All required works should be conducted according to the supervisor engineer.		
A3	Sewerage System: Supply machinery for demolishing (7m*8m) of play yard concrete which is around existed septic tank & cesspool; the work also includes demolishing the existing septic tank, cesspool, and #20 maintenance holes and removing all sewer pipes, the boundary of the demolished area should be demarcated/cut by cutter before demolishing will be started. All required works should be conducted according to the supervisor engineer.	L.S.	1
B	Earth Work:		
B1	Excavation works Excavation in all types of soils (even rock layers, asphalt, or existing foundation concretes) for (the sewer pipes & manholes) according to the designed level. Under existing tile concrete (35cm thickness) at toilets and drinking area, the price includes compaction of the excavation base by using a compactor according to requirements of section 300 of I.G.T.S. and instruction of the site engineer.	M ³	70
B2	Backfilling works: Supplying materials and filling with approved screened sub-base materials type B maximum size is 2" up to the designed level for the building, and where required within the area inside or outside such as aprons, walkways, toilet units, drinking area, around sewer pipes and the septic tank with the cesspool, etc..... with compaction (according to the specification) in layers 20 cm thickness, the compaction must be not less than 88% MDD according to the instructions of the site engineer with all necessary works for the final two layers.	M ³	100
B3	Provide materials and lay one layer of thick nylon under the concrete floors of tiles, manholes, septic tanks, ...etc.	M ²	150
C	CONCRETE WORKS: Including supply of materials (steel reinforcement, connection steel wires, cement, aggregate, water, sand, plastic cover for fixing the steel reinforcement in the proper level, bolts, nuts, washers, G. I. pipes, cutter machines, binder machine, etc.), and all necessary works, according to the section (6) of I.G.T.S, drawings, and instructions of the site engineer. Note: 1- Use new plywood for all wooden form support, with Adjustable Steel Scaffolding Props and Formwork Jack Support. 2- $F_y = 276 \text{ Mpa}$ for 10mm,12mm steel bars. $F_y = 414 \text{ Mpa}$ for 16mm,20mm, and 25mm steel bars 3. Allowable bearing capacity of soil = 100 KN / m² (assumed). 5. the reinforcement details should be according to ACI detailing manual 2004. 6. New Plywood or standard formworks must be used for all structural parts.		
C1	Plain Concrete: Supply materials and cast plain concrete class (C10) 1:3:6 10cm (min. thickness) for under tiles at (toilet units & drinking area), manholes foundation, and septic foundation, laying two layers of thick nylon. (The nylon should also cover the sides of excavation walls and extend on land for 50cm to both sides of the excavation).	M ²	170
D	Masonry works: Including provision of material, erection, pointing, curing, making expansion joint every (6m) with thickness 25mm with using of 25mm thickness compressed Polystyrene sheets, all necessary work according to section (500) of I.G.T.S., drawings, and instructions of the site engineer.		
D1	Hollow concrete block works: Supplying materials & construction of walls with hollow concrete blocks 20 X 20 X 40 cm with cement mortar(1: 3) for partition walls at toilet units, each toilet dimension (1.1m*1.6m*2m). The price includes filling the vertical joints between blocks with cement and sand 1:3.	M ³	13
E	ELECTRICAL INSTALLATIONS: Electrical points, including provision and installation of all wiring of wires 1.5 mm² for illumination and 2.5 mm² for the rest), inside PVC conduits 20-25 mm with thickness 1.8mm galvanized boxes 0.9 mm thickness cables should be laid inside PVC pipes, all materials should be new (best type). All works should be done according to specifications and standard IEC76 and the instruction of a supervisor engineer.		
E1	Supply, install and test lighting points LED 18Watt (outdoor) IP 65 with all required using (single wires 1.5mm ² with a suitable cable tray or cable conduit and switch).	No.	25
E2	Supply materials, install, connect, and test electrical LED fluorescent lights (50W) with all annexed parts using (2x1.5)mm ² wires with switch on/off all (2-3) lamps controlled by one button.	No.	25
E3	Supply, install and test socket 13 Amp. Using (wires 2.5mm ²). The work should be done according to the instruction of the supervisor engineer.	No.	8
E4	Supply, install and test FDB Circuit breaker, 12 lines (Different circuit breakers), with main 100 Amp, including connections, interconnections, painting, lettering, loop earth etc. as required. The price includes the provision of a protection box.	Unit	1
E5	Supply, install and test copper cable 4 X 10mm ² +10mm ² best inside 2.5" diameter PVC pipes in the ground or on the wall or pass through the core in the wall + installing above cable tray with all required and necessary works (such as hidden manholes) iron pipe 2" with an insulator.	mI	100
E6	Supply, install and test industrial Exhaust Fan size #4(10") and #2 (8") (Japanese, Malaysian Quality, or equivalents.) mounted to the walls inside a wooden frame. The price includes supplying & installing until brake wire mesh, painting from outside, and control switch.	Unit	6
E7	Supply and install and test 200 Liters production storage capacity an electrical water heater element of 2000 Watt with a thermostat. The tank plate is galvanized with 3mm thick The work includes all wiring 4x3mm ² and 30 Amp electric switch, plumbing works, pipes, fittings, and complete fixtures. The unit's location should be as per the instructions of the Site Engineer.	Unit	2
E8	Supply and install electric water cooler size 60 Liters, best type, production storage capacity, with two drains. The price includes connecting the water sources and electricity with all required materials and works.	Unit	4
F	Sanitary (Plumbing) Installation: Includes supply and installation of materials, pipes, all kinds of fittings, valves, mixers, bibcock taps, P-traps, gullies with cover, supports, hangers, plug and clips, all excavation with backfilling, placing concrete 1:2:4,15cm thick under and around pipes, workforce for the installation and internal connection of the water system to hot and cold water and the main water supply system. All water pipes should be Polypropylene (PPR). Composite water pipes of min. 3 Layers of side walls (PPR/AL/PPR/PE), PPR-C inner layer, and a special mixture of AL middle layer should be coated with an external layer of PE (Polyethylene Layer) dark grey/black color to protect against ultraviolet rays, Different Outside Diameter (OD) as below, Min.PN16 Bars, suitable for drinking purposes/food grade, approved samples with all required fittings and accessories, Egyptian best type PVC pipes for sewerage system with all the necessary fittings. All new WS and SS work items should be tested before covering. Note: All materials should be the best-approved type; the work of external water connection (3/4" dia.) includes repairing (if any) all Asphalt, concrete, and curb stone.		
F1	Providing materials and fixing industrial marble wash basin (best type) with mixer (Turkish Quality) or equivalent (if the	M.L.	10

	mentioned brands are not available) + floor drains + Gully (Trap), using proper brackets and adhesive materials for fixing the basin with walls and fixing drain pipes inside walls(2.25"). the price includes making a square steel pipe 4"*4" frame 3mm thick with anti-rust paint.		
F2	Providing ceramic wash basin (wall mounted type) with mixer (Best Type, Such as GROHE, Hansgrohe, DURAVIT, Roca)or equivalent (if the mentioned brands are not available) + wall & floor drains + Gully (Trap)/room, using proper brackets and adhesive materials for fixing the basin with walls and fixing drain pipes inside walls & floor (2.25"). The price also includes provide and install ceramic (50cmx25cm) (best type)for the wall behind the wash basin with a dimension of (1m width x 150m height) using tile adhesive materials (Kalakem flex type) with all the accessories.	No	2
F3	Providing materials and fix Eastern W.C Ceramic ((Best Type, approved sample)) with hidden Siphon/in-wall tank. + Gully (Trap) and cleanout accessories .	No.	10
F4	Western W.C/Wall Hung/Mounted Toilet with the in-wall tank: provide, test, and install (Best Type, Such as GROHE, Hansgrohe, DURAVIT, Roca) or equivalent (if the mentioned brands are not available)with gully trap 4" dia, and flexible hose 5mm, handle tissue place complete in all respect.	No.	2
F5	Supply and install HDPE 1000 liter water tank; the work includes making an iron base support for the water tank and a layer of XPS under the tank, and drainage size ¾" locked by socket +Plug etc. and all the required fitting and works.	PCs	3
F6	Connecting the building with the main source of water using a normal PPR pipe of 32 mm OD & PN20. The price includes all fitting and necessary works such as connecting water tanks with wash facilities and water cooler.	M.L.	200
F7	PVC pipes (4)" diameter: Supply and install (4")dia. PVC pipes best/approved type, 4.20 mm wall thickness with all necessary materials and fittings, according to the section 1500 of I.G.T.S and the instructions of the site engineer with all necessary work the price includes casting concrete type C (1:2:4) around the pipes 15cm thick for all pipeline.	M.L.	40
F8	PVC pipes (6)" diameter: Supply and install (6")dia. PVC pipes best/approved type, 4.20 mm wall thickness with all necessary materials and fittings, according to the section 1500 of I.G.T.S and the instructions of the site engineer with all necessary work the price includes casting concrete type C (1:2:4) around the pipes 15cm thick for all pipeline.	M.L.	50
F9	Taps 1/2" : Provide materials and installation of chrome taps (best-approved type such as GROHE, DURAVIT, ECA, or Vitra) or equivalent (if the mentioned brands are not available) size 1/2", for the required places and according to the site engineer's instructions.	Pcs	10
F10	Provide and install Sink basin Turkish marble type(two wings and two bowels), the price includes all accessories of pipes for cold and hot water with the chrome mixer tap(Turkish Quality) or equivalent (if the mentioned brands are not available) and also includes the Aluminum counter length 1.8m for the Sink base.	M.L.	5
F11	Floor drain (PVC) 4"dia.: Provision of materials and erection of 4" dia. Floor drain. The work includes the excavations, crushed stone, lean concrete with a thickness of 20cm, and connection to the receiving manholes by PVC pipe 4" dia, with drain(Turkish Quality) nickel covers, with all necessary work.	No.	6
F13	Concrete block manholes: Supply materials and construction manholes of different depths with internal dimensions using solid concrete blocks size 15X20X40 cm for walls. The price includes excavation, supply, and laying of crushed stone with proper compaction, laying of plain concrete, block walls, plastering both sides (inner & outer), covering the inner side of the manholes with a mix of 1:2 water, SBR. Aheen covers due to drawings with the frame, according to the details shown in the drawings.		
F14	40x40cm and cover 40x40cm	No.	14
F16	60x60 cm and cover 60x60cm	No.	2
F17	80x80 cm and cover80x80cm	No.	1
F18	Septic Tank: Provide materials and build a septic tank of internal dimension (L x W x D, 4m x 3m x 2.2m under inlet pipe level), according to attached technical drawings and Supervisor Engineer instructions. The work includes excavations, cast reinforcement concrete with wood shuttering for slab floor, side & partition walls, and manhole neck of 25 cm thick, C26 Mpa, 12 mm steel bars @ 20x20 cm C/C double layers, with a thick nylon layer under concrete. The partition baffle wall should be at 2/3 from the inlet side. The baffle should have at least two holes (length 40cm, height 20cm). Paving inside of the septic tank by using waterproof waste materials of the approved sample. Fit T-joints on both inlet and outlet pipes, T-joints to being 20cm long on both ends. Cast top slab by reinforced concrete, 20 cm thick, steel bars 12mm @ 15cm c/c. The slab must fit smoothly and tightly onto the RC walls. Leave openings in the top slab for two manholes (20x20) cm each with neck extension, positioned exactly over the inlet and the outlet pipes. Close with two heavy-duty cast iron/GRP type manhole covers. Install ventilation pipe PVC 2.5". If possible, fix it to a close wall. Install min. 3m of 6" connection pipe between the septic tank outlet and the cesspool. Make sure the septic tank is fully watertight. The work includes excavations of a hole of suitable dimensions with a flat bottom, leaving a space of at least 20/30 cm around the tank. In the case of heavy ground (e.g., clayey subsoil and/or groundwater, the distance must be at least 50 cm. Spread a 20/25 cm deep layer of 2/6 washed gravel (JALMOOD) on the bottom of the excavation to allow the tank to rest on a uniform and level base. Excavated material must not be used as backfill. The excavation must be a minimum of 1 m from any structures. The work includes all required works for avoiding surface runoff infiltration, uplift pressure, and keeping the tank safe from any external forces and loads, marking the boundary with suitable warning signs.	No.	1
F19	Construction of Cesspools:- Provide materials and drill/build cesspools 1.1 m outer diameter for septic tank effluent infiltration according to attached drawings, 8 m depth. Casing (6 m) using double wall corrugated pipes of inner diameter 80 cm minimum and 1 m from the top/ground level by a concrete ring of min.80 cm dia. Gravel pack between cesspool wall and casing pipe. Concrete seal around the concrete ring, 0.5 m down from the top of cesspool/ground, the cover should be round ductile cast iron manhole covers 60cm diameter.	No.	1
G	FINISHING: Including provision of all necessary materials, work, and curing. The works should be done according to sections 10 & 14 of I.G.T.S, drawings, and instructions of the site engineer with all necessary works, and use SBR at a rate of 200gr per m2, the ratio of SBR to water(3-1).		
G1	Cement plastering: Providing materials and plastering with cement sand mortar 1:3 three layers (1. cement spatter dash(sharbat),2.rendering coat and leveling (kafmal),3. finishing fine coat (saf)) 20mm thick min. and the final layer should be very smooth, using 3m straight aluminum edges for plastering guides for outer walls And use SBR at a rate of 200gr per m2.	M²	80
G2	Ceramic tile works supply materials and erection of (Best Quality) ceramic tiles (as sample approved) using the best type(first class) on two-layer of plastering of cement mortar (1: 2) using straight edges for toilet walls, above all washbasins and baths walls, kitchens according to the details (the places indicated in the drawing or by the site engineer). And use SBR at a rate of 200gr per m2. The price includes the erection of ceramic belts with suitable height and coating the backside of the tiles with a layer of cement splatter dash using SBR. the price consists of using Aluminum straights for corners.	M²	250

G3	External painting(silicone): Provide materials and Painting with External painting (Weather prove) painting and color approved by the site engineer) three layers (for exterior walls). The work should be done according to the site engineer's specifications, drawings, and instructions. Note: the paint must be according to the international organization ISO 9001.	M ²	350
G4	Satin paint: Provide materials and Painting with satin painting painting and color approved by the site engineer) three layers for the areas indicated in the drawings (for walls).	M ²	150
H	Doors & Windows: Providing all necessary materials and installing doors according to sections 11, 12, 13 of I.G.T.S, details, and instructions of site engineer with all the required works, prior samples should be approved by the site engineer.		
H1	Aluminum Windows: Supply material and install Aluminum windows wide section 2mm thickness, fixing 4x3cm 3mm thickness steel pipes frame to the wall, Double glass pan (6mm transparent+4mm semi-transparent) thickness, ordinary or mushajar, rubber, handle, the price includes protect glasses by suitable wire mesh with frame.	M ²	6
H2	Aluminum Doors Works: Supply material and install Aluminum doors, double plate 2mm thickness. The price includes a double glass pan of 6mm thickness, ordinary or mushajar, rubber, handle, switch mortice best Turkish type, and door stopper.	M ²	20
H3	Iron Door Works: Supply material and workshop for repairing #2 entrance toilet existed iron doors, it includes rendering door leafs & frames, painting one layer anti-rust and two layers of oily painting, re-placing door hinges, locker with kelone, all required works should be conducted according to supervisor engineer.	L.S.	1
H4	Sign board: Supply and install steel sign board (2.5mX1.5m) plate gage 18, with steel angle frame (1.25x1.25) inch (3mm) thickness, with one layer of anti-rust paint and two layers of approved color oil paint (JOTIN) brand or equivalent, ISO 901, includes printing the name of the school with the foundation year by detail.	PCs	1
I	Flooring: (Including provision of materials, works, curing and installation) the work should be done according to the sections 6 and 9 of I.G.T.S. drawings, and instructions of site engineer with all necessary works.		
I1	Supply materials and paving Ceramic Floor Tiles 10mm thickness, best quality first class (sample should be provided for approval) Wear-resistant, Non-slip, Acid-resistant, Low water-absorption 0.5% with all necessary works on a layer of cement sand mortar 1:3 mix ratio, The price includes cleaning the porcelain after the end of the works. The work includes using cement mortar and sealing the joints with white cement & lime grout and SPR color if required mixture), making a 1.0 cm expansion joint, each 25m2 filling with flexible epoxy, all required works should be carried out according to the attached drawing and supervisor engineer instruction.	M2	125

Annex B: Bill of Quantities
LOT2-B Construction of Three Classrooms at Kobani Primary School in Erbil

No.	Description	Unit	Qty.
A	Site Preparation		
A.1.1	Excavation works: Excavation in all types of soils (even rock layers, asphalt, or existing foundation concretes), including backfilling with sub-base material and compaction according to requirements of section (2) of I.G.T.S. the price includes compaction of the excavation base by using Vibrator and according to details and instruction of site engineer.	M ³	40
A.1.2	Backfilling works: Supplying materials and filling with approved screened sub-base materials type A maximum size is 2" up to the DPC level for the building and where required within the area inside or outside such as aprons, walkways, etc..... with compaction (according to the specification) in layers 25 cm thickness, the compaction must be not less than 80% MDD and using anti termite chemical (clorediddin) to prevent and treat the white termite according to the instructions of the manufacturer and site engineer with all necessary works for the final two layers.	M ³	70
B	CONCRETE WORKS: Including supply of materials (steel reinforcement, connection steel wires, Ready mix concrete , plastic cover for fixing the steel reinforcement in the proper level, bolts, nuts, washers, G. I. pipes, etc.), and all necessary works, according to the section (600) of I.G.T.S, drawings, and instructions of the site engineer. 1- all support for wooden forms work should be steel (jacks). 2- All steel bars must be according to ASTM A 615 Fy = 420 Mpa for all steel bars. 3. Allowable bearing capacity of soil = 120 KN / m2 (assumed). 4. concrete compressive strength at 28 days based on standard 150 mm cubes should not be less than 25MPa for slab and foundation and 30 Mpa for columns . 5. The reinforcement details should be according to ACI detailing manual 2004. 6. All formworks must be made of plywood or standard forms (not local way) for all structural parts.		
B1	Plain Concrete: Supply materials and cast plain concrete (C10) 1:3:6 10cm (min. thickness) for columns footing and wall footings to the required elevations after laying two layers of thick nylon. (The nylon should also cover the sides of excavation walls and extend on land for 50cm to both sides of the excavation).	M ²	70
B2	Walkway: Providing materials and casting plain concrete (Smooth surface, using copter instrument) for the walkway thickness of 10cm with laying one layer of BRC 6mm Dia. (15cm*15cm) C/C, making expansion joints every 2.6 m in both directions or as the cutter instrument requires. The price includes using steel forms for the edges. The work should be done according to the site engineer's specifications, drawings, and instructions.	M ²	110
B3	Foundation and footing: Provide all materials and cast reinforced concrete (ready mix C 25) for the foundations, continuous footing through column footing, and column footings, according to the attached drawings. All casting works must be done with a vibrator.	M ³	15
B4	Walkway Foundation: Provide all materials and cast reinforced concrete (ready mix C 25) for the foundations, continuous footing through column footing, and column footings, according to the attached drawings. All casting works must be done with a vibrator.	M ³	7
B5	Slabs: Provide all materials and cast reinforced concrete(ready mix C 25) for slabs according specifications, and site engineer instructions. Note: All the roofs must be treated and smoothened by a copter instrument and using a vibrator during casting.	M ³	32
B6	Beams: Provide all materials and cast reinforced concrete (ready mix C 25) for beams, lintels according to drawings, specifications and instructions of site engineer.	M ³	10

B7	DPC-Tie Beams: Provide all materials and cast reinforced concrete (ready mix C 25) for DPC-Tie beams, according to drawings, specifications and instructions of site engineer.	M ³	3
B8	Columns: Provide all materials and cast reinforced concrete for the fair-faced columns, according to drawings, specifications and instructions of site engineer. All casting works must be done with a vibrator.	M ³	2
C	Masonry works: Including provision of material, erection, pointing, curing with all necessary work according to section (5) of I.G.T.S., drawings, and instructions of the site engineer.		
C1	Solid concrete block works: Supply material & construction of walls with solid concrete blocks 15X20X40cm with cement, sand mortar(1: 3). The price includes flush pointing for outside and inside by cement sand 1:3.	M ³	20
C2	Hollow concrete block works: Supplying materials & construction of walls with hollow concrete blocks 20 X 20 X 40 cm with cement mortar(1: 3) for the above D.P.C level the price includes filling vertical joints between blocks with cement and sand 1:3; the works should be done according to specifications and instructions of the site engineer.	M ³	40
D	ELECTRICAL INSTALLATIONS: Electrical points including provision and installation of all wiring (three lines Line, Neutral and earth, using 1.5 mm2 for illumination and 2.5 mm2 for the rest), inside PVC conduits 20-25 mm with thickness 1.8 mm galvanized boxes 0.9 mm thickness cables should be laid inside PVC pipes, all materials like switches, circuit breakers..etc. Must be original from the brand and good quality like BG, Mk, Panasonic ABB, Schneider or equivalent quality. All work should be done according to the specifications and instructions of a supervisor engineer. - The contractor is responsible for designing all electrical boards and networks to submitting them to UNHCR TU for approval before starting the works.		
D1	Supply materials, install, connecting, and test electrical LED lights (60x60cm)(72 W) with all annexed parts using (2x1.5)mm2 wires inside false ceiling (daylight type) with switch on/off. All required work according to instructions of the supervisor Engineer.	Unit	18
D2	Supply, install and test lighting points LED 18Watt (outdoor) IP 65 with all required using (single wires 1.5mm ² with a suitable cable tray or cable conduit). The price includes the switch light and must be (MK, B.G, Panasonic or equivalent).The price includes installing of photocells.	Unit	15
D3	Supply, install and test socket 13 Amp. Using (wires 2.5mm ² (GC, GCCI, Hidayatm FTM, Edison) or equivalent. The work should be done according to the instruction of the supervisor engineer.).	Unit	10
D4	Branch Circuit breaker 3 phase 60 A Schneiderquality or equivalent.	Unit	1
D5	Supply, install and test FDB Circuit breaker, 12 lines (Different circuit breakers), with main 125A, including connections, interconnections, painting, lettering, loop earth etc. as required. The price includes the provision of a protection box.	Unit	1
D6	Supply, install and test copper cable 4 X 10mm2+10mm2 best inside 2.5" diameter PVC pipes in the ground or on the wall + installing above cable tray with all required and necessary works (such as hidden manholes) iron pipe 2" with an insulator.	ml	100
D7	Supply and install and test split points using copper cable 4x6mm2 inside PVC pipe with an electric switch 45 Amp best type, with using mini 32x3 Amp +10Amp with box, also install 3/4" PVC pipe inside the wall with fixing it to drain the water of the split outside the building.	Unit	3
D8	Supply, install and test electric Ceiling Fan (Panasonic, Philips, Toshiba) or equivalent (if the mentioned brands are unavailable) with the regulator; the price includes installing the electrical points by isolation copper wire 1.5 mm2 and 10mm steel bar for hanging the fan according to of instruction of supervisor electrical engineer.	Unit	6
D9	Supply, install and test split AC unit (24,000 BTU) (tosot, LG, or Gree) or equivalent (if the mentioned brands are not available) (INVERTER TECHNOLOGY). The work also includes installing a 32 Amp Residual current circuit breaker with Overcurrent Protection- RCBO (Legrand, ABB, Siemens, Schneider) or equivalent (if the mentioned brands are not available) and connecting it with the electrical source using (2X4)mm2 cable (GC, GCCI, Hidayatm FTM, Edison) or equivalent (if the mentioned brands are not available) with all accessories. The price also includes coring the wall using a proper machine (if needed) and filling the hole with foam and proper cover; the price includes fixing and suspending the outdoor unit on the wall or making a proper steel stand.	No.	3
E	FINISHING: Including provision of all necessary materials, works and curing to do the finishing works. The works should be done according to section 10, & 14 of I.G.T.S, drawings and instructions of site engineer with all necessary works, and use SBR at a rate of 200gr per m2.		
E1	Cement plastering: Providing materials, staff and plastering with cement sand mortar 1:3, three layers (cement splatter dash, kafmal, saf) 20mm thick min at inside and outside the building the final layer should be very smooth, using aluminum straight edges for plastering guides. Using SBR at a rate of 200gr per m2, the price includes fixing steel wire mesh for the edges between walls and columns.	M ²	570
E2	Gypsum plastering for the block walls inside the rooms: Supplying materials and plastering with gypsum (using the best type of gypsum approved by site engineer) in 2 layers minimum thickness 15 mm using aluminum straight edges for plastering guides each 80 cm for walls and roofs and the area indicated in the drawings, also fixing steel wire mesh then using one layer of cement plastering for covering the wire mesh.	M ²	270
E3	Skirting: Supply materials and skirting using first class ceramic tiles (15)cm height and tile adhesive materials (Kalakem flex type), in rooms according to the drawings and instructions of site engineer.	ml	75
E4	Provide materials and cover the windows frame (four sides) with marble 3cm thick (best type), width 30cm. The price includes a spin-off of the outer edges of the granite and using kalakim paste FLEX type for fixing. The work should be done according to the specifications, drawings, and instructions of the site engineer.	ml	60
E5	Acrylic internal paint: Provide materials and staff to paint the internal walls of the building with Acrylic painting (color approved by the site engineer) three layers after prime coat with all the required works to make the wall fare face before painting using paste or any required works as indicated by the site engineer. The work should be done according to IGTS. Note: the paint must be according to the international specification organization ISO 9001.	M ²	270
E6	External painting(Silicone): Provide materials and Painting with External painting painting and color approved by the site engineer) three layers after the prime coat for the areas indicated in the drawings (for exterior walls). The work should be done according to the site engineer's specifications, drawings, and instructions. Note: the paint must be according to the international specification organization ISO 9001.	M ²	320
E7	Satin painting 120 cm: Provide materials and Painting 120 cm High with satin painting and color approved by the site engineer) three layers for the areas indicated in the drawings (for walls).	M ²	120
E8	Roof Treatments: Provide materials and workers to treat the roof using waterproof (UV resistant) Sika 3mm layer thickness with fiberglass mesh and prime coat. The price includes cleaning, treating, and using prime coat before using the roof guard and all the required works according to the site engineer.	M ²	220

E9	Suspended ceiling tile (false ceiling): Provide materials and fix acoustical panels 60 X 60 cm, fire rate Class A, edge SLT model for the classrooms. The price includes hanging beams (Skka 38 mm height) every 120cm by a screw, steel fisher, rode 3mm, connecting the beams by skka 120cm,60cm long (32mm height), and all necessary works. The work should be done according to the specifications and instructions of the site engineer.	M ²	110
F	Doors & Windows: Providing all necessary materials and installing doors according to sections 11, 12, 13 of I.G.T.S, details, and instructions of site engineer with all necessary works, prior samples should be approved by site engineer.		
F1	Metal Door: Provide and install decorative metal doors approved, well-known origin and brand for the entrances and halls and rooms, double-faced of plate thickness 1.50mm including glass pans, door frame 13.5*4.5cm 2.5mm thickness, Film Coated Residential Steel Entrance Door Glassy Finished Style, including special switch best type, gate lock, door stopper, rubber, polycarbonate filled, special guard bar, thermal paint & metal frames 6*22cm, Mercury glass 15x40cm with 3 cm Styrofoam polystyrene inside the door, Central lock system, with additional horizontal a lock with three concealed hinges with all necessary works, samples required for final approval.	M ²	10
F2	Steel guard bars: Provide and install metal guard bars windows, with primer and two layers of best oil paint, using square bar 12 x 12 mm welded inside an angle frame 1.25"*1.25"*3mm, fixed by screw and fisha to the wall according to the details, and instructions of the site engineer.	M ²	17
F3	Aluminum Window: Supply material and install Aluminum windows wide section best type 2mm thickness. , Double glass pan (6mm+4mm) thickness, ordinary or mushajar , rubber, handle, flywire mesh for opening Areas, the price includes using EKOPLAST paste, cleaning the glasses by machine before composing, and all other required works according to the drawings and instructions of site engineer.	M ²	17
F4	Metal handrail works for the walkways: Provide materials & install a handrail (walkway) with 90 cm Hight. The price includes primer and two layers of best oil paint for all ironmongery required. The price consists of excavation and concreting (with dimension 30*30*50 cm) for fixing square steel pipe 3" x 3" every 2m welded to the metal handrail.	M.L	25
F5	Sign board: Supply and install steel sign board (2.5mX1.5m) plate gage 18, with steel angle frame (1.25x1.25) inch (3mm) thickness, with one layer of anti-rust paint and two layers of approved color oil paint (JOTIN) brand or equivalent, ISO 901, includes printing the name of the school with the foundation year in detail.	Unit	1
G	Flooring: (Including provision of materials, works, curing and installation) the work should be done according to the sections 6 and 9 of I.G.T.S. drawings, and instructions of site engineer with all necessary works.		
G1	Floor concrete:- Provide materials and cast plain concrete 10cm thickness, including grading and leveling of the foundation under the ceramic tile and laying one layer of thick nylon or a layer of crushed stone, according to the details for the ground floor.	M ²	115
G2	Supply materials and paving ceramic tile best quality first class (sample should be provided for approval), Wear-resistant, Non-slip, Acid-resistant, Low water-absorption 0.5% with all necessary works on a layer of cement sand mortar 1:3 mix ratio; the price includes cleaning the porcelain after the end of the works. The work includes using cement mortar and sealing the joints with white cement & lime grout and SPR color if required mixture), making a 1.0 cm expansion joint for each 25m2 filling with flexible epoxy; all required works should be carried out according to the attached drawing and supervisor engineer instruction.	M ²	115

Annex D: Detailed Technical Evaluation Criteria

#	Items	MANDATORY RFP SPECIFIC REQUIREMENTS	Submitted (Yes/NO)
1	Mandatory Site Visit	Did the vendor send an engineer to visit the site on the date and time and sign their company's name on the attendance sheet? <u>(The attendant should show any proof that he/she is an engineer).</u>	
2	Mandatory Bid Security	Has the bidder submitted a scanned copy of the Bid Security of USD 7,500 by "Good for Payment Cheque/Certified Cheque" made out in the name of UNHCR covering the offer's validity (180 days after the closing date of the bid)? It should be a certified cheque (not personal). <u>The cheque should indicate the RFP number and be issued under the company name.</u> The selected company would be required to submit the original cheque.	
3	Mandatory Valid Business Registration Certificate	Is the company registered as a construction or general contracting company in IRAQ (Federal Government or Kurdistan Region)? <u>Companies aged under 3 years at the time of the submission will be disqualified.</u>	
Mandatory Pre-qualification - Pass / Fail			

The Bidders must meet all the above mandatory pre-qualification criteria in order for their proposal to be considered for further evaluation.

Stage 2: Technical Evaluation

The percentage distribution of 60% of the total score has been allocated to Technical Proposal. Maximum scores are listed in the table below. Failure to achieve a minimum score of **60%** out of the 60 points will result in technical non-compliance and elimination from further evaluation.

Technical Evaluation Criteria:

Technical Evaluation			
A percentage distribution of 60% of the total score of technical evaluation has been allocated to Technical Proposal. Maximum scores are listed in the table below. Failure to achieve a minimum score of 36 points out of the 60 points will result in technical non-compliance and elimination from further evaluation.			
Main Criteria	Sub-Criteria	Specific Requirements	Score
General Company Qualification & experience	Company profile and Capability.	The company has ISO 9001 certification or equivalent recognized certifications. (1 Point)	1
		Company age from the registration date (min 3 years).	2
	Company classification	The company has a valid construction classification ID issued by the Ministry of Planning (Central Government and KRI), classified range between 1-5 classes.	2
		Classification from 1-3 (2 Points)	
	Staff qualifications, CVs with min 5 years of experience and Resources	Project Manager (site engineer) with a bachelor's academic degree in civil engineering (minimum of 5 years of experience) with proof of graduation like (Graduation certificate, syndicate ID, Union ID) (3 Points)	3
		Surveyor (diploma in Surveying) with at least 3 years of experience. (2 Point)	2
	Financial Auditing report	The latest 2 consecutive years, financial audit reports for the years (2020-2021-2022). The audit financial reports (including the Balance Sheet) must be certified by the Iraqi Association of Accountants— minimum cumulative turnover of USD (70,000).	4
		Submitted with a minimum cumulative turnover of USD (70,000) (4 Points)	
		Did not submit or submitted with turnover less than (70,000 USD) (0 Points):	0
	Total score 14 points		
Relevant Experiences	Proof of relevant	experiences Copies of Purchase Orders (POs), contract agreements, or work orders attached with proof of project completion certificate/ performance letter issued by the client (Showing value, time completed, organization or firm for which completed, contact details of the organizations) awarded and served within the past 10 years. The actual copies of POs, contracts, or work orders should relate to similar projects (this includes new construction, rehabilitation, and sanitation projects)	5
		- 5 (and above) Projects = 5 Points - 4 Projects = 4 Points - 3 Projects = 3 Points - 2 Projects = 2 Points - 1 Projects = 1 Point - No project = 0 Points	
	Past experience with clients	List of similar projects showing (project name, client name, project cost, reference contact (phone No. or email)). UNHCR will conduct a reference check per project to be considered.	3
		- 3 or more different clients (3 Points) - 2 different clients (2 Points) - 1 client (1 Point) - No list (0 Points)	
Total score 8 points			
Technical Specifications of Works	Construction & Finishing Materials	Catalogs or Datasheet Confirming that the specification of the below items complies with the BoQ:	
		Acrylic Painting (internal & external) (2 Points)	2
		Metal door (2 Points)	2
		Roof treatment materials (2 Points).	2

	Sanitation Materials	Eastern W.C (2 Point)		2
		Water mixer and taps (3 Point)		3
		PVC and composite PPR water Pipes (2 Points)		2
		UV-resistant HDPE water tank 1000 liters (3 Points)		3
	Electrical fittings Materials	Copper cables and wires (4 X 16mm2) (4 X 25mm2) (2 Points)		2
		Led lights (2 Points)		2
		Socket and switch plug (2 Points)		2
		industrial Exhaust Fan (3 Points)		3
		Water Cooler (3 Points)		3
		electric Ceiling Fan (2 Points)		2
30 points (Min. Passing point is 20 Points)				
Work Plan & Method of Implementation	Works plan Detailed and realistic work plan with Work Schedule/ Gantt Chart showing the starting and end of each activity	- Implement realistic timelines as indicated in the Scope of work (up to 100 days). Including a Gantt Chart indicating a detailed sequence of activities. (3 Points).		3
		- Incomplete Gantt chart, no Gantt Chart or Proposed Gantt chart (more than 100 days) of the indicated duration in (SoW) or Project Schedule not indicating a detailed sequence of activities (0 Point).		
	Method of implementation	Submission of the minimum equipment list, which should comprise 1 Truck, 1 Excavator, 1 Pickup, 1 Loader, 1 Compactor, and 1 Concrete Mixture Machine	Full list (2 Points).	2
			Partial list (1 point)	
		The logistics plan includes access to the site and material delivery with the needed workforce. (1 Point)		1
		Environmental Impact Assessment Plan. (1 Point)		1
		Risk mitigation plan and insurance to ensure all risks are covered (1 Point).		1
Total Score 8 Points				
Total Score for Technical Evaluation 60				

Annex E: Technical Proposal Form

The Bidder must provide sufficient information in the proposal to demonstrate compliance with the requirement set out in each section of this Request for Proposal. This **PROPOSAL FORM** must be completed, signed and returned to UNHCR. Proposal must be made in accordance with the instructions contained in this Request for Proposal.

TERMS AND CONDITIONS OF CONTRACT

Any contract resulting from this RFP shall be subject to **Annex G: UNHCR General Conditions of Contracts for Civil works (October 2000)**

D-1 DECLARATION

The undersigned, having read the Instruction to Bidder **Annex G: UNHCR General Conditions of Contracts for Civil works (October 2000)** as set out in the attached document, hereby offers to supply the services specified in the BOQ at the price or prices quoted in **Annex A & B: Scope of Work (SOW) & Bill of Quantities**.

The undersigned understands that UNHCR reserves the right to accept the whole or part of your bid or allow split or partial awards on this project. It is however important to note that the construction project cannot be split unless the various components are defined by LOT. All other projects are to be awarded on an “all or nothing basis”.

D-2 AWARD AND BANK GUARANTEE:

The Firm that submitted the successful Proposal will be notified by letter of the award prior to the expiration of the validity period. The letter, referred to as the “Letter of Award” will state the sum of the fees to be paid to the Firm for the services rendered and will indicate the terms under which the Contract must be finalized.

The Contract must be signed within 14 days of the issue of the Letter of Acceptance. The successful bidder will be required to furnish us with 10% Bank Guarantee of the contract sum from a reputable bank in the next 7 days, valid for the entire period of the contract works.

Name of authorized representative: _____

Title: _____

Signature: _____

Date: _____

Supplier Name: _____

Postal Address: _____

Telephone No.: _____

Email Address: _____

D-3 BIDDER GENERAL INFORMATION

Bidder General Information		
Description	Information (to be filled by the Bidder)	Remarks
Registration Type (Company / Contractor etc.)	E.g. Construction Company with appropriate registration as a construction company	
Registration number		
If multi location company, specify headquarters location		
Grading/Classification if any applicable to the type of registration you company has.	Provide certified copies	
Number of similar and successfully completed projects;	Provide a list and copies of contracts / POs with certificate of completion	
Number of similar projects currently underway;	Provide a list and copies of contracts / POs	
Total number of clients previous and current	Provide a list	
Specialty		
Expiry Date of Certifications and/or Grading		<i>Provide certified copies</i>
Legal Status	e.g. Limited Company / Public limited Company etc	<i>Provide certified copies of Registration</i>
VAT Registration Number	(If applicable)	

D-4 STAFF QUALIFICATION AND EXPERIENCE:

Qualifications and experience of key management and technical personnel proposed for this Project. Signed CVs of all proposed staff must accompany the submission and it should be noted that substitution of staff during Project implementation shall be subject to the approval of UNHCR. A detailed organization chart of the company including the location and staffing of existing offices must also be attached to the offer.

Construction Project Management Staff		
A. Key Professionals		
Name	Position	Task
B. Support Staff		
Name	Position	Task

The CVs of all staff listed above must be provided and a reference to the page number must be made for each staff cv in the technical proposal.

D-5 FINANCIAL INFORMATION:

Annual Turn-over Information (Last Three Years)		
Year	Turn-over in USD	Remarks
2020		
2021		
2022		

D-6 Financial Statement Analysis

S No.	Description of Financial Info.	Value	Reference Page No. Tec Proposal
Current Ration			
1	Current assets		
2	Current liabilities		
Debt Ratio as a Percentage			
3	Total Debt		
4	Total Assets		

D-7 WORKS IN HAND (Ongoing Projects)

Works in Hand				
Employer name & contact details	Description of Works/Services	Start date	End date	Amount
Total USD				

Make a reference to page number in your technical proposal for the corresponding documents (1. Contract / PO 2. Date of Project Site Handover. All documents must be provided in your technical proposal.

D-8 CONSTRUCTION EXPERIENCE IN LAST FIVE YEARS

Construction Experience in last ten years				
Year	Employer name & contact details	Description of Works/Services	Amount	
Total USD:				

Make a reference to page number in your technical proposal for the corresponding documents (1. Contract / PO 2. Date of Project Site Handover 3. Substantial Completion Certificate) All documents must be provided in your technical proposal.

D-9 INFORMATION ON ANY CURRENT LITIGATION IN WHICH THE FIRM(S) IS INVOLVED.

Other Party(ies)	Cause of Dispute	Amount Involved

D-10 PROPOSED WORK PLAN AND SCHEDULE OF ACTIVITIES

The proposed work plan and schedule of activities must be submitted with this Proposal. The work plan and schedule should be prepared in detail to the extent possible and include time allocated.

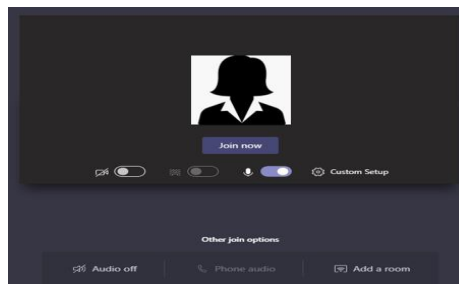
A proposed timeline in a Gantt / Bar chart format must be part of this Proposal. It should start with establishing Minimum Requirements till the Issuance of the Substantial Completion Certificate.

Annex J

Join a meeting without a Teams account



1. Go to the meeting invite and select **Join Microsoft Teams Meeting**.
2. That'll open a webpage, where you'll see two choices: **Download the Windows app** and **Join on the web instead**. If you join on the web, you can use either Microsoft Edge or Google Chrome. Your browser may ask if it's OK for Teams to use your mic and camera. Be sure to allow it so you'll be seen and heard in your meeting.
3. Enter your name and choose your audio and video settings. If the meeting room (or another device that's connected to the meeting) is nearby, choose **Audio off** to avoid disrupting. Select **Phone audio** if you want to listen to the meeting on your mobile phone.
4. When you're ready, hit **Join now**.
5. This will bring you into the **lobby**. We'll notify the meeting organizer that you're there, and someone in the meeting can then admit you.



ANNEX L: TENTATIVE CALENDAR OF ACTIVITIES:

Calendar of Activities			
S/No:	Action Description	Date	
		From	To
1	Tender available to vendors (<i>Tender opening and closing dates</i>)	16/05/2023	06/06/2023
2	Closing date for Queries		31/06/2023
3	Site Visit (<i>if applicable</i>)	25/05/2023	26/05/2023
4	Pre-bid conference Meeting	29/05/2023	29/05/2023
5	Tender Closing date	06/06/2023	06/06/2023
6	Bid Opening Date	07/06/2023	07/06/2023
7	Technical Evaluation	08/06/2023	29/06/2023
8	Financial Evaluation	02/07/2023	06/07/2023
9	Approval of Contract	07/07/2023	16/07/2023

ANNEX M: BID DATA SHEET

THE FOLLOWING SPECIFIC DATA FOR THE SERVICES TO BE PROCURED SHALL COMPLEMENT, SUPPLEMENT OR AMEND THE PROVISION IN THE INSTRUCTIONS TO BIDDERS. WHENEVER THERE IS A CONFLICT, THE PROVISION HEREIN SHALL PREVAIL.

DEADLINE FOR SUBMISSION OF BIDS	18/05/2023 at 2359 HRS Iraq Local Time	
SUBMISSION OF BIDS:	Please submit your proposal through an online eTenderBox Tool, which can be accessed at http://etenderbox.unhcr.org	LOT1: Construction of Three Classrooms at Tarin Primary School, Construction of Two WASH Facility Units and One Classroom at Payman School, and Re-Construction of the Sewerage System and Rehabilitation for the WASH Facility Units at Raber Primary School in Erbil LOT2: Re-Construction of the Sewerage System and Rehabilitation for the Wash Facility Units at Aweza Primary School, and Construction of Three Classrooms at Kobani Primary School in Erbil
LATE SUBMISSION OF OFFERS:	OFFERS SHOULD BE SUBMITTED IN GOOD TIME TO BE RECEIVED BY CLOSING DATE AND TIME. IMPORTANT NOTE: BIDS RECEIVED AFTER THE DEADLINE FOR SUBMISSION OF BIDS AND BIDS TRANSMITTED IN ANY OTHER MANNER THAN THOSE INDICATED ABOVE WILL NOT BE CONSIDERED.	
BID VALIDITY PERIOD:	180 DAYS	
PRICE VALIDITY PERIOD:	Entire Period of the Project Duration	
DEFECT LIABILITY:	6 MONTHS	
TERMS OF REFERENCE:	ALTERNATIVES TERMS OF REFERENCE SHALL NOT BE CONSIDERED	
DELIVERY SCHEDULE:	SET UP TIME: IN DAYS: 7 Days DELIVERY TIME: IN DAYS: 90 Days	
RETENTION MONEY:	Please note that a 10% of the total contract value will be kept as retention money for period of 6 Months from the completion and handover of the site against defects and liabilities.	
RELEASE OF PERFORMANCE BOND OR BANK GUARANTEE	The performance bond or bank guarantee will be released upon the 100% completion of the works and upon the issuance of Substantial Completion of Works Certification by the UNHCR Project Manager/Engineer.	
LIQUIDATED DAMAGES	The resulting contract from this tendering exercise MAY BE subject to the application of liquidated damages at the sole discretion of UNHCR and if deemed necessary. In accordance with article 2.11 of the tender document.	
SUBCONTRACTING	UNHCR WILL HAVE TO APPROVE ANY SUBCONTRACTOR THAT THE CONTRACTOR INTENDS TO USE FOR THE EXECUTION.	
LANGUAGE OF THE BID:	ENGLISH	
REQUESTS FOR ADDITIONAL INFORMATION:	BIDDERS ARE REQUIRED TO SUBMIT ALL THEIR QUERIES IN RESPECT OF THIS REQUEST FOR PROPOSAL TO BID BY E-MAIL TO: IRQERPROC@unhcr.org and cc: omerr@unhcr.org BEFORE 2359 HRS Iraq Local Time on 06/06/2023. (CUT-OFF DATE FOR QUERIES) . UNCHR MAY, AT ITS DISCRETION, COPY ANY REPLY TO A PARTICULAR QUESTION TO ALL OTHER INVITED / PARTICIPATING BIDDERS.	
BID EVALUATION CRITERIA:	BIDS WILL BE EVALUATED BASED ON THE TECHNICAL EVALUATION CRITERIA prescribed in article " 2.6.2 Technical and Financial evaluation "	

ANNEX N: SUBMISSION CHECKLIST

Submission Checklist		
S. No.	Description	Status
1	I have read and understood the RFP and all its annexes	
2	Annex A & B: Bill of Quantities & Scope of Work (SOW) - Completed and Submitted	
3	Annex C: Design and the structure Drawings LOT 1 and 2	
4	Annex E: Technical Proposal Form - Completed and Submitted	
5	Annex F: Vendor Registration Form - Completed and Submitted	
6	Annex G: UNHCR General Conditions of Contracts for Civil works (October 2000) Signed and Stamped or else	
7	Annex H: Supplier's Code of Conduct - Signed and Stamped	
8	Annex K: Financial Offer Form (Filled Signed and Stamped in PDF)	
9	Annex M: Bid Data Sheet	

Name of authorized representative: _____

Title: _____

Signature: _____

Date: _____

Supplier Name: _____

Postal Address: _____

Telephone No.: _____

Email Address: _____