

**ISLAMIC REPUBLIC OF PAKISTAN
SCHOOL EDUCATION & LITERACY DEPARTMENT
GOVERNMENT OF SINDH (GOS)**



ASIAN DEVELOPMENT BANK

Loan 4409-PAK:

**Sindh Secondary Education Improvement Project
(Additional Financing)**

(SELD/SSEIP-AF/CW-04)

BIDDING DOCUMENT

Procurement of Plant

Design, Supply and Installation

Single-Stage: Two-Envelope

Bidding Procedure

**SELD/SSEIP/CW-04: PACKAGE-4: RECONSTRUCTION OF 101
SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES
WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD
BASIS IN DISTRICT NAUSHERO FEROZE [02-LOTS]**

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PROCUREMENT OF PLANT DESIGN, SUPPLY, AND INSTALLATION

Single-Stage: Two-Envelope Bidding Procedure

BIDDING DOCUMENT for Procurement of

SELD/SSEIP/CW-04: PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN DISTRICT NAUSHERO FEROZE [02-LOTS]

- **Lot-1:** Reconstruction of **55 Schools** using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in **Tehsil Moro, District Naushero Feroze**
- **Lot-2:** Reconstruction of **46 Schools** using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in **Tehsil Naushero Feroze, District Naushero Feroze**

Issued on:	18 September 2024
Invitation for Bids No.:	SELD/SSEIP-AF/CW-04
OCB No.:	SELD/SSEIP-AF/CW-04
Employer:	Project Director Project Implementation Unit Sindh Secondary Education Improvement Project School Education and Literacy Department Government of Sindh
Country:	Pakistan

Preface

This Bidding Document for Procurement of Plant – Design, Supply, and Installation, has been prepared by **School Education and Literacy Department, Government of Sindh** and is based on the Standard Bidding Document for Procurement of Plant – Design, Supply, and Installation (SBD Plant) issued by the Asian Development Bank dated **December 2021**.

ADB's SBD Plant has the structure and the provisions of the Master Procurement Document entitled "Procurement of Plant – Design, Supply, and Installation", prepared by multilateral development banks and other public international financial institutions except where ADB-specific considerations have required a change

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Section 1: Instructions to Bidders

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A. General	
1. Scope of Bid	1.1 In connection with the Invitation for Bids (IFB) indicated in the Bid Data Sheet (BDS), the Employer, as indicated in the BDS, issues this Bidding Document for the procurement of plant and services as specified in Section 6 (Employer's Requirements). The name, identification, and number of lot/s (contract/s) of the open competitive bidding (OCB) are provided in the BDS.
	1.2 Throughout this Bidding Document, (a) the term "in writing" means communicated in written form and delivered against receipt; (b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and (c) "day" means calendar day.
2. Source of Funds	2.1 The Borrower or Recipient (hereinafter called "Borrower") indicated in the BDS has applied for or received financing (hereinafter called "funds") from the Asian Development Bank (hereinafter called "ADB") toward the cost of the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.
	2.2 Payments by ADB will be made only at the request of the Borrower and upon approval by ADB in accordance with the terms and conditions of the Financing Agreement between the Borrower and ADB (hereinafter called "Financing Agreement"), and will be subject in all respects to the terms and conditions of that Financing Agreement. No party other than the Borrower shall derive any rights from the Financing Agreement or have any claim to the funds.
3. Fraud and Corruption	3.1 ADB requires Borrowers (including beneficiaries of ADB-financed activity) and their personnel, as well as firms and individuals participating in an ADB-financed activity, including but not limited to, Bidders, Suppliers, and Contractors, agents, subcontractors, subconsultants, service providers, subsuppliers, manufacturers (including their respective officers, directors, employees and personnel) under ADB-financed contracts to observe the highest standard of ethics during the procurement and execution of such contracts in accordance with ADB's Anticorruption Policy (1998, as amended from time to time). In pursuance of this policy, ADB (a) defines, for the purposes of this provision, the terms set forth below as follows: (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party; (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

	(iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party; (iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party; (v) "abuse" means theft, waste, or improper use of assets related to ADB-related activity, either committed intentionally or through reckless disregard; (vi) "conflict of interest" means any situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations; and (vii) "integrity violation" is any act, as defined under ADB's Integrity Principles and Guidelines (2015, as amended from time to time), which violates ADB's Anticorruption Policy, including (i) to (vi) above and the following: obstructive practice, violations of ADB sanctions, retaliation against whistleblowers or witnesses, and other violations of ADB's Anticorruption Policy, including failure to adhere to the highest ethical standard. (b) will reject a proposal for award if it determines that the Bidder recommended for award or any of its officers, directors, employees, personnel, subconsultants, subcontractors, service providers, suppliers or manufacturers has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for the Contract; (c) will cancel the portion of the financing allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of ADB-financing engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to ADB to remedy the situation, including by failing to inform ADB in a timely manner at the time they knew of the integrity violations; (d) will impose remedial actions on a firm or an individual, at any time, in accordance with ADB's Anticorruption Policy and Integrity Principles and Guidelines, including declaring ineligible, either indefinitely or for a stated period of time, to participate¹ in ADB-financed, -administered, or -supported activities or to benefit from an ADB-financed, -administered, or -supported contract, financially or otherwise, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices or other integrity violations; and (e) will have the right to require that a provision be included in the Bidding Documents and in contracts financed, administered, or supported by ADB, requiring Bidders, suppliers and contractors, consultants, manufacturers, service providers and other third parties engaged or involved in ADB-related activities, and their respective officers, directors, employees and personnel, to permit ADB or its representative
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¹ Whether as a Contractor, Subcontractor, Consultant, Manufacturer or Supplier, or Service Provider; or in any other capacity (different names are used depending on the particular Bidding Document).

	to inspect the site and their assets, accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by ADB.
	3.2 All Bidders, consultants, contractors, suppliers, manufacturers, service providers, and other third parties engaged or involved in ADB-related activities, and their respective officers, directors, employees and personnel, are obliged to cooperate fully in any investigation when requested by ADB to do so. As determined on a case by case basis by ADB, such cooperation includes, but is not limited to, the following: (a) being available to be interviewed and replying fully and truthfully to all questions asked; (b) providing ADB with any items requested that are within the party's control including, but not limited to, documents and other physical objects; (c) upon written request by ADB, authorizing other related entities to release directly to ADB such information that is specifically and materially related, directly or indirectly, to the said entities or issues which are the subject of the investigation; (d) cooperating with all reasonable requests to search or physically inspect their person and/or work areas, including files, electronic databases, and personal property used on ADB activities, or that utilizes ADB's Information and Communications Technology (ICT) resources or systems (including mobile phones, personal electronic devices, and electronic storage devices such as external disk drives); (e) cooperating in any testing requested by ADB, including but not limited to, fingerprint identification, handwriting analysis, and physical examination and analysis; and (f) preserving and protecting confidentiality of all information discussed with, and as required by, ADB. 3.3 All Bidders, consultants, contractors and suppliers shall require their officers, directors, employees, personnel, agents to ensure that, in its contract with its sub-consultants, subcontractors, and other third parties engaged or involved in ADB-related activities, such sub-consultants, subcontractors, and other third parties similarly are obliged to cooperate fully in any investigation when requested by ADB to do so. 3.4 The Employer hereby puts the Bidder on notice that the Bidder or any Joint Venture partner of the Bidder (if any) may not be able to receive any payments under the Contract if the Bidder or any of its Joint Venture partners, as appropriate, is, or is owned (in whole or in part) by a person or entity subject to applicable sanctions. 3.5 Furthermore, Bidders shall be aware of the provision stated in GCC 9.6 and GCC 42.2.1 (c).
4. Eligible Bidders	4.1 A Bidder may be a natural person, private entity, or government-owned enterprise subject to ITB 4.5 - or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a Joint Venture. In the case of a Joint Venture, (a) all partners shall be jointly and severally liable, and

	(b) the Joint Venture shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the Joint Venture during the bidding process and, in the event the Joint Venture is awarded the Contract, during contract execution.
	4.2 A Bidder, and all partners constituting the Bidder, shall have the nationality of an eligible country, in accordance with Section 5 (Eligible Countries). A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.
	4.3 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if any of, including but not limited to, the following apply: (a) they have controlling shareholders in common; or (b) they receive or have received any direct or indirect subsidy from any of them; or (c) they have the same legal representative for purposes of this bid; or (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to material information about or improperly influence the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or (e) a Bidder participates in more than one bid in this bidding process, either individually or as a partner in a Joint Venture, except for alternative offers permitted under ITB 13. This will result in the disqualification of all Bids in which it is involved. However, subject to any finding of a conflict of interest in terms of ITB 4.3 (a) - (d) above, this does not limit the participation of a Bidder as a subcontractor in another Bid or of a firm as a subcontractor in more than one Bid; or (f) a Bidder, Joint Venture partner, associates, parent company or any affiliated entity, participated as a consultant in the preparation of the design or technical specifications of the plant and services that are the subject of the Bid; or (g) a Bidder was affiliated with a firm or entity that has been hired (or is proposed to be hired) by the Employer or Borrower as Project Manager for the Contract; or (h) a Bidder would be providing goods, works, or nonconsulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm. (i) A Bidder that has a financial or familial relationship with staff of the Employer including project implementing/executing agency, or of a

	recipient of a part of the loan who: (i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the contract, and/or the bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to ADB throughout the procurement process and execution of the contract.
	4.4 A firm will not be eligible to participate in any procurement activities under an ADB-financed, -administered, or -supported project while under temporary suspension or debarment by ADB pursuant to its Anticorruption Policy (see ITB 3), whether such debarment was directly imposed by ADB, or enforced by ADB pursuant to the Agreement for Mutual Enforcement of Debarment Decisions. A bid from a temporary suspended or debarred firm will be rejected and such bid may be in breach of debarment conditions, thereby subject to further ADB's investigation.
	4.5 Government-owned enterprises in the Borrower's country shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under commercial law, and (iii) are not dependent agencies of the Employer. 4.6 A Bidder shall not be under suspension from bidding by the Employer as the result of the execution of a Bid-Securing Declaration.
	4.7 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
	4.8 Bidders shall be excluded if by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods from, or payments to, a particular country, person, or entity in respect of goods or services originating in that country. Where the Borrower's country prohibits payments to a particular person or entity or for particular goods or services by such an act of compliance, that firm shall be excluded.
5. Eligible Plant and Services	5.1 The plant and services to be supplied under the Contract shall have their origin in eligible source countries as defined in ITB 4.2 and all expenditures under the Contract will be limited to such plant and services.
	5.2 For purposes of ITB 5.1 above, "origin" means the place where the plant, or component parts thereof are mined, grown, produced, or manufactured, and from which the services are provided. Plant components are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that is substantially in its basic characteristics or in purpose or utility from its components.
B. Contents of Bidding Document	
6. Sections of Bidding Document	6.1 The Bidding Document consists of Parts I, II, and III, which include all the sections indicated below, and should be read in conjunction with any addenda issued in accordance with ITB 8. PART I Bidding Procedures

	Section 1 - Instructions to Bidders (ITB) Section 2 - Bid Data Sheet (BDS) Section 3 - Evaluation and Qualification Criteria (EQC) Section 4 - Bidding Forms (BDF) Section 5 - Eligible Countries (ELC) PART II Requirements Section 6 - Employer's Requirements (ERQ) PART III Conditions of Contract and Contract Forms Section 7 - General Conditions of Contract (GCC) Section 8 - Special Conditions of Contract (SCC) Section 9 - Contract Forms (COF)
	6.2 The IFB issued by the Employer is not part of the Bidding Document.
	6.3 The Employer is not responsible for the completeness of the Bidding Document and its addenda, if they were not obtained directly from the source stated by the Employer in the IFB.
	6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the Bid.
7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting	7.1 A prospective Bidder requiring any clarification on the Bidding Document shall contact the Employer in writing at the Employer's address indicated in the BDS, or raise inquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond to any request for clarification, provided that such request is received no later than 21 days prior to the deadline for submission of bids. The Employer's response shall be in writing with copies to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 24.2.
	7.2 The Bidder is advised to visit and examine the site where the plant is to be installed and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Bid and entering into a contract for the provision of plant and services. The costs of visiting the site shall be at the Bidder's own expense.
	7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents, will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

	7.4	The Bidder's designated representative is invited to attend a pre-bid meeting, if provided for in the BDS. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
	7.5	The Bidder is requested to submit any questions in writing, to reach the Employer not later than 1 week before the pre-bid meeting.
	7.6	Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting.
	7.7	Nonattendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.
8. Amendment of Bidding Document	8.1	At any time prior to the deadline for submission of Bids, the Employer may amend the Bidding Document by issuing addenda.
	8.2	Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with ITB 6.3.
	8.3	To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 24.2
C. Preparation of Bids		
9. Cost of Bidding	9.1	The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
10. Language of Bid	10.1	The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.
11. Documents Comprising the Bid	11.1	The Bid shall comprise two envelopes submitted simultaneously, one containing the Technical Bid and the other the Price Bid, both envelopes enclosed together in an outer single envelope.
	11.2	The Technical Bid submitted by the Bidder shall comprise the following: (a) Letter of Technical Bid;

	(b) Bid Security or Bid-Securing Declaration, in accordance with ITB 21; (c) alternative Bids, if permissible, in accordance with ITB 13; (d) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 22.2; (e) documentary evidence in accordance with ITB 14.1, that the plant and services offered by the Bidder in its Bid or in any alternative Bid, if permitted, are eligible; (f) documentary evidence in accordance with ITB 15, the Bidder's eligibility and qualifications to perform the contract if its Bid is accepted; (g) Technical Proposal in accordance with ITB 17. (h) documentary evidence in accordance with ITB 16, that the plant and services offered by the Bidder conform to the Bidding Document; (i) in the case of a bid submitted by a Joint Venture, the Bid shall include a copy of the Joint Venture Agreement entered into by all partners. Alternatively, a Letter of Intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all partners and submitted with the Bid, together with a copy of the proposed agreement; (j) list of subcontractors, in accordance with ITB 17.2; and (k) any other document required in the BDS.
	11.3 The Price Bid submitted by the Bidder shall comprise the following: (a) Letter of Price Bid; (b) completed schedules as required, including Price Schedules, in accordance with ITB 12 and ITB 18; (c) alternative price Bids, if permissible, in accordance with ITB 13; and (d) any other document required in the BDS.
12. Letter of Bid and Schedules	12.1 The Letters of Technical Bid and Price Bid, and the Schedules, and all documents listed under ITB 11, shall be prepared using the relevant forms furnished in Section 4 (Bidding Forms). The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested and as required in the BDS.
13. Alternative Bids	13.1 The BDS indicates whether alternative Bids are allowed. If they are allowed, the BDS will also indicate whether they are permitted in accordance with ITB 13.3, or invited in accordance with ITB 13.2 and/or ITB 13.4.
	13.2 When alternatives to the Time Schedule are explicitly invited, a statement to that effect will be included in the BDS, and the method of evaluating different time schedules will be described in Section 3 (Evaluation and Qualification Criteria).
	13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the Employer's requirements as described in the Bidding Document must also provide: (i) a price at which they are prepared to offer a plant meeting the Employer's requirements; and (ii) all information necessary for a complete evaluation of the alternatives by the Employer, including drawings, design calculations, technical specifications, breakdown

	of prices, and proposed installation methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.
	13.4 When Bidders are invited in the BDS to submit alternative technical solutions for specified parts of the facilities, such parts shall be described in Section 6 (Employer's Requirements). Technical alternatives for the specific parts of the facilities that comply with the performance and technical criteria specified for the plant and services shall be considered by the Employer on their own merits, pursuant to ITB 32.
14. Documents Establishing the Eligibility of Plant and Services	14.1 To establish the eligibility of the plant and services in accordance with ITB 5, Bidders shall complete the Country of Origin Declaration Form included in Section 4 (Bidding Forms).
15. Documents Establishing the Eligibility and Qualifications of the Bidder	15.1 To establish its eligibility and qualifications to perform the Contract in accordance with Section 3 (Evaluation and Qualification Criteria), the Bidder shall provide the information requested in the corresponding information sheets included in Section 4 (Bidding Forms). 15.2 Domestic Bidders, individually or in Joint Ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility as described in ITB 38.
16. Documents Establishing Conformity of the Plant and Services	16.1 The documentary evidence of the conformity of the plant and services to the Bidding Document may be in the form of literature, drawings and data, and shall furnish: (a) a detailed description of the essential technical and performance characteristics of the plant and services, including the functional guarantees of the proposed plant and services, in response to the Specification; (b) a list giving full particulars, including available sources, of all spare parts and special tools necessary for the proper and continuing functioning of the plant for the period named in the BDS, following completion of plant and services in accordance with provisions of the contract; and (c) a commentary on the Employer's Specifications and adequate evidence demonstrating the substantial responsiveness of the plant and services to those specifications. Bidders shall note that standards for workmanship, materials and equipment designated by the Employer in the Bidding Document are intended to be descriptive (establishing standards of quality and performance) only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalog numbers in its Bid, provided that it demonstrates to the Employer's satisfaction that the substitutions are substantially equivalent or superior to the standards designated in the Specifications.
17. Technical Proposal, Subcontractors	17.1 The Bidder shall furnish a Technical Proposal, including a statement of work methods, equipment, personnel, schedule, environmental, health and safety (EHS) management plan commensurate with the proposed scope of works, EHS Code of Conduct, and any other information as stipulated in Section 4

	(Bidding Forms), in sufficient detail to demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time.
	17.2 For major items of plant and services as listed by the Employer in Criterion 2.5 of Section 3 (Evaluation and Qualification Criteria), which the Bidder intends to purchase or subcontract, the Bidder shall give details of the name and nationality of the proposed Subcontractors, including Manufacturers, for each of those items. In addition, the Bidder shall include in its Bid information establishing compliance with the requirements specified by the Employer for these items. Bidders are free to list more than one Subcontractor against each item of the plant and services. Quoted rates and prices will be deemed to apply to whichever Subcontractor is appointed, and no adjustment of the rates and prices will be permitted.
	17.3 The Bidder shall be responsible for ensuring that any Subcontractor proposed complies with the requirements of ITB 4, and that any plant, or services to be provided by the Subcontractor comply with the requirements of ITB 5 and ITB 15.1
18. Bid Prices and Discounts	18.1 Unless otherwise specified in the BDS and/or Section 6 (Employer's Requirements), bidders shall quote for the entire plant and services on a "single responsibility" basis such that the total Bid price covers all the Contractor's obligations mentioned in or to be reasonably inferred from the Bidding Document in respect of the design, manufacture, including procurement and subcontracting (if any), delivery, construction, installation, and completion of the plant. This includes all requirements under the Contractor's responsibilities for testing, pre-commissioning and commissioning of the plant and, where so required by the Bidding Document, the acquisition of all permits, approvals, and licenses, etc.; the operation, maintenance, and training services and such other items and services as may be specified in the Bidding Document, all in accordance with the requirements of the General Conditions. Items against which no price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed to be covered by the prices for other items.
	18.2 Bidders are required to quote the price for the commercial, contractual, and technical obligations outlined in the Bidding Document. The prices for all items in the Price Schedules shall be expressed in positive values. If the prices are expressed in negative values, the bid will be rejected.
	18.3 Bidders shall give a breakdown of the prices in the manner and detail called for in the Price Schedules included in Section 4 (Bidding Forms). Where no different Price Schedules are included in the Bidding Document, Bidders shall present their prices in the following manner: Separate numbered Schedules included in Section 4 (Bidding Forms) shall be used for each of the following elements. The total amount from each Schedule (Nos. 1 to 4) shall be summarized in a Grand Summary (Schedule No. 5) giving the total bid price(s) to be entered in the Letter of Price Bid. Absence of the total bid price in the Letter of Price Bid may result in the rejection of the Bid. Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within the Employer's Country Schedule No. 3: Design Services

	Schedule No. 4: Installation and Other Services Schedule No. 5 Grand Summary (Schedule Nos. 1 to 4) Schedule No. 6: Recommended Spare Parts Bidders shall note that the plant and mandatory spare parts included in Schedule Nos. 1 and 2 above exclude materials used for civil, building, and other construction works. All such materials shall be included and priced under Schedule No. 4, Installation and Other Services.
18.4	In the Schedules, Bidders shall give the required details and a breakdown of their prices as follows: (a) Plant to be Supplied from Abroad (Schedule No. 1): (i) the price of the plant shall be quoted carriage and insurance paid (CIP)-named place of destination basis specified in the BDS; (ii) all customs duties and other taxes paid or payable in the Employer's country on the plant if the contract is awarded to the Bidder; and (iii) the total price for the plant. (b) Plant Supplied from Within the Employer's Country (Schedule No. 2): (i) the price of the plant shall be quoted on an EXW Incoterm basis (ex works, ex factory, ex warehouse, ex showroom, as applicable), including all customs duties and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of plant quoted ex works or ex factory, or on the previously imported plant of foreign origin quoted ex warehouse, ex showroom; (ii) sales tax and other taxes payable in the Employer's country on the plant if the contract is awarded to the Bidder, and (iii) the total price for the plant. (c) Design Services. (Schedule No. 3). Rates or prices shall include all taxes, duties, levies, and charges payable in the Employer's country as of 28 days prior to the deadline for submission of Bids. (d) Installation and Other Services (Schedule No. 4) shall be quoted separately and shall include rates or prices for local transportation, insurance, and other services incidental to delivery of the plant, all labor, contractor's equipment, temporary works, materials, consumables, and all matters and things of whatsoever nature, including operations and maintenance services, the provision of operations and maintenance manuals, training, etc., where identified in the Bidding Document, as necessary for the proper execution of the installation and other services, including all taxes, duties, levies, and charges payable in the Employer's country as of 28 days prior to the deadline for submission of bids. (e) Recommended spare parts (Schedule No. 6) shall be quoted separately as specified in either subparagraph (a) or (b) above in accordance with the origin of the spare parts.
18.5	The current edition of Incoterms, published by the International Chamber of Commerce shall govern.

	18.6 The prices shall be either fixed or adjustable as specified in the BDS. (a) In the case of Fixed Price, prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account. A Bid submitted with an adjustable price quotation will be treated as nonresponsive and rejected. (b) In the case of Adjustable Price, prices quoted by the Bidder shall be subject to adjustment during performance of the contract to reflect changes in the cost elements such as labor, material, transport, and contractor's equipment in accordance with the procedures specified in the corresponding appendix to the Contract Agreement. A Bid submitted with a fixed price quotation will be treated as nonresponsive and be rejected. The Bidder shall furnish the indexes (e.g. for labor and materials), their weightings and source in the Tables of Adjustment Data included in Section 4 (Bidding Forms). The Employer may require the Bidder to justify its proposed indexes and weightings. Any bid that omits indexes and weightings shall be subject to clarification with the Bidder.
	18.7 If so indicated in BDS 1.1, Bids are being invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer any price reduction (discount) for the award of more than one contract shall specify in their Letter of Price Bid the price reductions applicable to each package, or alternatively, to individual contracts within the package, and the manner in which the price reductions will apply.
19. Currencies of Bid and Payment	19.1 The currency(ies) of the bid shall be, as specified in the BDS.
	19.2 Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements.
20. Period of Validity of Bids	20.1 Bids shall remain valid for the bid validity period specified in the BDS. The bid validity period starts from the date fixed for the bid submission deadline date prescribed by the Employer in accordance with ITB 24.1. A bid valid for a shorter period shall be rejected by the Employer as nonresponsive.
	20.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 21, it shall also be extended 28 days beyond the deadline of the extended bid validity period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its Bid.
21. Bid Security/ Bid Securing Declaration	21.1 Unless otherwise specified in the BDS, the Bidder shall furnish as part of its Bid, in original form, either a Bid-Securing Declaration or a bid security as specified in the BDS. In the case of a bid security, the amount and currency shall be as specified in the BDS. 21.2 If a Bid-Securing Declaration is required pursuant to ITB 21.1, it shall use the form included in Section 4 (Bidding Forms). The Employer will declare a Bidder ineligible to be awarded a Contract for a specified period of time, as indicated in the BDS, if a Bid-Securing Declaration is executed.

	21.3 If a bid security is specified pursuant to ITB 21.1, the bid security shall be, at the Bidder's option, in any of the following forms: (a) an unconditional bank guarantee (hard copy of the bank guarantee or in the form of SWIFT message MT760), or (b) an irrevocable letter of credit, or (c) a cashier's or certified check, all from a reputable source from an eligible country as described in Section 5 (Eligible Countries). In the case of a bank guarantee, the bid security shall be submitted using either the Bid Security Form included in Section 4 (Bidding Forms) or another form acceptable to the Employer. The form must include the complete name of the Bidder. The bid security shall be valid for 28 days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 20.2.
	21.4 Unless otherwise specified in the BDS, any Bid not accompanied by a substantially compliant bid security or Bid-Securing Declaration, if one is required in accordance with ITB 21.1, shall be rejected by the Employer as nonresponsive.
	21.5 If a bid security is specified pursuant to ITB 21.1, the bid security of substantially nonresponsive Technical Bids shall be returned before opening the Price Bids. The bid security of unsuccessful Bidders at Price Bid evaluation shall be returned promptly upon the successful Bidder's furnishing of the performance security pursuant to ITB 46.
	21.6 If a bid security is specified pursuant to ITB 21.1, the bid security of successful Bidders shall be returned promptly once the successful Bidder has signed the Contract and furnished the required performance security.
	21.7 The bid security may be forfeited or the Bid-Securing Declaration executed, if (a) notwithstanding ITB 26.3, a Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Letters of Technical Bid and Price Bid, except as provided in ITB 20.2 or (b) the successful Bidder fails to: (i) sign the Contract in accordance with ITB 45; (ii) furnish a performance security in accordance with ITB 46; or (iii) accept the arithmetical corrections of its Bid in accordance with ITB 36.
	21.8 If the bid security is required as per ITB 21.1, the bid security of a Joint Venture shall be in the name of the Joint Venture that submits the Bid. If the Joint Venture has not been legally constituted at the time of bidding, the bid security shall be in the name of any or all of the Joint Venture partners. If the Bid-Securing Declaration is required as per ITB 21.1, the Bid-Securing Declaration of a Joint Venture shall be in the name of the Joint Venture that submits the Bid. If the Joint Venture has not been legally constituted at the time of bidding, the Bid-Securing Declaration shall be in the names of all future partners as named in the letter of intent referred to in ITB 4.1.

22. Format and Signing of Bid	22.1 The Bidder shall prepare one original set of the Technical Bid and one original set of the Price Bid comprising the Bid as described in ITB 11 and clearly mark it "ORIGINAL - TECHNICAL BID" and "ORIGINAL - PRICE BID". Alternative bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE". In addition, the Bidder shall submit copies of the Bid, in the number specified in the BDS and clearly mark each of them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
	22.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. If a Bidder submits a deficient authorization, the Bid shall not be rejected in the first instance. The Employer shall request the Bidder to submit an acceptable authorization within the number of days as specified in the BDS. Failure to provide an acceptable authorization within the period stated in the Employer's request shall cause the rejection of the Bid. If either the Letter of Technical Bid or Letter of Price Bid or the Bid-Securing Declaration (if applicable) is not signed, the Bid shall be rejected.
	22.3 A Bid submitted by a Joint Venture shall be signed so as to be legally binding on all partners.
	22.4 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.
D. Submission and Opening of Bids	
23. Submission, Sealing, and Marking of Bids	23.1 Bidders shall submit their Bids as specified in the BDS. Procedures for submission, sealing and marking are as follows: (a) Bidders submitting Bids by mail or by hand shall enclose the original and each copy of the Bid, including alternative Bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL," "ALTERNATIVE," and "COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope. The rest of the procedure shall be in accordance with ITB 23.2 to ITB 23.6. (b) Bidders submitting Bids electronically shall follow the electronic bid submission procedures specified in the BDS.
	23.2 The inner and outer envelopes shall (a) bear the name and address of the Bidder, (b) be addressed to the Employer in accordance with ITB 24.1, and (c) bear the specific identification of this bidding process indicated in the BDS 1.1.
	23.3 The outer envelopes and the inner envelopes containing the Technical Bid shall bear a warning not to open before the time and date for the opening of Technical Bid, in accordance with ITB 27.1.

	23.4	The inner envelopes containing the Price Bid shall bear a warning not to open until advised by the Employer in accordance with ITB 27.7.
	23.5	Alternative Bids, if permissible in accordance with ITB 13, shall be prepared, sealed, marked, and delivered in accordance with the provisions of ITB 20 and ITB 21, with the inner envelopes marked in addition "ALTERNATIVE NO...." as appropriate.
	23.6	If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.
24. Deadline for Submission of Bids	24.1	Bids must be received by the Employer at the address and no later than the date and time indicated in the BDS.
	24.2	The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
25. Late Bids	25.1	The Employer shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 24. Any Bid received by the Employer after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.
26. Withdrawal, Substitution, and Modification of Bids	26.1	A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 22.2 (except for withdrawal notices, which do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be: (a) prepared and submitted in accordance with ITB 22 and ITB 23 (except for withdrawal notices, which do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and (b) received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 24.
	26.2	Bids requested to be withdrawn in accordance with ITB 26.1 shall be returned unopened to the Bidders.
	26.3	No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Technical Bid or any extension thereof.
27. Bid Opening	27.1	The Employer shall open the Technical Bids in public at the address, on the date, and time specified in the BDS in the presence of Bidder's designated representatives and anyone who choose to attend. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 23.1, shall be as specified in the BDS. The Price Bids will remain unopened and will be held in custody of the Employer until the specified time of their opening. If the Technical Bid and the Price Bid are submitted

	together in one envelope, the Employer may reject the entire Bid. Alternatively, the Price Bid may be immediately resealed for later evaluation.
27.2	First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening.
27.3	Second, outer envelopes marked "SUBSTITUTION" shall be opened. The inner envelopes containing the Substitution Technical Bid and/or Substitution Price Bid shall be exchanged for the corresponding envelopes being substituted, which are to be returned to the Bidder unopened. Only the Substitution Technical Bid, if any, shall be opened, read out, and recorded. Substitution Price Bid will remain unopened in accordance with ITB 27.1. No envelope shall be substituted unless the corresponding Substitution Notice contains a valid authorization to request the substitution and is read out and recorded at bid opening.
27.4	Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Bid and/or Price Bid shall be modified unless the corresponding Modification Notice contains a valid authorization to request the modification and is read out and recorded at the opening of Technical Bids. Only the Technical Bids, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Price Bids, both Original as well as Modification, will remain unopened in accordance with ITB 27.1.
27.5	All other envelopes holding the Technical Bids shall be opened one at a time, and the following read out and recorded: (a) the name of the Bidder; (b) whether there is a modification or substitution; (c) the presence of a bid security or a Bid-Securing Declaration, if required; and (d) any other details as the Employer may consider appropriate. Only Technical Bids and alternative Technical Bids read out and recorded at bid opening shall be considered for evaluation. Unless otherwise specified in the BDS, all pages of the Letter of Technical Bid are to be initialed by at least three representatives of the Employer attending the bid opening. No Bid shall be rejected at the opening of Technical Bids except for late Bids, in accordance with ITB 25.1.
27.6	The Employer shall prepare a record of the opening of Technical Bids that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; and alternative Bids; and the presence or absence of a bid security or a Bid-Securing Declaration, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted Bids on time, and posted online when electronic bidding is permitted.
27.7	At the end of the evaluation of the Technical Bids, the Employer will invite bidders who have submitted substantially responsive Technical Bids and

	who have been determined as being qualified for award to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the Employer. Bidders shall be given reasonable notice of the opening of Price Bids.
	27.8 The Employer will notify in writing Bidders who have been rejected for submitting nonresponsive Technical Bids and return their Price Bids unopened together with their bid securities, before opening the Price Bids of the substantially responsive Bidders.
	27.9 The Employer shall conduct the opening of Price Bids of all Bidders who submitted substantially responsive Technical Bids, in the presence of Bidders' representatives who choose to attend at the address, on the date, and time specified by the Employer. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.
	27.10 All envelopes containing Price Bids shall be opened one at a time and the following read out and recorded: (a) the name of the Bidder; (b) whether there is a modification or substitution; (c) the Bid Prices, including any discounts and alternative offers; and (d) any other details as the Employer may consider appropriate. Only Price Bids, discounts, and alternative offers read out and recorded during the opening of Price Bids shall be considered for evaluation. Unless otherwise specified in the BDS, all pages of the Letter of Price Bid and Price Schedules are to be initialed by at least three representatives of the Employer attending bid the opening. No Bid shall be rejected at the opening of Price Bids.
	27.11 The Employer shall prepare a record of the opening of Price Bids that shall include, as a minimum: the name of the Bidder, the Bid Price (per lot if applicable), any discounts, and alternative offers. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted Bids on time, and posted online when electronic bidding is permitted.
E. Evaluation and Comparison of Bids	
28. Confidentiality	28.1 Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until publication of Contract award.
	28.2 Any attempt by a Bidder to influence the Employer in the evaluation of the Bids or Contract award decisions may result in the rejection of its Bid.
	28.3 Notwithstanding ITB 28.2, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it should do so in writing.

29. Clarification of Bids	29.1 To assist in the examination, evaluation, and comparison of the Technical and Price Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the substance of the Technical Bid or prices in the Price Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 36.
	29.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.
30. Deviations, Reservations, and Omissions	30.1 During the evaluation of Bids, the following definitions apply: (a) "Deviation" is a departure from the requirements specified in the Bidding Document; (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.
31. Examination of Technical Bids	31.1 The Employer shall examine the Technical Bid to confirm that all documents and technical documentation requested in ITB 11.2 have been provided, and to determine the completeness of each document submitted. If any of these documents or information is missing, the Bid may be rejected.
	31.2 The Employer shall confirm that the following documents and information have been provided in the Technical Bid. If any of these documents or information is missing, the offer shall be rejected. (a) Letter of Technical Bid; (b) written confirmation of authorization to commit the Bidder; (c) Bid Security or Bid-Securing Declaration, if applicable; and (d) Technical Proposal in accordance with ITB 17.
32. Responsiveness of Technical Bid	32.1 The Employer's determination of a bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB11.
	32.2 A substantially responsive Technical Bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that, (a) if accepted, would: (i) affect in any substantial way the scope, quality, or performance of the plant and services specified in the Contract; or (ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or

	(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.
	32.3 The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 17, Technical Proposal, in particular to confirm that all requirements of Section 6 (Employer's Requirements) have been met without any material deviation, reservation, or omission.
	32.4 If a Bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.
33. Nonmaterial Nonconformities	33.1 Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid that do not constitute a material deviation, reservation, or omission.
	33.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the Price Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
	33.3 Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or nonconforming item or component. The adjustment shall be made using the method indicated in Section 3 (Evaluation and Qualification Criteria).
34. Detailed Evaluation of Technical Bids	34.1 The Employer will carry out a detailed technical evaluation of the Bids not previously rejected as being substantially nonresponsive, to determine whether the technical aspects are in compliance with the Bidding Document. The Bid that does not meet minimum acceptable standards of completeness, consistency, and detail, and the specified minimum and/or maximum requirements for specified functional guarantees, will be treated as nonresponsive and hence rejected. To reach such a determination, the Employer will examine and compare the technical aspects of the bids on the basis of the information supplied by the Bidders, taking into account the following: (a) overall completeness and compliance with the Employer's Requirements; deviations from the Employer's Requirements; conformity of the plant and services offered with specified performance criteria; suitability of the plant and services offered in relation to the environmental and climatic conditions prevailing at the site; and quality, function and operation of any process control concept included in the Bid. The Bid that does not meet minimum and/or maximum acceptable standards of completeness, consistency, and detail will be rejected for nonresponsiveness; (b) type, quantity, and long-term availability of mandatory and recommended spare parts and maintenance services; and

	(c) other relevant factors, if any, listed in Section 3 (Evaluation and Qualification Criteria).
	34.2 Where alternative technical solutions have been allowed in accordance with ITB 13, and offered by the Bidder, the Employer will make a similar evaluation of the alternatives. Where alternatives have not been allowed but have been offered, they shall be ignored.
35. Eligibility and Qualification of the Bidder	35.1 The Employer shall determine to its satisfaction during the evaluation of Technical Bids whether a Bidder meets the eligibility and qualifying criteria specified in Section 3 (Evaluation and Qualification Criteria).
	35.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 15. Unless permitted in the BDS, the determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, or affiliates.
	35.3 An affirmative determination shall be a prerequisite for the opening and evaluation of a Bidder's Price Bid. The Employer reserves the right to reject the bid of any bidder found to be in circumstances described in GCC 42.2.1(a). A negative determination shall result into the disqualification of the Bid, in which event the Employer shall return the unopened Price Bid to the Bidder.
	35.4 The capabilities of the manufacturers and subcontractors proposed in its Bid for the major items of plant and services to be used by a Bidder will also be evaluated for acceptability in accordance with Section 3 (Evaluation and Qualification Criteria). Their participation should be confirmed with a letter of intent between the parties, as needed. Should a manufacturer or subcontractor be determined to be unacceptable, the Bid will not be rejected, but the Bidder will be required to propose, without changing its bid price, an acceptable substitute manufacturer or subcontractor meeting the minimum technical specifications stated in Section 6 (Employer's Requirements). If a Bidder does not provide an acceptable substitute manufacturer or subcontractor by the date and time set in the Employer's request for substitution of manufacturer or subcontractor, its Bid may be rejected.
	35.5 Prior to signing the Contract, the corresponding Appendix to the Contract Agreement shall be completed, listing the approved manufacturers or subcontractors for each item concerned.
36. Correction of Arithmetical Errors	36.1 During the evaluation of Price Bids, the Employer shall correct arithmetical errors on the following basis: (a) where there are errors between the total of the amounts given under the column for the price breakdown and the amount given under the Total Price, the amounts given under the column for the price breakdown shall prevail and the Total Price will be corrected accordingly; (b) where there are errors between the total of the amounts of Schedule Nos. 1 to 4 and the amount given in Schedule No. 5 (Grand Summary), the total of the amounts of Schedule Nos. 1 to 4 shall prevail and the Schedule No. 5 (Grand Summary) will be corrected accordingly;

	(c) if there is a discrepancy between the grand total price given in Schedule No. 5 (Grand Summary) and the bid amount in item (c) of the Letter of Price Bid, the grand total price given in Schedule No. 5 (Grand Summary) will prevail and the bid amount in item (c) of the Letter of Price Bid will be corrected; and (d) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetical error, in which case the amount in figures shall prevail subject to (a), (b), and (c) above.
	36.2 If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its bid security may be forfeited or its Bid-Securing Declaration executed.
37. Conversion to Single Currency	37.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as specified in the BDS.
38. Domestic Preference	38.1 Unless otherwise specified in the BDS, domestic preference shall not apply.
39. Evaluation and Comparison of Price Bids	39.1 The Employer shall use the criteria and methodologies listed in this clause. No other evaluation criteria or methodologies shall be permitted.
	39.2 I. To evaluate a Price Bid, the Employer shall consider the following: (a) the bid price, excluding provisional sums and the provision, if any, for contingencies in the Price Schedules; (b) price adjustment for correction of arithmetical errors in accordance with ITB 36.1; (c) price adjustment due to discounts offered in accordance with ITB 18.7; (d) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 33.3; (e) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 37; (f) assessment whether the bid is abnormally low in accordance with ITB 40; and (g) the evaluation factors indicated in Section 3 (Evaluation and Qualification Criteria). II. The Employer's evaluation of a Bid will exclude and not take into account, (a) in the case of Plant and Mandatory Spare Parts (Schedule No. 1) supplied from abroad, all taxes and duties, applicable in the Employer's country and payable on the Plant and Mandatory Spare Parts if the Contract is awarded to the Bidder; and (b) in the case of Plant and Mandatory Spare Parts (Schedule No. 2) supplied from within the Employer's country, sales and other taxes, applicable in the Employer's country and payable on the Plant and Mandatory Spare Parts if the Contract is awarded to the Bidder.

	39.3 If price adjustment is allowed in accordance with ITB 18.6, the estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.
	39.4 If this Bidding Document allows Bidders to quote separate prices for different lots (contracts), and the award to a single Bidder of multiple lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Letter of Price Bid, is specified in Section 3 (Evaluation and Qualification Criteria).
	39.5 If the Bid, which results in the lowest Evaluated Bid Price, is seriously unbalanced or front loaded in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Price Schedules, to demonstrate the internal consistency of those prices with the methods and time schedule proposed. After evaluation of the price analyses, taking into consideration the terms of payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract. 39.6 The Employer shall compare all substantially responsive Bids to determine the lowest evaluated Bid, in accordance with ITB 39.2.
40. Abnormally Low Bids	40.1 An abnormally low bid is one where the bid price, in combination with other elements of the bid, appears to be so low that it raises concerns as to the capability of the Bidder to perform the contract for the offered bid price. 40.2 When the offered bid price appears to be abnormally low, the Employer shall undertake a three-step review process as follows: (a) identify abnormally low costs and unit rates by comparing them with the engineer's estimates, other substantially responsive bids, or recently awarded similar contracts; (b) clarify and analyze the bidder's resource inputs and pricing, including overheads, contingencies and profit margins; and (c) decide whether to accept or reject the bid. 40.3 With regard to ITB 40.2 (b) above, the Employer will seek a written explanation from the bidder of the reasons for the offered bid price, including a detailed analysis of costs and unit prices, by reference to the scope, proposed methodology, schedule, and allocation of risks and responsibilities. This may also include information regarding the economy of the manufacturing process; the services to be provided, or the construction method to be used; the technical solutions to be adopted; and any exceptionally favorable conditions available to the bidder for the works, equipment or services proposed. 40.4 After examining the explanation given and the detailed price analyses presented by the bidder, the Employer may: (a) accept the bid, if the evidence provided satisfactorily accounts for the low bid price and costs, in which case the bid is not considered abnormally low; (b) accept the bid, but require that the amount of the performance security be increased at the expense of the bidder to a level sufficient to protect

	the Employer against financial loss. The amount of the performance security shall generally be not more than 20% of the contract price; or (c) reject the bid if the evidence provided does not satisfactorily account for the low bid price, and make a similar determination for the next ranked bid, if required.
41. Employer's Right to Accept Any Bid, and to Reject Any or All Bids	41.1 The Employer reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.
42. Notice of Intention for Award of Contract	42.1 If Standstill provisions apply as specified in the BDS, the standstill period shall be defined in the BDS to specify the duration subsequent to notification of intention for award of contract (before making the actual contract award) within which any unsuccessful bidder can challenge the proposed award.
F. Award of Contract	
43. Award Criteria	43.1 The Employer shall award the Contract to the Bidder whose offer has been determined successful in line with ITB 34 to ITB 40 above to be the lowest evaluated Bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be eligible and qualified to perform the Contract satisfactorily.
44. Notification of Award	44.1 Prior to the expiration of the period of bid validity and upon expiry of the standstill period specified in ITB 42.1, or upon satisfactory resolution of a complaint filed within standstill period, if applicable, the Employer shall transmit the Notification of Award through issuance of Letter of Acceptance using the form included in Section 9 (Contract Forms) to the successful Bidder, in writing, that its Bid has been accepted. At the same time, the Employer shall also notify all other Bidders of the results of the bidding. 44.2 Unless standstill period applies, upon notification of award through issuance of Letter of Acceptance, unsuccessful Bidders may request in writing to the Employer for a debriefing seeking explanations on the grounds on which their Bids were not selected. The Employer shall promptly respond in writing and/or in a debriefing meeting to any unsuccessful Bidder who, after publication of contract award, requests a debriefing. 44.3 Until a formal contract is prepared and executed, the notification of award through issuance of Letter of Acceptance shall constitute a binding Contract.
	44.4 Within 2 weeks of the award of contract or expiry of the standstill period, where such period applies, or, if a complaint has been filed within the standstill period, upon receipt of ADB's confirmation of satisfactory resolution of the complaint, the borrower shall publish in an English language newspaper or widely known and freely accessible website the results identifying the bid and lot or package numbers, as applicable and the following information: (a) name of each Bidder who submitted a bid; (b) bid prices as read out at bid opening;

		(c) name and evaluated prices of each bid that was evaluated; (d) name of Bidders whose Bids were rejected and the reasons for their rejection; and (e) name of the winning Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded.
45. Signing of Contract	45.1	Promptly after notification, the Employer shall send the successful Bidder the Contract Agreement.
	45.2	Within 28 days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.
46. Performance Security	46.1	Within 28 days of the receipt of notification of award through issuance of Letter of Acceptance from the Employer, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, subject to ITB 39.5 and ITB 40.4, using for that purpose the Performance Security Form included in Section 9 (Contract Forms), or another form acceptable to the Employer. If the bank issuing performance security is located outside the Employer's country, it shall be counter-guaranteed or encashable by a bank in the Employer's country.
	46.2	Failure of the successful Bidder to submit the abovementioned performance security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security or execution of the Bid-Securing Declaration. In that event, the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.
47. Bidding-Related Complaints	47.1	The procedures for dealing with Bidding-Related Complaints arising out of this bidding process are specified in the BDS.

Section 2: Bid Data Sheet

A. General																	
ITB 1.1	The number of the Invitation for Bids (IFB) is: SELD/SSEIP-AF/CW-04 The Employer is: through Project Director (“the Employer Representative”), Project Implementation Unit (PIU), Sindh Secondary Education Improvement Project (SSEIP), School Education and Literacy Department, Government of Sindh (GoS). The name of the open competitive bidding (OCB) is: SELD/SSEIP-AF/CW-04: Package-4: Reconstruction of 101 Schools using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in District Naushero Feroze [02-Lots] The identification number of the OCB is: SELD/SSEIP-AF/CW-04 The number and identification of lots (contracts) comprising this OCB is: Two (02) ➤ Lot-1: Reconstruction of 55 Schools using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in Tehsil Moro, District Naushero Feroze ➤ Lot-2: Reconstruction of 46 Schools using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in Tehsil Naushero Feroze, District Naushero Feroze The bidder has the option to bid any number of lots.																
ITB 2.1	The Borrower is: Islamic Republic of Pakistan The name of the Project is: Sindh Secondary Education Improvement Project – Additional Financing																
B. Contents of Bidding Documents																	
ITB 7.1	For clarification purposes only, the Employer’s address is: <table border="1"> <tbody> <tr> <td>Attention:</td> <td>Project Director Project Implementation Unit Sindh Secondary Education Improvement Project School Education and Literacy Department Government of Sindh</td> </tr> <tr> <td>Street address:</td> <td>House No. 17/1, Street No. 31, Khayabaan-e-Shamsheer, Saba Avenue, DHA Phase 5 Extn., Karachi Pakistan</td> </tr> <tr> <td>Floor/ Room number:</td> <td>Office of the Project Director</td> </tr> <tr> <td>City:</td> <td>Karachi</td> </tr> <tr> <td>ZIP code:</td> <td>75600</td> </tr> <tr> <td>Country:</td> <td>Islamic Republic of Pakistan</td> </tr> <tr> <td>Telephone:</td> <td>+92-21-99332182</td> </tr> <tr> <td>E-mail address:</td> <td>sseipkhipk@gmail.com</td> </tr> </tbody> </table>	Attention:	Project Director Project Implementation Unit Sindh Secondary Education Improvement Project School Education and Literacy Department Government of Sindh	Street address:	House No. 17/1, Street No. 31, Khayabaan-e-Shamsheer, Saba Avenue, DHA Phase 5 Extn., Karachi Pakistan	Floor/ Room number:	Office of the Project Director	City:	Karachi	ZIP code:	75600	Country:	Islamic Republic of Pakistan	Telephone:	+92-21-99332182	E-mail address:	sseipkhipk@gmail.com
Attention:	Project Director Project Implementation Unit Sindh Secondary Education Improvement Project School Education and Literacy Department Government of Sindh																
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Telephone:	+92-21-99332182																
E-mail address:	sseipkhipk@gmail.com																

	Requests for clarification should be received by the Employer no later than: 10 days before the submission of the bids / proposals.												
ITB 7.4	A Pre-Bid meeting shall take place. If a Pre-Bid meeting will take place, date, time and place are as follows: <table border="1"> <tr> <td>Date:</td><td>23 September 2024</td></tr> <tr> <td>Time:</td><td>1100 Hours (PST)</td></tr> <tr> <td>Place:</td><td>Project Implementation Unit Sindh Secondary Education Improvement Project School Education and Literacy Department Government of Sindh Address: House No. 17/1, Street No. 31, Khayabaan-e-Shamsheer, Saba Avenue, DHA Phase 5 Extn., Karachi Pakistan</td></tr> <tr> <td>City:</td><td>Karachi</td></tr> <tr> <td>Country:</td><td>Islamic Republic of Pakistan</td></tr> <tr> <td>Telephone:</td><td>+92-21-99332182</td></tr> </table> A site visit conducted by the Employer will not be organized. Bidders are encouraged to conduct site visit on their own and contact the Employer and the Project Manager before scheduling / making the site visit.	Date:	23 September 2024	Time:	1100 Hours (PST)	Place:	Project Implementation Unit Sindh Secondary Education Improvement Project School Education and Literacy Department Government of Sindh Address: House No. 17/1, Street No. 31, Khayabaan-e-Shamsheer, Saba Avenue, DHA Phase 5 Extn., Karachi Pakistan	City:	Karachi	Country:	Islamic Republic of Pakistan	Telephone:	+92-21-99332182
Date:	23 September 2024												
Time:	1100 Hours (PST)												
Place:	Project Implementation Unit Sindh Secondary Education Improvement Project School Education and Literacy Department Government of Sindh Address: House No. 17/1, Street No. 31, Khayabaan-e-Shamsheer, Saba Avenue, DHA Phase 5 Extn., Karachi Pakistan												
City:	Karachi												
Country:	Islamic Republic of Pakistan												
Telephone:	+92-21-99332182												
C. Preparation of Bids													
ITB 10.1	The language of the Bid is: English. Note: Bidders are required to submit supporting documents and forms that are part of the bid in the English language. If the supporting documents are in other language, then the bidder shall submit accurate certified translation of the relevant supporting documents and forms in the English language duly attested by the notary public of the Bidder's country or similar legal instrument of authorization as applicable under the laws of the bidder's home country, (specifying the authority for such attestation as per law of the country). Certification by the Foreign Office of the Bidder's country will also be acceptable. In case of discrepancies between the original version and the translation, the original version shall prevail.												
ITB 11.2 (k)	The Bidder shall submit with its Technical Bid the following additional documents: i. Quality Control Methods for Production, Designing, Manufacturing, Erecting, Installing and Maintaining Light Gauge Steel Structure Buildings, Brick & Mortar Works, and Reinforced/Plain Cement Concrete Works". ii. Construction Schedule (on Primavera /MS project or equivalent) by allocating the equipment and other resources; critical activities must be identified. iii. Health and Safety Management Plan. iv. Environmental Safety Plan. v. Letter of Acceptance / Award, completion certificates, IPCs / BOQs to substantiate construction experience. vi. Documents indicating availability of financial resources shown by the bidder to meet the requirement of Serial No. 2.3.3, Section-3 (i.e. audited standalone (not consolidated) financial statements, line of credit confirmed by issuing bank within last three (03) months, etc.). vii. Supporting documents to substantiate construction experience (refer 2.4.1; and 2.4.2 of Section 3) such as (a) Letter of Acceptance, (b) Letter of Award, (c) Letter of completion, completion certificates, substantial completion certificates, taking over certificates, performance certificates etc. (d) IPCs; and. (e) BOQs,												

	Bidders are required to submit all documents to support their bid in English language. Bidders are required to submit all documents to support their bid in English language. If the documentary evidence is in a language other than the English language, then the bidder shall submit accurate translation of the relevant passages in the English language duly attested by the notary public of the Bidder's Country or similar legal instrument of notarization as applicable under the laws of the Bidder's home country, (specifying the authority for such attestation as per law of the country). If a Bidder omits to submit any of the above documents or the documents submitted are deficient, the Bid shall not be rejected in the first instance and a clarification will be sought from the Bidder under ITB 27. Schedule of technical data in accordance with Clause 6, Subsection-2(Specification) of Section 6 (Employer's Requirement).
ITB 11.3 (d)	The Bidder shall submit with its Price Bid the following additional documents: • Unit price analysis for major items of works.
ITB 12.1	The units and rates in figures entered into the Price Schedules should be typewritten or if written by hand, must be in print form. Price Schedules not presented accordingly may be considered nonresponsive.
ITB 13.1	Alternative bids are not permitted.
ITB 13.2	Alternatives to the Time Schedule shall not be permitted.
ITB 13.4	Alternative technical solutions shall be permitted for the following parts of the plant and services: Not Applicable.
ITB 16.1 (b)	The period following completion of plant and services in accordance with provisions of the contract shall be Five (05) years
ITB 18.1	Bidders shall quote for the entire plant and services on a single responsibility basis.
IT 18.4(a)(i)	The Incoterm for quoting plant to be supplied from abroad is: CIP Karachi / Project Sites.
ITB 18.6	The prices quoted by the Bidder shall be fixed.
ITB 19.1	The currencies of the Bid shall be as follows: - The prices shall be quoted either in the currency of the Bidder's home country, or in any fully convertible currency (up to maximum three (03) foreign currencies). - A Bidder expecting to incur a portion of its expenditures in the performance of the Contract in more than one currency, and wishing to be paid accordingly, shall so indicate in the Schedule of Prices and the Letter of Price Bid. - If some of the contract expenditures related to Design, Installation and Other Services are to be incurred in the Employer's country, such expenditures shall be quoted in either foreign and/or local currency, depending upon the currency in which the costs are to be incurred.

	(d) Bidders may be required by the Employer to clarify their local and foreign currency requirements, and to substantiate that the amounts included in the Price Schedules are reasonable and responsive to ITB 18.1 in which case a detailed breakdown of its foreign currency requirements shall be provided by the Bidder (e) During the performance of the contract, the foreign currency portions of the outstanding balance of the Contract Price may be adjusted by agreement between the Employer and the Contractor to reflect any changes in foreign currency requirements for the contract. Any such adjustment shall be affected by comparing the amounts quoted in the bid with the amounts already used in the Facilities and the Contractor's future needs for imported items.
ITB 20.1	The bid validity period shall be One Hundred and Eighty (180) days , expiring on [18 April 2025] .
ITB 21.1	The Bidder shall furnish a Bid-Securing Declaration.
ITB 21.2	The ineligibility period will be Five (05) Years
ITB 21.4	Subject to the succeeding sentences, any bid not accompanied by Bid-Securing Declaration shall be rejected by the Employer as nonresponsive. If a Bidder submits a Bid-Securing Declaration that (i) deviates in form, content, and/or period of validity or (ii) does not provide sufficient identification of the Bidder (including, without limitation, failure to indicate the name of the Joint Venture or, where the Joint Venture has not yet been constituted, the names of all future Joint Venture Partners), the Employer shall request the Bidder to submit a compliant Bid-Securing Declaration within seven (07) days of receiving such a request. Failure to provide a compliant Bid-Securing Declaration within the prescribed period of receiving such a request shall cause the rejection of the Bid.
ITB 22.1	In addition to the original Bid, the number of copies is: Three (03) To facilitate evaluation, bidders are encouraged to submit the scanned soft copies, in PDF format, of their Bids in shape of a USB Drive. The soft copy (USB) of the Bids shall be enclosed in the envelope containing the hard copy of the Bidder's Original Bid. If there is any discrepancy between the data/information in the soft copy (USB) of the Bidder's Bids and the hard copy of the Bidder's Bids and between the Price indicated in the hard copy of the Bidder's Original Price Bid, and in the soft copy (USB) of the Bidder's Price Bid, the data and information indicated in the hard copy of the Original Bid shall prevail. All of the rates and amounts must be written by the bidder in words that are written in figures. In addition to above, soft copy of Priced Bid in "Excel format", in the same USB containing the "PDF format", shall also be provided in the envelope containing the hard copy of the Bidder's Original Price Bid, to facilitate review and evaluation process. Any information that indicates or alludes to the price of the bid must not be provided in the envelop or USB containing the technical bid. Failure to meet this requirement shall be considered as a sufficient ground for rejection of bids. Note: Submission of the USB is only for reference and shall not constitute electronic bid submission as stipulated in ITB 23.1 (b) and is provision in the Data Sheet.

ITB 22.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of an organizational document, board resolution or its equivalent, or power of attorney specifying the representative's authority to sign the Bid on behalf of, and to legally bind, the Bidder. If the Bidder is an intended or an existing Joint Venture, the power of attorney should be signed by all partners and specify the authority of the named representative of the Joint Venture to sign on behalf of, and legally bind, the intended or existing Joint Venture. If the Joint Venture has not yet been formed, also include evidence from all proposed Joint Venture partners of their intent to enter into a Joint Venture in the event of a contract award in accordance with ITB 11.2. The written confirmation of authorization to sign on behalf of the Bidder should either be: a) notarized, or b) attested to by an appropriate forum (authority) in the Bidder's home country, specifying the representative's authority to sign the bid on behalf of the bidder.																				
ITB 22.2	The Bidder shall submit an acceptable authorization within seven (07) days .																				
D. Submission and Opening of Bids																					
ITB 23.1	Bidders shall submit their Bids by mail or by hand. "Bidders who submit bids by mail or in person should enclose the original and each copy of the bid, in separate sealed envelopes, clearly marking the envelopes as "ORIGINAL" and "COPY." The remainder of the procedure will follow ITB 23.2 to ITB 23.6.																				
ITB 23.1 (b)	Electronic bidding submission procedures shall be: Not Applicable .																				
ITB 24.1	For bid submission purposes only, the Employer's address is <table border="1"> <tr> <td>Attention:</td><td>Project Director Project Implementation Unit Sindh Secondary Education Improvement Project School Education and Literacy Department Government of Sindh</td></tr> <tr> <td>Street address:</td><td>House No. 17/1, Street No. 31, Khayabaan-e-Shamsheer, Saba Avenue, DHA Phase 5 Extn., Karachi Pakistan</td></tr> <tr> <td>Floor/ Room number:</td><td>Office of the Project Director</td></tr> <tr> <td>City:</td><td>Karachi</td></tr> <tr> <td>ZIP code:</td><td>75600</td></tr> <tr> <td>Country:</td><td>Islamic Republic of Pakistan</td></tr> <tr> <td>Telephone:</td><td>+92-21-99332182</td></tr> <tr> <td>E-mail address:</td><td>sseipkhipk@gmail.com</td></tr> </table> The deadline for bid submission is <table border="1"> <tr> <td>Date:</td><td>23 October 2024</td></tr> <tr> <td>Time:</td><td>1100 Hours (Pakistan Standard Time)</td></tr> </table>	Attention:	Project Director Project Implementation Unit Sindh Secondary Education Improvement Project School Education and Literacy Department Government of Sindh	Street address:	House No. 17/1, Street No. 31, Khayabaan-e-Shamsheer, Saba Avenue, DHA Phase 5 Extn., Karachi Pakistan	Floor/ Room number:	Office of the Project Director	City:	Karachi	ZIP code:	75600	Country:	Islamic Republic of Pakistan	Telephone:	+92-21-99332182	E-mail address:	sseipkhipk@gmail.com	Date:	23 October 2024	Time:	1100 Hours (Pakistan Standard Time)
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Date:	23 October 2024																				
Time:	1100 Hours (Pakistan Standard Time)																				
ITB 27.1	The bid opening of Technical Bids shall take place at																				

	Street address: Office of the Project Director Project Implementation Unit Sindh Secondary Education Improvement Project School Education and Literacy Department Government of Sindh House No. 17/1, Street No. 31, Khayabaan-e-Shamsheer, Saba Avenue, DHA Phase 5 Extn., Karachi Pakistan City: Karachi ZIP code: 75600 Country: Islamic Republic of Pakistan Date: 23 October 2024 Time: 1105 Hours (Pakistan Standard Time)								
ITB 27.1	Electronic bid opening procedure shall be as follows: Not Applicable								
ITB 27.5	The Letter of Technical Bid shall be initiated by all members of the Procurement Committee representatives of the Employer attending Technical Bid opening.								
ITB 27.10	The Letter of Price Bid and Price Schedules shall be initiated by all members of the Procurement Committee of the Employer attending the Price Bid opening. All pages of the Letter of Bid and all pages of the Price Schedule are to be initiated by all members of the Bid Opening Committee attending the Bid opening.								
E. Evaluation and Comparison of Bids									
ITB 35.2	The qualifications of other firms such as the Bidder's subsidiaries, parent entities, or affiliates, "shall not" be permitted.								
ITB 37.1	The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: Pak Rupees (PKR) The source of the selling exchange rate shall be: State Bank of Pakistan The date for the selling exchange rate shall be: 28 days prior to the deadline for submission of bids.								
ITB 38.1	Domestic preference shall not apply.								
ITB 42.1	Standstill provisions shall not apply.								
F. Award of Contract									
ITB 47.1	The procedures for Bidding-Related Complaints are referenced in Appendix 7 of the Procurement Regulations for ADB Borrowers. The Bidder should submit its complaint following these procedures, in writing, to: <table border="1"> <tr> <td>For the attention:</td> <td>Mr. Zahid Ali Abbasi</td> </tr> <tr> <td>Title or position:</td> <td>Secretary to Government of Sindh</td> </tr> <tr> <td>Employer:</td> <td>School Education and Literacy Department, Government of Sindh</td> </tr> <tr> <td>Tel:</td> <td>+92-21- 99211227 and +92-21-99211238</td> </tr> </table>	For the attention:	Mr. Zahid Ali Abbasi	Title or position:	Secretary to Government of Sindh	Employer:	School Education and Literacy Department, Government of Sindh	Tel:	+92-21- 99211227 and +92-21-99211238
For the attention:	Mr. Zahid Ali Abbasi								
Title or position:	Secretary to Government of Sindh								
Employer:	School Education and Literacy Department, Government of Sindh								
Tel:	+92-21- 99211227 and +92-21-99211238								

Section 3: Evaluation and Qualification Criteria

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1. Evaluation

1.1 Technical Evaluation

In addition to the criteria listed in ITB 34.1 (a)–(b), other relevant factors are as follows: Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to successfully implement the contract considering its proposed site organization, method statement, mobilization, and construction schedule (to be described by the Bidder in sufficient detail to demonstrate the adequacy of its work methods, scheduling, and material sourcing) including the extent to which they are presented in a consistent manner and comply with requirements stipulated in Section 6 (Employer's Requirements) without material deviation, reservation, or omission.

Noncompliance with equipment and personnel requirements described in Section 6 (Employer's Requirements) shall not normally be a ground for bid rejection and such noncompliance will be subject to clarification during bid evaluation and rectification prior to contract award.

Any bid not conforming to the qualification criteria mentioned herein shall not be considered for further evaluation. Bids not covering the entire scope included in the bid shall be considered non-responsive and shall not be evaluated further for price comparison. Furthermore, bids, which do not fulfill the technical specifications laid down in, and attached with, Section-6 (Employer's Requirement) shall also be considered non-responsive.

1.2 Alternative Technical Solutions

Technical alternatives, if permitted under ITB 13.4, will be evaluated as follows:

Not Applicable

1.3 Economic Evaluation

In addition to the criteria listed in ITB 39.2 I (a)–(f), other relevant factors are as follows:

1.3.1 Quantifiable Deviations and Omissions

Pursuant to ITB 33.3, the cost of all quantifiable nonmaterial nonconformities or omissions from the contractual and commercial conditions shall be evaluated. The Employer will make its own assessment of the cost of any nonmaterial nonconformities and omissions for the purpose of ensuring fair comparison of Bids.

1.3.2 Time Schedule

Time to complete the plant and services from the effective date specified in Article 3 of the Contract Agreement for determining the time for completion of pre-commissioning activities is: as specified under Clause 8.2 of Section 8: Special Conditions of Contract. No credit will be given for earlier completion. Bid offering a completion date beyond the designated period shall be rejected.

1.3.3 Operation and Maintenance (O&M) Costs

The O&M cost factors for calculating the life cycle cost are as follows:

Not Applicable

1.3.4 Functional Guarantees of the Facilities

Not Applicable

1.3.5 Work, Services, Facilities, etc., to Be Provided by the Employer

Where bids include the undertaking of work or the provision of services or facilities by the Employer in excess of the provisions allowed for in the Bidding Document, the Employer shall assess the costs of such additional work, services and/or facilities during the duration of the contract. Such costs shall be added to the bid price for evaluation.

1.3.6 Specific Additional Criteria

The following additional criteria will be used in the evaluation:

Add any other relevant criteria to consider in bid evaluation, such as quality, responsiveness to socioeconomic or environmental objectives, sustainable procurement technical requirements that have been specified in Section 6, special security considerations at site, and Bidder's records of achieving the desired results based on experience and performance history. For each criteria, clearly specify the evaluation methodology, e.g. (i) any relevant requirement specified in Section 6 will be evaluated on a pass/fail (compliance basis), (ii) in addition to evaluating that requirement on a pass/fail (compliance basis), if applicable, specify the monetary adjustments to be applied to bid prices for comparison purposes on account of bids that exceed the specified minimum requirements, or (iii) if merit point scoring is applied in the evaluation, the criteria will be the one of the technical factors.

1.3.6.1 Environmental, Health and Safety Management Plan (EHSMP)

Any bid not accompanied by the EHSMP may be rejected by the Employer as nonresponsive. If a Bidder submits a EHSMP that is not commensurate with the risks and impacts of the proposed works and activities in the bidding document, the Employer shall issue a request for clarification to request for further information from the Bidder. The Bidder must submit the requested information within **ten (10)** days of receiving such a request. Failure to provide a satisfactory response to the request for further information within the prescribed period of receiving such a request may cause the rejection of the Bid.

1.3.6.2 Sustainable Procurement

The following sustainable procurement technical requirements will be evaluated on a pass/fail basis. Failure to meet any of the following requirements will result in mandatory rejection of the bid.

Sustainable Procurement: sustainability aspects (e.g. energy efficiency, reduction of wastages, material reduction, sources of materials etc.) maximum ambient temperature requirements without air conditioning and/or other criteria that may ensure that the level of heat remains to comfortable levels during extreme summers. demonstrating the Bidder's approach and commitment to sustainable design and construction practices.

1.3.7 Domestic Preference

Domestic preference will be **Not Applicable**

1.4 Multiple Contracts

If works are grouped in lots / multiple contracts and pursuant to ITB 39.4, the Employer will evaluate and compare Bids on the basis of a contract, or a combination of contracts, or as a total of contracts to arrive at the least cost combination for the Employer by taking into account discounts offered by Bidders in case of award of multiple contracts.

If a Bidder as defined in ITB 4.1 submits several successful (lowest evaluated substantially responsive) bids, the evaluation will also include an assessment of the Bidder's capacity to meet the following aggregated requirements as presented in the bid:

- Average annual turnover,
- Financial resources,
- Equipment to be allocated, and
- Personnel to be fielded.

2. Qualification

It is the legal entity or entities comprising the Bidder, and not the Bidder's parent companies, subsidiaries, or affiliates, that must satisfy the qualification criteria described below:

2.1 Eligibility

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	

2.1.1 Nationality

Nationality in accordance with ITB 4.2.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Forms ELI – 1; ELI – 2 with attachments
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2.1.2 Conflict of Interest

No conflicts of interest in accordance with ITB 4.3.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Letter of Technical Bid
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2.1.3 ADB Eligibility

Not having been declared ineligible by ADB, as described in ITB 4.4.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Letter of Technical Bid
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2.1.4 Government-Owned Enterprise

Bidder required to meet conditions of ITB 4.5.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Forms ELI - 1, ELI - 2 with attachments
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2.1.5 United Nations Eligibility

Not having been excluded by an act of compliance with a United Nations Security Council resolution in accordance with ITB 4.8.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Letter of Technical Bid
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2.1.6 Registration with Pakistan Engineering Council (PEC)

The successful Bidder must be registered with Pakistan Engineering Council (PEC) and shall have a valid registration Certificate before signing the Contract. Lot-1: Category C-A	must meet requirement	not applicable	must meet requirement	Not applicable	Forms ELI - 1; ELI - 2 with attachments
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Lot-2: Category C-B If the successful bidder is a JV including a local firm whose registration is expired at the time of bid submission, the firm shall be required to submit a valid PEC registration certificate before signing the Contract. If the successful bidder is a single entity or JV comprises a foreign firm, the foreign firm shall be required to submit a valid PEC registration certificate before signing of the Contract.					
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2.2 Historical Contract Nonperformance

2.2.1 History of Nonperforming Contracts

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
Non-performance of a contract ¹ did not occur as a result of contractor default since 1 January 2014.	Must meet requirement	Must meet requirement	Must meet requirement ²	Not Applicable	Form CON-1

2.2.2 Suspension Based on Execution of Bid-Securing Declaration

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
Not under suspension based on execution of a Bid-Securing Declaration pursuant to ITB 4.6.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Letter of Technical Bid

¹ Nonperformance, as decided by the Employer, shall include all contracts where (a) nonperformance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Nonperformance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Nonperformance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

² This requirement also applies to contracts executed by the Bidder as Joint Venture partner.

2.2.3 Pending Litigation and Arbitration

Pending litigation and arbitration criterion **shall** apply.

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
All pending litigation, arbitration, or other material events impacting the net worth and/or liquidity of the bidder, if any, shall be treated as resolved against the Bidder and so shall in total not represent more than Fifty percent (50%) of the Bidder's net worth calculated as the difference between total assets and total liabilities.	Must meet requirement	Not applicable	Must meet requirement	Not applicable	Form CON - 1

2.2.4 Declaration: Environmental, and Health and Safety Past Performance

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
Declare any contracts that have been suspended or terminated and/or performance security called by an employer for reasons related to the non-compliance of any environmental, health and safety contractual obligations in the past five (05) years .	Must make the declaration. If the bidder proposes Specialist Sub-contractor/s to meet EQC 2.4.2, those Specialist Sub-contractor/s must also make the declaration	Not applicable	Each partner must make the declaration. If the bidder proposes Specialist Sub-contractor/s to meet EQC 2.4.2, those Specialist Sub-contractor/s must also make the declaration	Not applicable	Form CON-2

2.3 Financial Situation

2.3.1 Historical Financial Performance

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
Submission of audited financial statements or, if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, for the last three (03) years i.e. Financial Year 2021-22, 2022-23 & 2023-24 of the bidders who close their accounts on 30 th June every year <u>OR</u> Calendar Year 2021, 2022 & 2023 for the bidders who close their accounts on 31 st December every year <u>OR</u> for the latest three (03) years to demonstrate the current soundness of the Bidder's financial position. As a minimum, the Bidder's net worth for the last year, calculated as the difference between total assets and total liabilities should be positive.	Must meet requirement	Not applicable	Must meet requirement	Not applicable	Form FIN - 1 with attachments

2.3.2 Average Annual Turnover

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
Minimum average annual construction turnover calculated as total certified payments received for contracts in progress or completed, within the last three (03) years.	Must meet requirement	Must meet requirement	Must meet 25% of the requirement	Must meet 40% of the requirement	Form FIN - 2
for Lot-1 PKR 6,960.00 million or US\$ equivalent					
for Lot-2 PKR 5,072.00 million or US\$ equivalent					

2.3.3 Financial Resources

If the bid evaluation process and the decision for the award of the Contract takes more than 1 year from the date of bid submission, Bidders may be asked to resubmit their current contract commitments and latest information on financial resources supported by latest audited accounts or audited financial statements, or if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, and the Bidders' financial capacity, will be reassessed on this basis.

Criteria	Compliance Requirements				Documents				
Requirement	Single Entity	Joint Venture			Submission Requirements				
		All Partners Combined	Each Partner	One Partner					
For Single Entities The Bidder must demonstrate that its financial resources defined in FIN-3, less its financial obligations for its current contract commitments defined in FIN-4, meet or exceed the total requirement for the following lots: <table><tr><td>for Lot-1</td><td>PKR 1,547.00 million or US\$ equivalent</td></tr><tr><td>for Lot-2</td><td>PKR 1,127.00 million or US\$ equivalent</td></tr></table>	for Lot-1	PKR 1,547.00 million or US\$ equivalent	for Lot-2	PKR 1,127.00 million or US\$ equivalent	must meet requirement	not applicable	not applicable	not applicable	Form FIN – 3 and Form FIN – 4 If the Bidder intends to utilize a line of credit to fulfill the financial resources requirement, the Bidder must obtain a letter of line of credit from a recognized bank. The letter must be: (i) addressed to the Client; (ii) shall be issued within last 02 month; (iii) it should be unconditional; and (iv) credit line must be valid and available (specifying remaining balance of credit) to the bidder for the complete Time for Completion of the Project). Separate / specific letters should be submitted for respective lot, in case a bidder is submitting bids for multiple lots.
for Lot-1	PKR 1,547.00 million or US\$ equivalent								
for Lot-2	PKR 1,127.00 million or US\$ equivalent								
For Joint Ventures (1) One partner must demonstrate that its financial resources defined in FIN-3, less its financial obligations for its own current contract commitments defined in FIN-4, meet or exceed its required share from the total requirement for the following lots. <table><tr><td>for Lot-1</td><td>PKR 619.00 million or US\$ equivalent</td></tr></table>	for Lot-1	PKR 619.00 million or US\$ equivalent	not applicable	not applicable	not applicable	must meet requirement	Form FIN – 3 and Form FIN – 4 If the Bidder intends to utilize a line of credit to fulfill the financial resources requirement, the Bidder must obtain a letter of line of credit from a recognized bank. The letter must be: (i) addressed to the Client; (ii) shall be issued within last 02 month; (iii) it should		
for Lot-1	PKR 619.00 million or US\$ equivalent								

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
for Lot-2 PKR 451.00 million or US\$ equivalent AND					be unconditional; and (iv) credit line must be valid and available (specifying remaining balance of credit) to the bidder for the complete Time for Completion of the Project). Separate / specific letters should be submitted for respective lot, in case a bidder is submitting bids for multiple lots.
(2) Each partner must demonstrate that its financial resources defined in FIN - 3, less its financial obligations for its own current contract commitments defined in FIN - 4, meet or exceed its required from the total requirement for the following lots. for Lot-1 PKR 387.00 million or US\$ equivalent for Lot-2 PKR 282.00 million or US\$ equivalent AND	not applicable	not applicable	must meet requirement	not applicable	Form FIN – 3 and Form FIN – 4 If the Bidder intends to utilize a line of credit to fulfill the financial resources requirement, the Bidder must obtain a letter of line of credit from a recognized bank. The letter must be: (i) addressed to the Client; (ii) shall be issued within last 02 month; (iii) it should be unconditional; and (iv) credit line must be valid and available (specifying remaining balance of credit) to the bidder for the complete Time for Completion of the Project). Separate / specific letters should be submitted for respective lot, in case a bidder is submitting bids for multiple lots.
(3) The Joint Venture must demonstrate that the combined financial resources of all partners defined in FIN-3, less all the partners' total financial obligations for the current contract commitments defined	not applicable	must meet requirement	not applicable	not applicable	Form FIN – 3 and Form FIN – 4 If the Bidder intends to utilize a line of credit to fulfill the financial resources requirement, the Bidder must obtain

Criteria	Compliance Requirements				Documents				
Requirement	Single Entity	Joint Venture			Submission Requirements				
		All Partners Combined	Each Partner	One Partner					
in FIN-4, meet or exceed the total requirement for the following lots: <table><tr><td>for Lot-1</td><td>PKR 1,547.00 million or US\$ equivalent</td></tr><tr><td>for Lot-2</td><td>PKR 1,127.00 million or US\$ equivalent</td></tr></table>	for Lot-1	PKR 1,547.00 million or US\$ equivalent	for Lot-2	PKR 1,127.00 million or US\$ equivalent					a letter of line of credit from a recognized bank. The letter must be: (i) addressed to the Client; (ii) shall be issued within last 02 month; (iii) it should be unconditional; and (iv) credit line must be valid and available (specifying remaining balance of credit) to the bidder for the complete Time for Completion of the Project). Separate / specific letters should be submitted for respective lot, in case a bidder is submitting bids for multiple lots.
for Lot-1	PKR 1,547.00 million or US\$ equivalent								
for Lot-2	PKR 1,127.00 million or US\$ equivalent								

2.4 Bidder's Experience

2.4.1 Contracts of Similar Size and Nature

Criteria		Compliance Requirements			Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
Participation as a contractor, Joint Venture partner, or approved Subcontractor, in at least one contract that has been satisfactorily and substantially completed within the last ten (10) years and that is similar to the proposed works, where the value of the Bidder's participation exceeds the amount mentioned below for each lot. The similarity of the Bidder's participation shall be based on: 1. the physical size 2. nature of works 3. complexity, methods 4. technology or 5. other characteristics as described in Section 6, Employer's Requirements	Must meet requirement	Must meet requirement	Not Applicable	Must meet requirement	Form EXP-1 In addition to the submission requirement Form EXP-1, Bidders shall provide the following supporting documents: 1. Signed Contract Agreement, and 2. Taking-Over Certificate, Contract Completion Certificate or Performance Certificate or Delivery Document(s) (Bills of Lading, Inspection Certificates etc.) for the contract(s), in sufficient detail to verify the contract name, value and completion time (or substantial completion). If the documents are other than in English, an accurate certified translation of these documents in English shall be provided in accordance with ITB 10.1. The Bidders are required to complete Form EXP-1, indicating both the percentage and amount of their participation in the total contract amount. Additionally, the Bidder may be required to provide relevant details.
<table><tr><td>for Lot-1</td><td>PKR 2,552.00 million or US\$ equivalent</td></tr><tr><td>for Lot-2</td><td>PKR 1,860.00 million or US\$ equivalent</td></tr></table>					for Lot-1
for Lot-1	PKR 2,552.00 million or US\$ equivalent				
for Lot-2	PKR 1,860.00 million or US\$ equivalent				

Criteria		Compliance Requirements			Documents
Requirement	Single Entity	Joint Venture			Submission Requirements
		All Partners Combined	Each Partner	One Partner	
					such as joint venture (JV) or subcontract agreements, Engineer's approval of subcontractor, etc. Note: The Employer will consider a "substantially completed contract" as one in which the works have been completed and the Contractor has received Taking Over Certificate for whole of the Works.

2.4.2 Experience in Key Activities

2.4.2(a) Must be complied with by the Bidder. In case of a Joint Venture Bidder, the Bidder or at least one of the partners must meet the requirement in the key activity. For contracts under which the Bidder participated as a Joint Venture partner, only the Bidder's designated scope of works under the contracts shall be considered to meet this requirement.

Table A

Criteria	Compliance Requirements		Documents						
Requirement	Single Entity	Joint Venture	Submission Requirements						
For the above or other contracts executed during the period stipulated in 2.4.1, a minimum experience in the following key activities:	Must meet requirement	Must meet requirement	Form EXP-2 Form EXP – 2 shall be supported by documents such as Signed Contract Agreement, Taking-Over Certificate or Contract Completion Certificate indicating the contract name, value, completion date (or percentage of substantial completion), activities performed by Joint Venture partners, and other relevant details sufficient to demonstrate compliance with the requirements.						
1.Experience in Design of Light Guage Steel Frame Structure Buildings including Light Guage Steel Frame Structure Buildings, Landscape, Horticulture, Internal Pathways/Roads, Pavements, Drainage, Electrification, Solar Pannel, Lighting, Sewerage and Water Supply (as minimum): <table border="1"><tr><th>Lot No.</th><th>Covered Area (Sq ft)</th></tr><tr><td>Lot-1</td><td>223,100</td></tr><tr><td>Lot-2</td><td>248,500</td></tr></table>	Lot No.	Covered Area (Sq ft)	Lot-1	223,100	Lot-2	248,500	Must meet requirement	Must meet requirement	
Lot No.	Covered Area (Sq ft)								
Lot-1	223,100								
Lot-2	248,500								
2.Experience in construction of Light Guage Steel Frame Structure Buildings including Light Guage Steel Frame Structure Buildings, Landscape, Horticulture, Internal Pathways/Roads, Pavements, Drainage, Electrification, Solar Pannel, Lighting, Sewerage and Water Supply (as minimum): <table border="1"><tr><th>Lot No.</th><th>Covered Area (Sq ft)</th></tr><tr><td>Lot-1</td><td>223,100</td></tr><tr><td>Lot-2</td><td>248,500</td></tr></table>	Lot No.	Covered Area (Sq ft)	Lot-1	223,100	Lot-2	248,500	Must meet requirement	Must meet requirement	
Lot No.	Covered Area (Sq ft)								
Lot-1	223,100								
Lot-2	248,500								

2.4.2(b) The Employer accepts any of the following activities to be subcontracted. They may be complied with by the Bidder or by its proposed specialist subcontractor.

If the key activity is to be undertaken by a Specialist Subcontractor, the Employer shall require evidence of the subcontracting agreement from the Bidder.

Table B

Criteria	Compliance Requirements		Documents						
Requirement	Single Entity or its Specialist Subcontractors	Joint Venture or its Specialist Subcontractors	Submission Requirements						
For the above or other contracts executed during the period stipulated in 2.4.1, a minimum experience in the following key activities:	One must meet requirement	One must meet requirement	Form EXP – 2 ¹						
3. Experience in Solarization under construction of Light Guage Steel Frame Structure Buildings									
<table><tr><th>Lot No.</th><th>KVA</th></tr><tr><td>Lot-1</td><td>10</td></tr><tr><td>Lot-2</td><td>10</td></tr></table>	Lot No.	KVA	Lot-1	10	Lot-2	10			
Lot No.	KVA								
Lot-1	10								
Lot-2	10								

2.4.3 Specific Experience in Managing Environmental, Health and Safety Aspect

Criteria	Compliance Requirements		Documents
Requirement	Single Entity or Its Specialist Subcontractors	Joint Venture or Its Specialist Subcontractors	Submission Requirements
For the contracts in 2.4.1 and 2.4.2 above and/or any other contracts [substantially completed and under implementation] as prime contractor, Joint Venture partner, or Subcontractor between 1st January 2017 and Bid submission deadline, experience in managing ES risks and impacts in the following aspects: - Local cultural heritage protection practice - Work at height and fall protection. - Control of infectious and communicable diseases (HIV/AIDS, malaria, COVID-19 etc	Must meet requirements.	One member must meet requirements.	Form EXP-3

¹ Submission requirements: Form EXP – 2 shall be supported by documents such as Signed Contract Agreement, Taking-Over Certificate or Contract Completion Certificate indicating the contract name, value, completion date (or percentage of substantial completion), activities performed by Joint Venture partners, and other relevant details sufficient to demonstrate compliance with the requirements

2.5 Organizational Environmental, Health and Safety System

2.5.1 Environmental, Health and Safety Certification

Criteria		Compliance Requirements		Documents
Requirement		Single Entity or Its Specialist Subcontractors	Joint Venture or Its Specialist Subcontractors	Submission Requirements
Availability of a valid ISO certification or internationally recognized equivalent (equivalency to be demonstrated by the Bidder), and applicable to the worksite: 1) Quality management certificate ISO 9001 (or internationally recognized equivalent). 2) Environmental management certificate ISO 14001 (or internationally recognized equivalent). 3) Health and Safety management certificate ISO 45001 (or internationally recognized equivalent).		Must meet requirements.	All members must meet requirements.	Form EXP-4

2.5.2 Environmental, Health and Safety Documentation

Criteria		Compliance Requirements		Documents
Requirement		Single Entity or Its Specialist Subcontractors	Joint Venture or Its Specialist Subcontractors	Submission Requirements
Availability of in-house policies and procedures for EHS management: 1. Existence of an Ethics Charter 2. Existence of a system for monitoring compliance with EHS commitments for the Bidder's Subcontractors and all its partners. 3. Existence of official company procedures for the management of the following: ➤ EHS resources and facilities and EHS monitoring system. ➤ Project Areas management information (base camps, quarries, burrow pits, storage areas).		Must meet requirements.	All members must meet requirements.	Form EXP-5

Criteria	Compliance Requirements		Documents
Requirement	Single Entity or Its Specialist Subcontractors	Joint Venture or Its Specialist Subcontractors	Submission Requirements
➤ Health and Safety on worksites policy and related guidance.			

2.5.3 Environmental, Health and Safety Dedicated Personnel

Criteria	Compliance Requirements		Documents
Requirement	Single Entity or Its Specialist Subcontractors	Joint Venture or Its Specialist Subcontractors	Submission Requirements
Availability of in-house personnel dedicated to EHS issues: 1. Environmental Specialist 2. Occupational Health and Safety Specialist	Must meet requirements	All members must meet requirements	Form EXP-6

2.6 Subcontractors

Subcontractors or Manufacturers for the following major items of plant and services must meet the following minimum qualification criteria, herein listed for a Subcontractor for the item. Failure to comply with this requirement will result in rejection of the Subcontractor but not the Bidder.

Item No.	Description of Item	Minimum Qualification to be met	Documents Submission Requirements
1			
2			
3			
4			

In the case of a Bidder who offers to supply and install major items of plant under the contract, which the Bidder did not manufacture or otherwise produce, the Bidder shall provide the Manufacturer's authorization, using the form provided in Section 4 (Bidding Forms), showing that the Bidder has been duly authorized by the Manufacturer or producer of the related plant and equipment or component to supply and install that item in the Employer's country. Failure to submit the Manufacturer's authorization at the first instance is considered a minor, nonmaterial omission and shall be subject to clarification. However, failure of the Bidder to submit the omitted authorization shall lead to rejection of the Subcontractor or Manufacturer of the item under evaluation in accordance with ITB 35.4.

Section 4: Bidding Forms

This section contains the forms to be completed by the Bidder and submitted as part of its Bid.

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Letter of Technical Bid

Date: **xx xxxxxxxxx 2024**

OCB No.: **SELD/SSEIP-AF/CW-04: Package-4**

Invitation for Bid No.: **SELD/SSEIP-AF/CW-04: Package-4**

To:

Project Director

Project Implementation Unit

Sindh Secondary Education Improvement Project

School Education and Literacy Department

Government of Sindh

Address: House No. 17/1, Street No. 31, Khayabaan-e-Shamsheer, Saba Avenue, DHA

Phase 5 Extn., Karachi Pakistan

Tel: +92-21-99332182

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) 8.
- (b) We acknowledge that we have read and understand ADB's Anticorruption Policy (1998) and Integrity Principles and Guidelines (2015), both as amended from time to time.
- (c) We offer to design, manufacture, test, deliver, install, pre-commission, and commission in conformity with the Bidding Document the following Plant and Services:

SELD/SSEIP-AF/CW-04: Package-4: Reconstruction of 101 Schools using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in District Naushero Feroze [02-Lots]

- **Lot-1:** Reconstruction of **55 Schools** using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in **Tehsil Moro, District Naushero Feroze**
- **Lot-2:** Reconstruction of **46 Schools** using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in **Tehsil Naushero Feroze, District Naushero Feroze**

[Select the Lot(s) for which you apply and delete the other]

- (d) Our Bid consisting of the Technical Bid and the Price Bid shall be valid for a period of **One Hundred and Eighty (180) days** starts from the date fixed for the bid submission deadline in accordance with ITB 24.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (e) Our firm, including any Subcontractors or Manufacturers for any part of the Contract, have or will have nationalities from eligible countries, in accordance with ITB 4.2.
- (f) We, our directors, key officers, key personnel, including any Subcontractors, consultants, subconsultants, manufacturers, service providers or Suppliers for any part of the Contract, do not have any conflict of interest in accordance with ITB 4.3.

If there is any conflict of interest, please state details:

- (i) Parties involved in the conflict of interest: _____
- (ii) Details about the conflict of interest: _____

- (g) We are not participating, as a Bidder, either individually or as partner in a Joint Venture, in more than one bid in this bidding process in accordance with ITB 4.3(e), other than alternative offers submitted in accordance with ITB 13.
- (h) Our firm, Joint Venture partners, our respective direct and indirect shareholders, directors, key officers, key personnel, associates, parent company, affiliates or subsidiaries, including any Subcontractors, consultants, subconsultants, manufacturers, service providers or Suppliers for any part of the contract, are not subject to, or not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Asian Development Bank or a debarment imposed by the Asian Development Bank in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the Asian Development Bank and other development banks.¹
- (i) Our firm, Joint Venture partners, our respective direct and indirect shareholders, directors, key officers, key personnel, associates, parent company, affiliates or subsidiaries, including any Subcontractors, consultants, subconsultants, manufacturers, service providers or Suppliers for any part of the contract, are not under ongoing investigation and/or sanctions proceedings by the Asian Development Bank or any multilateral development bank.

If under ongoing investigation and/or sanction proceedings by the Asian Development Bank or any multilateral development bank, please state details:

(i) Name of the multilateral development bank: _____

(ii) Reason for the ongoing investigation / allegations: _____

- (j) Our firm, Joint Venture partners, our respective direct and indirect shareholders, directors, key officers, key personnel, associates, parent company, affiliates or subsidiaries, including any Subcontractors, consultants, subconsultants, manufacturers, service providers or Suppliers for any part of the Contract, are not temporarily suspended, debarred, declared ineligible, or subject to any national and/or international sanctions by any country, any international organization, any multilateral development bank and other donor agency.

If so temporarily suspended, debarred, declared ineligible, or subject to any national and/or international sanctions by any country, any international organization, any multilateral development bank and other donor agency, please state details (as applicable to each Joint Venture partner, their respective direct or indirect shareholders, directors, key officers, key personnel, associate, parent company, affiliate, subsidiaries, Subcontractors, consultants, subconsultants, manufacturers, service providers and/or Suppliers):

(i) Name of Institution: _____

(ii) Period of the temporary suspension, debarment, ineligibility, or national or international sanction [start and end date]: _____

(iii) Reason for the temporary suspension, debarment, ineligibility, or national or international sanction: _____

- (k) Our firm, Joint Venture partners, associates, parent company affiliates or subsidiaries, including any Subcontractors, consultants, subconsultants, manufacturers, service providers Suppliers, key

¹ These institutions include African Development Bank, European Bank for Reconstruction and Development (EBRD), Inter-American Development Bank (IADB), and the World Bank Group. According to paragraph 9 of the Agreement, other international financial institutions may join upon the consent of all Participating Institutions and signature of a Letter of Adherence by the international financial institution substantially in the form provided (Annex B to the Agreement). Upon adherence, such international financial institution shall become a Participating Institution for purposes of the Agreement. Bidders are advised to check www.adb.org/integrity for updates.

officers directors and key personnel have never been *charged or convicted* with any criminal offense (including felonies but excluding misdemeanors) or infractions and/or violations of ordinance; nor charged or found liable in any civil or administrative proceedings in the last 10 years; or undergoing investigation for such, or subject to any criminal, civil or administrative orders, monitorship or enforcement actions.

If so charged, convicted/found liable, under ongoing investigation, or subject to orders, monitorship or enforcement actions, please state details:

- (i) Nature of the offense/violation, proceedings, investigation, and/or monitorship or enforcement actions: _____
- (ii) Court, area of jurisdiction and/or the enforcement agency: _____
- (iii) Resolution [*i.e. dismissed, settled, or convicted; duration of penalty*]: _____
- (iv) Other relevant details [*please specify*]: _____

- (l) Our firm, Joint Venture partners, our respective direct and indirect shareholders, directors, key officers, key personnel, associates, affiliates or subsidiaries, including any Subcontractors, consultants, subconsultants, manufacturers, service providers or Suppliers, can make and receive electronic fund transfer payments through the international banking system or otherwise discharge the Employer's obligation upon initiation of wire transfer.

If unable to make or receive funds through the international banking system or otherwise discharge the Employer's obligation upon initiation of wire transfer, please state the details:

- (i) Nature of the restriction: _____
- (ii) Jurisdiction of the restriction: _____
- (iii) Other relevant details: _____

- (m) Our firm, Joint Venture partners, associates, parent company, affiliates or subsidiaries, including any Subcontractors, consultants, subconsultants, manufacturers, service providers or Suppliers, key officers, directors and key personnel are not from a country which is prohibited to export goods or services to, or receive any payments from the Employer's country and/or are not prohibited to receive payments for particular goods or services by the Employer's country by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations.
- (n) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract.²

Name of Recipient	Address	Reason	Amount
.....			
.....			

- (o) We understand that it is our obligation to notify the Employer of any changes in connection with the matters described in paragraphs (f), (h), (i), (j), (k), (l), (m) and (n) of this Letter of Technical Bid.

² If none has been paid or is to be paid, indicate "None".

- (p) [We are not a government-owned enterprise] / [We are a government-owned enterprise but meet the requirements of ITB 4.5].³
- (q) We have not been suspended nor declared ineligible by the Employer based on execution of a Bid-Securing Declaration in accordance with ITB 4.6.
- (r) At any time following submission of our Bid, we shall permit, and shall cause our Joint Venture partners, directors, key officers, key personnel, associates, parent company, affiliates or subsidiaries, including any Subcontractors, consultants, subconsultants, manufacturers, service providers or Suppliers for any part of the contract to permit ADB or its representative to inspect our sites, assets, accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by ADB. We understand that failure of this obligation may constitute obstructive practice that may result in debarment and/or contract termination.
- (s) Regardless of whether the contract will be awarded to us, we shall preserve all accounts, records and other documents related to bid submission for at least 3 years from the date of submission of the bid or the period prescribed in applicable law, whichever is longer.
- (t) If we are awarded the contract, we shall preserve all accounts, records and other documents related to the procurement and execution of the contract for at least 5 years after completing the works contemplated in the relevant contracts or the period prescribed in applicable law, whichever is longer.
- (u) If our Bid is accepted, we commit to mobilizing key equipment and personnel in accordance with the requirements set forth in Section 6 (Employer's Requirements) and our technical proposal, or as otherwise agreed with the Employer.
- (v) We certify on behalf of the Bidder, that the information provided in the bid has been fully reviewed, given in good faith, and to the best of our knowledge is true and complete. We understand that it is our obligation to inform the Employer of any changes to the information as and when it becomes known to us. We understand that any misrepresentation that knowingly or recklessly misleads, or attempts to mislead may lead to the automatic rejection of the Bid or cancellation of the contract, if awarded, and may result in remedial actions, in accordance with ADB's Anticorruption Policy (1998, as amended to date) and Integrity Principles and Guidelines (2015, as amended from time to time).

Name

In the capacity of

Signed

Duly authorized to sign the Bid for and on behalf of

Date

³ Use one of the two options as appropriate.

Country of Origin Declaration Form

Name of Bidder _____ IFB Number _____ Page ____ of ____

Item	Description	Country of Origin

Letter of Price Bid

Date: **xx xxxxxx 2024**

OCB No.: **SELD/SSEIP-AF/CW-04: Package-4**

Invitation for Bid No.: **SELD/SSEIP-AF/CW-04: Package-4**

To:

Project Director

Project Implementation Unit

Sindh Secondary Education Improvement Project

School Education and Literacy Department

Government of Sindh

Address: House No. 17/1, Street No. 31, Khayabaan-e-Shamsheer, Saba Avenue, DHA

Phase 5 Extn., Karachi Pakistan

Tel: +92-21-99332182

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Document, including Addenda issued in accordance with Instructions to Bidders (ITB) 8.
- (b) We acknowledge that we have read and understand ADB's Anticorruption Policy (1998) and Integrity Principles and Guidelines (2015), both as amended from time to time.
- (c) We offer to design, manufacture, test, deliver, install, pre-commission, and commission in conformity with the Bidding Document the following Plant and Services:

SELD/SSEIP-AF/CW-04: Package-4: Reconstruction of 101 Schools using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in District Naushero Feroze [02-Lots]

- **Lot-1:** Reconstruction of **55 Schools** using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in **Tehsil Moro, District Naushero Feroze**
- **Lot-2:** Reconstruction of **46 Schools** using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in **Tehsil Naushero Feroze, District Naushero Feroze**

[Select the Lot(s) for which you apply and delete the other]

- (d) The total price of our Bid, excluding any discounts offered in item (d) below is the sum of

[amount of foreign currency in words], [amount in figures], and [amount of local currency in words], [amount in figures]

The total bid price from the Grand Summary (Schedule No. 5) should be entered by the Bidder inside this box. Absence of the total bid price in the Letter of Price Bid may result in the rejection of the bid.

- (e) The discounts offered and the methodology for their application are as follows: *[insert discounts and methodology for their application if any]*

- (f) Our Bid shall be valid for a period of **One Hundred and Eighty (180) days** starts from the date fixed for the submission deadline in accordance with ITB 24.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (g) If our Bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document.
- (h) We understand that this bid, together with your written acceptance thereof included in your notification of award through the issuance of Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (i) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (j) At any time following submission of our Bid, we shall permit, and shall cause our Joint Venture partners, directors, key officers, key personnel, associates, parent company, affiliates or subsidiaries, including any Subcontractors, consultants, subconsultants, manufacturers, service providers or Suppliers for any part of the contract to permit ADB or its representative to inspect our sites, assets, accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by ADB. We understand that failure of this obligation may constitute obstructive practice that may result in debarment and/or contract termination.
- (k) Regardless of whether the contract will be awarded to us, we shall preserve all accounts, records and other documents related to bid submission for at least 3 years from the date of submission of the bid or the period prescribed in applicable law, whichever is longer.
- (l) If we are awarded the contract, we shall preserve all accounts, records and other documents related to the procurement and execution of the contract for at least 5 years after the completing the works contemplated in the relevant contracts or the period prescribed in applicable law, whichever is longer.
- (m) We confirm and stand by our commitments and other declarations made in connection with the submission of our Letter of Technical Bid.
- (n) We certify on behalf of the Bidder, that the information provided in the bid has been fully reviewed, given in good faith, and to the best of our knowledge is true and complete. We understand that it is our obligation to inform the Employer of any changes to the information as and when it becomes known to us. We understand that any misrepresentation that knowingly or recklessly misleads, or attempts to mislead may lead to the automatic rejection of the Bid or cancellation of the contract, if awarded; and may result in remedial actions, in accordance with ADB's Anticorruption Policy (1998, as amended to date) and Integrity Principles and Guidelines (2015, as amended from time to time).

Name

In the capacity of

Signed

Duly authorized to sign the Bid for and on behalf of

Date

Price Schedules

PREAMBLE

General

1. The Price Schedules are divided into separate Schedules as follows:
 Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad
 Schedule No. 2: Plant and Mandatory Spare Parts Supplied from within the Employer's Country
 Schedule No. 3: Design Services
 Schedule No. 4: Installation and Other Services
 Schedule No. 5: Grand Summary
 Schedule No. 6: Recommended Spare Parts
2. The Schedules do not generally give a full description of the plant to be supplied and the services to be performed under each item. Bidders shall be deemed to have read the Employer's Requirements and other sections of the Bidding Document and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling in the rates and prices. The entered rates and prices shall be deemed to cover the full scope as aforesaid, including overheads and profit.
3. If Bidders are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with ITB 7 prior to submitting their bid.

Pricing

4. The units and rates in figures entered into the Price Schedules should be typewritten or if written by hand, must be in print form. Price Schedules not presented accordingly may be considered nonresponsive. Any alterations necessary due to errors, etc., shall be initialed by the Bidder.
 As specified in the Bid Data Sheet and Special Conditions of Contract, prices shall be fixed and firm for the duration of the Contract, or prices shall be subject to adjustment in accordance with the corresponding Appendix (Price Adjustment) to the Contract Agreement.
5. Bid prices shall be quoted in the manner indicated and, in the currencies specified in the Instructions to Bidders in the Bidding Document.
 For each item, Bidders shall complete each appropriate column in the respective Schedules, giving the price breakdown as indicated in the Schedules.
 Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in Section 6 (Employer's Requirements) or elsewhere in the Bidding Document.
6. Payments will be made to the Contractor in the currency or currencies indicated under each respective item.
7. When requested by the Employer for the purposes of making payments or part payments, valuing variations or evaluating claims, or for such other purposes as the Employer may reasonably require, the Contractor shall provide the Employer with a breakdown of any composite or lump sum items included in the Schedules.

Schedules of Rates and Prices

Attached as Annexure 'A'

Tables of Adjustment Data

Table A - Local Currency

To be entered by the bidder

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Proposed Weighting
	Nonadjustable	---	---	a: <u>0.15</u> b: _____ c: _____ d: _____ e: _____
Total				1.00

Table B - Foreign Currency

Name of Currency: _____

[Insert name of currency. If the Bidder wishes to quote in more than one foreign currency, this table should be repeated for each foreign currency.]

To be entered by the bidder

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Proposed Weighting
	Nonadjustable	---	---	a: <u>0.15</u> b: _____ c: _____ d: _____ e: _____
Total				1.00

- Note -

The base date shall be the date 28 days prior to the deadline for submission of the bid.

Tables of Adjustment Data shall only be included if prices are to be quoted as adjustable prices in accordance with ITB 18.6.

Bid Security

Bank Guarantee

[Bank's name, and address of issuing branch or office]⁴

Beneficiary:[Name and address of the Employer].....

Date:

Bid Security No.:

We have been informed that [name of the Bidder] (hereinafter called "the Bidder") has submitted to you its bid dated [insert date] (hereinafter called "the Bid") for the execution of [name of contract] under Invitation for Bids No. [insert IFB number] ("the IFB").

Furthermore, we understand that, according to your conditions, bidders must be bonded by a bid guarantee.

At the request of the Bidder, we [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [amount in figures] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid condition(s) to cause the Bidder:

- (a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Letters of Technical Proposal; or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Agreement, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This guarantee will expire (a) if the Bidder is the successful Bidder, upon our receipt of copies of the Contract Agreement signed by the Bidder and the Performance Security issued to you upon the instruction of the Bidder; or (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful Bidder, or (ii) 28 days after the expiration of the Bidder's bid.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No.758.⁵

[Authorized signature(s) and bank's seal (where appropriate)]

⁴ All italicized text is for use in preparing this form and shall be deleted from the final document.

⁵ Or the employer may use "Uniform Rules for Demand Guarantees (URDG), ICC Publication No. 458" as appropriate.

Bid-Securing Declaration

Date: *[insert date (as day, month and year)]*

Bid No.: *[insert number of bidding process]*

Alternative No.: *[insert identification No if this is a bid for an alternative]*

To: *[insert complete name of the Employer]*

We, the undersigned, declare that:

We understand that, according to your conditions, Bids must be supported by a Bid-Securing Declaration.

We accept that we will automatically be suspended from being eligible for bidding in any contract with the Borrower for the period of time of *[insert number of years as indicated in ITB 21.2 of the BDS]* starting on the date that we receive a notification from the Employer, if we are in breach of our obligation(s) under the bid conditions, because we

- (a) have withdrawn our Bid during the period of bid validity specified in the Letters of Technical and Price Bid; or
- (b) do not accept the correction of errors in accordance with the Instruction to Bidders (hereinafter "the ITB"); or
- (c) having been notified of the acceptance of our Bid by the Employer during the period of bid validity, (i) fail or refuse to execute the Contract; if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the ITB.

We understand that this Bid-Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) 28 days after the expiration of our Bid.

Signed: *[insert signature of person whose name and capacity are shown]*

In the capacity of *[insert legal capacity of person signing the Bid-Securing Declaration]*

Name: *[insert complete name of person signing the Bid-Securing Declaration]*

Duly authorized to sign the bid for and on behalf of *[insert complete name of the Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Corporate Seal *(where appropriate)*

Technical Proposal

Site Organization

Method Statement

Mobilization Schedule

Construction Schedule

Environmental, Health and Safety Management Plan

Environmental, Health and Safety Code of Conduct

Plant

Personnel

Equipment

Proposed Subcontractors for Major Items of Plant and Services

Manufacturer's Authorization

Affiliate Company Guarantee

Time Schedule

Functional Guarantee of the Proposed Facilities

Site Organization

[Note: *Evaluation of the Bidder's Site Organization will include an assessment of the Bidder's capacity to mobilize key personnel for the Contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section 6 (Employer's Requirements).]*

Method Statement

The bidder **shall** provide detailed Method Statement of executing the project. The bidder shall also indicate the machinery to be used and key personnel showing their responsibilities.

In case of a JV, the Method Statement **shall** include clear delineation of activities / roles to be performed by each JV partner consistent with the indicated JV share in the JV Agreement.

Mobilization Schedule

The bidder shall provide graphical (Bar Chart) presentation of its mobilization schedule, harmonized with the Construction Schedule to complete the Works in the stipulated time under the contract. The Mobilization Schedule should reflect the no-objection request and approval step for Site-Specific Environmental, Health and Safety Management Plan as per Contract Conditions. Bidder shall provide mobilization Schedule conforming with the requirement of condition of contract.

Construction Schedule

[Note: *Evaluation of the Bidder's Construction Schedule will include an assessment of the Bidder's technical capacity to mobilize equipment for the Contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section 6 (Work's Requirements).*

Bidders must provide their Construction Schedule on primavera / MS project or equivalent by allocating the equipment and other resources, critical activities must be identified.]

The construction schedule shall include the following key milestones:

Environmental, Health and Safety Management Plan (EHSMP)

The Bidder shall submit an outline Environmental, Health and Safety Management Plan (EHSMP) commensurate with the risks and impacts of the proposed works and activities. These strategies and plans shall describe in detail the actions, materials, equipment, management processes, etc. that will be implemented by the Contractor, and its subcontractors.

In developing these strategies and plans, the Bidder shall have regard to the EHS provisions of the contract and EHS risks including those as may be more fully described in Section 6 (Employer's Requirements).

Environmental, Health and Safety Code of Conduct

Environmental, Health and Safety Code of Conduct for Contractor's Personnel Form

The minimum content of the EHS Code of Conduct form as set out by the Employer shall not be substantially modified. However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Bidder shall initial and submit the EHS Code of Conduct form as part of its bid.

ENVIRONMENTAL, HEALTH AND SAFETY CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We are the Contractor, [enter name of Contractor]. We have signed a contract with [enter name of Employer] for [enter description of the Works]. These Works will be carried out at [enter the Site and other locations where the Works will be carried out]. Our contract requires us to implement measures to address environmental, health and safety risks related to the Works.

This EHS Code of Conduct is part of our measures to deal with environmental, health and safety risks related to the Works. It applies to all our staff, labourers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as "Contractor's Personnel" and are subject to this EHS Code of Conduct.

This EHS Code of Conduct identifies the behavior that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Contractor's Personnel shall:

1. carry out his/her duties competently and diligently;
2. comply with this EHS Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. maintain a safe working environment including by:
 - a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
 - b. wearing required personal protective equipment;
 - c. using appropriate measures relating to chemical, physical and biological substances and agents; and
 - d. following applicable emergency operating procedures.
4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;

6. report violations of this EHS Code of Conduct; and
7. not retaliate against any person who reports violations of this EHS Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism.

RAISING CONCERNS

If any person observes behavior that he/she believes may represent a violation of this EHS Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done by call [] to reach the Contractor's hotline (if any) and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

CONSEQUENCES OF VIOLATING THE ENVIRONMENTAL, HEALTH AND SAFETY CODE OF CONDUCT

Any violation of this EHS Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this EHS Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this EHS Code of Conduct, I can contact [enter name of Contractor's contact person(s) with relevant experience]] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Contractor:

Signature: _____

Date: (day month year): _____

Plant

Personnel

Form PER – 1: Proposed Personnel

Bidders should provide the details of proposed personnel and their experience record in the relevant Information Forms below for each of the candidate.

1.	Title of position
	Name
2.	Title of position
	Name
3.	Title of position
	Name
4.	Title of position
	Name
etc.	Title of position
	Name

-- Note --

All titles of positions will be as listed in Section 6 (Employer's Requirements).

Form PER – 2: Resume of Proposed Personnel

The Bidder shall provide all the information requested below. Use one form for each position.

Position		
Personnel information	Full Legal Name	Date of Birth
	Known as	Place of Birth
	Nationality	Citizenship
	Type of government ID	ID number
	Attach a copy of ID to this form	
	Professional qualifications	
Present employment	Name of employer	
	Address of employer	
	Telephone	Contact (manager/personnel officer)
	Fax	E-mail
	Job title	Years with present employer

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	To	Company/Project/Position/Relevant Technical and Management Experience

Equipment

Form EQU: Equipment

The Bidder shall provide adequate information and details to demonstrate clearly that it has the capability to meet the equipment requirements indicated in Section 6 (Employer's Requirements), using the Forms below. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

Item of Equipment		
Equipment Information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current Status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment	
	☐ Owned ☐ Rented ☐ Leased ☐ Specially manufactured	

Omit the following information for equipment owned by the Bidder.

Owner	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental/lease/manufacture agreements specific to the project	

Proposed Subcontractors and/or Manufacturers for Major Items of Plant and Services

The following Subcontractors and/or Manufacturers are proposed for carrying out the item of the facilities indicated based on Criterion 2.5 of Section 3 (Evaluation and Qualification Criteria). Bidders are free to propose more than one for each item.

Major Items of Plant and Services	Proposed Subcontractors or Manufacturers	Nationality

Manufacturer's Authorization

Date: *[insert date (as day, month and year) of bid submission]*

OCB No.: *[insert number of bidding process]*

To: *[insert complete name of the Employer]*

WHEREAS

We *[insert complete name of the manufacturer or manufacturer's authorized agent]*, who are official manufacturers or agent authorized by the Manufacturer of *[insert type of goods manufactured]*, having factories at *[insert full address of manufacturer's factories]*, do hereby authorize *[insert complete name of the Bidder]* to submit a bid the purpose of which is to provide the following goods, manufactured by us *[insert name and/or brief description of the goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 27 of the General Conditions of Contract, with respect to the goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the manufacturer]*

Title: *[insert title]*

Duly authorized to sign this Authorization on behalf of *[insert complete name of the manufacturer]*

Dated on _____ day of _____, _____ *[insert date of signing]*

-- Note --

The bidder shall require the manufacturer to fill out this form in accordance with the instructions indicated. This letter of authorization should be signed by a person with the proper authority to sign documents that are binding on the manufacturer. The bidder shall include it in its bid, if so indicated in the BDS.

Affiliate Company Guarantee

Name of Contract/Contract No.: _____

Name and address of Employer: _____

_____ [together with successors and assigns].

We have been informed that [name of Contractor] (hereinafter called the "Contractor") is submitting an offer for the above-referenced Contract in response to your invitation, and that the conditions of your invitation require its offer to be supported by an affiliate company guarantee.

In consideration of you, the Employer, awarding the Contract to the Contractor, we [name of affiliated company] irrevocably and unconditionally guarantee to you, as a primary obligation, that (i) throughout the duration of the Contract, we will make available to the Contractor our financial, technical capacity, expertise and resources required for the Contractor's satisfactory performance of the Contract; and (ii) we are fully committed, along with the Contractor, to ensuring a satisfactory performance of the Contract.

If the Contractor fails to so perform its obligations and liabilities and comply with the Contract, we will indemnify the Employer against and from all damages, losses and expenses (including legal fees and costs) which arise from any such failure for which the Contractor is liable to the Employer under the Contract.

This guarantee shall come into full force and effect when the Contract comes into full force and effect. If the Contract does not come into full force and effect within one year of the date of this guarantee, or if you demonstrate that you do not intend to enter into the Contract with the Contractor, this guarantee shall be void and ineffective. This guarantee shall come into full force and effect until all the Contractor's obligations and liabilities under the Contract have been discharged, when this guarantee shall expire and shall be returned to us, and our liability under it shall be discharged absolutely.

This guarantee shall be supplemental to the Contract as amended or varied by the Employer and the Contractor from time to time. We hereby authorize them to agree on any such amendment or variation, the due performance of which and compliance with which by the Contractor are likewise guaranteed hereunder. Our obligations and liabilities under this guarantee shall not be discharged by any allowance of time or other indulgence whatsoever by the Employer to the Contractor, or by any variation or suspension of the works to be executed under the Contract, or by any amendments to the Contract or to the constitution of the Contractor or the Employer, or by any other matters, whether with or without our knowledge or consent.

This guarantee shall be governed by the law of the same country (or other jurisdiction) that governs the Contract and any dispute under this guarantee shall be finally settled under the [Rules or Arbitration provided in the Contract]. We confirm that the benefit of this guarantee may be assigned subject only to the provisions for assignment of the Contract.

Signed by: [signature] [name] [position in parent/subsidiary company]	Signed by: [signature] [name] [position in parent/subsidiary company]
---	---

Date:

-- Note --

If permitted in accordance with ITB 35.2 of the BDS, the Bidder shall provide the Affiliate Company Guarantee Form filled out and signed by each subsidiary, parent entity, or affiliate that the Bidder submits for consideration of the Employer in determining its qualifications.

Time Schedule

To be used by Bidder when alternative Time for Completion is invited in ITB 13.2.

Functional Guarantee of the Proposed Facilities

Form FUNC

The Bidder shall copy on the left column of the table below, the identification of each functional guarantee required in the Specification and stated by the Employer in EQC 1.3.4 of Section 3, Evaluation and Qualification Criteria, and on the right column, provide the corresponding value for each functional guarantee of the proposed plant and equipment.

Functional Guarantee <i>[as required by the Employer in Section 3]</i>	Functional Guarantee Value Offered by the Bidder
1.	
2.	
3.	
...	

Bidder's Qualification

To establish its qualifications to perform the contract in accordance with Section 3 (Evaluation and Qualification Criteria) the Bidder shall provide the following information requested in the corresponding Information Sheets.

Form ELI - 1: Bidder's Information Sheet

Bidder's Information			
		Information of the Bidder	If the Bidder is a subsidiary or branch, information of any parent company/companies
Names	Full legal name(s)		
	Full trading name(s) (if any)		
Addresses	Registered address(es)		
	Trading address(es)		
	Postal address(es) (if different from trading address)		
Type of organization			
Country of constitution/incorporation/registration			
Year of constitution/incorporation/registration			
Corporate or registration number			
In case of a Joint Venture, legal name of each partner			
Bidder's authorized representative (name, address, telephone number(s), fax number(s), e-mail address)			

Attached are copies of the following documents:

- ☐ 1. In case of a single entity, articles of incorporation or constitution and company incorporation/registration of the legal entity named above, in accordance with ITB 4.1 and ITB 4.2.
- ☐ 2. Authorization to represent the firm or Joint Venture named above, in accordance with ITB 22.2.
- ☐ 3. In case of a Joint Venture, a letter of intent to form a Joint Venture or Joint Venture agreement, in accordance with ITB 4.1.
- ☐ 4. In case of a government-owned enterprise, any additional documents not covered under 1 above required to comply with ITB 4.5.

Form ELI - 2: Joint Venture Information Sheet

Each partner of the Joint Venture and Specialist Subcontractor must fill out this form separately.

Joint Venture / Specialist Subcontractor Information			
Bidder's legal name			
		Information of Joint Venture Partner or Specialist Subcontractor	If any Joint Venture Partner or Specialist Subcontractor is a subsidiary or branch, information of any parent company/companies
Names	Full Legal name(s)		
	Full trading name(s) (if any)		
Addresses	Registered address(es)		
	Trading address (es)		
	Postal address (es) (if different from trading address)		
Type of organization			
Country of constitution/ incorporation/ registration			
Year of constitution/ incorporation/ registration			
Corporate or registration number			
Joint Venture Partner's or Specialist Subcontractor's authorized representative information (name, address, telephone number(s), fax number(s), e-mail address)			
Attached are copies of the following documents: ☐ 1. Articles of incorporation or constitution and company incorporation/registration of the legal entity named above, in accordance with ITB 4.1 and ITB 4.2. ☐ 2. Authorization to represent the firm named above, in accordance with ITB 22.2. ☐ 3. In the case of a government-owned enterprise, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB 4.5.			

Subcontractors are those listed in Technical Proposal – Proposed Subcontractors and/or Manufacturers for Major Items of Plant and Services

Form CON – 1: Historical Contract Nonperformance

Each Bidder must fill out this form in accordance with Criteria 2.2.1 and 2.2.3 of Section 3 (Evaluation and Qualification Criteria) to describe any history of nonperforming contracts and pending litigation or arbitration formally commenced against it.

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name:

Joint Venture Partner: _____

Table 1: History of Nonperforming Contracts

Choose one of the following:

- ☐ No nonperforming contracts.
- ☐ Below is a description of nonperforming contracts involving the Bidder (or each Joint Venture partner if Bidder is a Joint Venture).

Year	Description	Amount of Nonperformed Portion of Contract (\$ equivalent)	Total Contract Amount (\$ equivalent)
<i>[insert year]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for nonperformance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>	<i>[insert amount]</i>

Table 2: Pending Litigation and Arbitration

Choose one of the following:

- ☐ No pending litigation, arbitration or any other material events impacting the net worth and/or liquidity of the bidder.
- ☐ Below is a description of all pending litigation, arbitration involving the Bidder or any other material events impacting the net worth and/or liquidity of the bidder (or each Joint Venture partner if Bidder is a Joint Venture).

Year	Matter in Dispute	Value of Pending Claim (\$ Equivalent)	Value of Pending Claim as a Percentage of Net Worth
<i>[insert year]</i>	Contract Identification, as applicable: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer, parties involved in the material events impacting the net worth and/or liquidity of the bidder: <i>[insert full name]</i> Address of Employer, parties involved in the material events impacting the net worth and/or liquidity of the bidder: <i>[insert street/city/country]</i> Matter of Dispute: <i>[indicate full description of dispute]</i> Party who initiated the dispute: <i>[indicate "Employer" or "Contractor"]</i> Status: <i>[indicate status of dispute]</i>	<i>[insert amount]</i>	<i>[insert amount]</i>

- Note -

Table 2 of this form shall only be included if Criterion 2.2.3 of Section 3 (Evaluation and Qualification Criteria) is applicable.

Form CON – 2: EHS Performance Declaration

Each Bidder must fill out this form in accordance with Criterion 2.2.4 of Section 3 (Evaluation and Qualification Criteria).

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name:

Joint Venture Partner: _____

In case of a Specialist Subcontractors, each Specialist Subcontractor must fill out this form and provide the Specialist Subcontractor's name:

Specialist Subcontractor: _____

Environmental and Health and Safety Performance Declaration in accordance with Section 3 (Evaluation and Qualification Criteria)			
☐ No suspension or termination of contract: An employer has not suspended or terminated a contract and/or called the performance security for a contract for reasons related to Environmental or Health and Safety performance since the date specified in Criterion 2.5 of Section 3 (Evaluation and Qualification Criteria).			
☐ Declaration of suspension or termination of contract: The following contract(s) has/have been suspended or terminated and/or Performance Security called by an employer(s) for reasons related to Environmental or Health and Safety performance since the date specified in Criterion 2.5 of Section 3 (Evaluation and Qualification Criteria). Details are described below:			
☐ Declaration of request for replacement of Key Environment, Health and Safety Personnel: The following contract(s) has/have experienced a request by the Employer to replace Environmental, Health and Safety Personnel for reasons related to Environmental or Health and Safety performance since the date specified in Criterion 2.5 of Section 3 (Evaluation and Qualification Criteria). Details are described below:			
☐ Declaration of past fatality resulted from EHS issues on site: The following contract(s) has/have experienced a fatality resulted from EHS issues on site since the date specified in Criterion 2.5 of Section 3 (Evaluation and Qualification Criteria). Details are described below:			
Year	Suspended or terminated portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and US\$ equivalent)
[insert year]	[insert amount and percentage]	Contract Identification: [indicate complete contract name/ number, and any other identification] Name of Employer: [insert full name] Address of Employer: [insert street/city/country] Reason(s) for suspension or termination: [indicate main reason(s) e.g., discharge over environmental limit, workers did not have required health and safety permits to undertake high risk work, work carried out was not adhered to approved construction methodology and quality control plan]	[insert amount]
[insert year]	[insert amount and percentage]	Contract Identification: [indicate complete contract name/ number, and any other identification]	[insert amount]

		Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s)]</i>	
...	...	<i>[list all applicable contracts]</i>	...
Performance Security called by an employer(s) for reasons related to EHS performance			
Year	Contract Identification	Total Contract Amount (current value, currency, exchange rate and US\$ equivalent)	
<i>[insert year]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s) e.g. discharge over environmental limit, workers did not have required health and safety permits to undertake high risk work, work carried out was not adhered to approved construction methodology and quality control plan]</i>	<i>[insert amount]</i>	
Key EHS personnel replacement requested by the Employer for reasons related to EHS performance			
Year	Contract Identification and Reasons	Personnel replacement action and results	
<i>[insert year]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for requesting for replacement: <i>[indicate main reason(s)]</i>	<i>[insert description]</i>	
Fatality due to EHS issues on Site			
Year	Contract Identification	Follow-on actions taken by the contractor	
<i>[insert year]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Description of fatality event: Causation:	<i>[insert description]</i>	

Form FIN - 1: Historical Financial Performance

Each Bidder must fill out this form.

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name:

Joint Venture Partner: _____

Financial Data for Previous ____ Years [PKR or US\$ Equivalent]		
Year 1:	Year 2:	Year __:

Information from Balance Sheet

Total Assets (TA)			
Total Liabilities (TL)			
Net Worth = TA-TL			
Current Assets (CA)			
Current Liabilities (CL)			
Working Capital = CA - CL			

Most Recent Working Capital		To be obtained for most recent year and carried forward to FIN - 3 Line 1; in case of Joint Ventures, to the corresponding Joint Venture Partner's FIN – 3.
------------------------------------	--	---

Information from Income Statement

Total Revenues			
Profits Before Taxes			
Profits After Taxes			

☐ Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the last 03 years, as indicated above, complying with the following conditions.

1. Unless otherwise required by Section 3 of the Bidding Documents, all such documents reflect the standalone financial situation of the legal entity or entities comprising the Bidder and not the Bidder's parent companies, subsidiaries or affiliates.
2. Historical financial statements must be audited by a certified accountant.
3. Historical financial statements must be complete, including all notes to the financial statements.
4. Historical financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

Form FIN - 2: Average Annual Turnover

Each Bidder must fill out this form.

The information supplied should be the Annual Turnover of the Bidder or each partner of a Joint Venture for the total certified payments received from the clients for contracts in progress or completed, converted to US dollars at the rate of exchange at the end of the period reported.

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name:

Joint Venture Partner: _____

Annual Turnover Data for the Last Three (03) Years			
Year	Amount Currency	Exchange Rate	PKR or US\$ Equivalent
Average Annual Turnover			

Form FIN – 3: Availability of Financial Resources

Bidders must demonstrate sufficient financial resources, usually comprising of Working Capital supplemented by credit line statements or overdraft facilities and others to meet the Bidder's financial requirements for

- (a) its current contract commitments, and
- (b) the subject contract.

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name:

Joint Venture Partner: _____

Financial Resources		
No.	Source of financing	Amount (PKR or US \$ equivalent)
1	Working Capital (to be taken from FIN - 1)	
2	Credit Line ⁶	
3	Other Financial Resources	
Total Available Financial Resources		

^a To be substantiated by a letter from the bank issuing the line of credit.

⁶ To be substantiated by a letter from the bank issuing the line of credit. (i) address to the Client; (ii) shall be issued within last 03 month; (iv) it should be unconditional; and (v) credit line must be valid and available (specifying the remaining balance of the credit) to the bidder for the complete Time for Completion of the Project).

Form FIN-4: Financial Requirements for Current Contract Commitments

Bidders (or each Joint Venture partner) should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name:

Joint Venture Partner: _____

Current Contract Commitments						
No.	Name of Contract	Employer's Contact (Address, Tel, Fax)	Contract Completion Date	Outstanding Contract Value (X) ^a	Remaining Contract Period in months (Y) ^b	Monthly Financial Resources Requirement (X / Y)
1						
2						
3						
4						
Total Monthly Financial Requirement for Current Contract Commitments						PKR or US\$

^a Remaining outstanding contract values to be calculated from 28 days prior to the bid submission deadline (PKR or US\$ equivalent based on the foreign exchange rate as of the same date).

^b Remaining contract period to be calculated from 28 days prior to bid submission deadline.

Form FIN - 5: Self-Assessment Tool for Bidder's Compliance to Financial Resources (Criterion 2.3.3 of Section 3)

This form requires the same information submitted in Forms FIN - 3 and FIN - 4. All conditions of "Available Financial Resources Net of CCC $\geq$ Requirement for the Subject Contract" must be satisfied to qualify.

Form FIN - 5A: For Single Entities

For Single Entities: (A)	Total Available Financial Resources from FIN – 3 (B)	Total Monthly Financial Requirement for Current Contract Commitments (CCC) from FIN – 4 (C)	Available Financial Resources Net of CCC $D = (B - C)$	Requirement for the Subject Contract (E)	Results: Yes or No [D must be greater than or equal to E] (F)
_____ (Name of Bidder)					

Form FIN - 5B: For Joint Ventures

For Joint Ventures: (A)	Total Available Financial Resources from FIN – 3 (B)	Total Monthly Financial Requirement for Current Contract Commitments (CCC) from FIN – 4 (C)	Available Financial Resources Net of CCC $D = (B - C)$	Requirement for the Subject Contract (E)	Results: Yes or No [D must be greater than or equal to E] (F)
One Partner:					
_____ (Name of Partner)					
Each Partner:					
_____ (Name of Partner 1)					
_____ (Name of Partner 2)					
_____ (Name of Partner 3)					
All partners combined	$\Sigma D =$ Sum of available financial resources net of current contract commitments for all partners		$\Sigma D =$ _____		

Form FIN - 5 is made available for use by the bidder as a self-assessment tool, and by the Employer as an evaluation work sheet, to determine compliance with the financial resources requirement as stated in 2.3.3. Failure to submit Form FIN - 5 by the Bidder shall not lead to bid rejection.

Form EXP – 1: Contracts of Similar Size and Nature

Fill out one (1) form per contract. Each contract shall be supported by documents such as Signed Contract Agreement, Taking-Over Certificate, Contract Completion Certificate or Performance Certificate.

The exchange rate to be used to calculate the value of the contract for conversion to a specific currency shall be the selling rate of the Borrower's Central bank on the date of the contract.

Contract of Similar Size and Nature		
Contract No of	Contract Identification	
Award Date		Completion Date
Role in Contract	☐ Contractor ☐ Management Contractor ☐ Subcontractor	
Total Contract Amount	PKR or US\$ Equivalent	
If partner in a Joint Venture or Subcontractor, specify participation of total contract amount	Percent of Total	Amount
Employer's name Address Telephone number Fax number E-mail		
Description of the Similarity in Accordance with Criterion 2.4.1 of Section 3 (Evaluation and Qualification Criteria)		

Form EXP - 2: Experience in Key Activities

Fill out one (1) form per contract. Each contract shall be supported by documents such as Signed Contract Agreement, Taking-Over Certificate or Contract Completion Certificate.

Each Bidder must fill out this form.

If complied by Specialist Subcontractor, each Specialist Subcontractor must fill out this form and provide the Specialist Subcontractor's name:

Specialist Subcontractor: _____

Contract with Similar Key Activities		
Contract No of	Contract Identification	
Award Date		Completion Date
Role in Contract	☐ Contractor ☐ Management Contractor ☐ Subcontractor	
Total Contract Amount	PKR or US\$ Equivalent	
If partner in a Joint Venture or Subcontractor, specify participation of total contract amount	Percent of Total	Amount
Employer's name Address Telephone number Fax number E-mail		
Description of the Key Activities in Accordance with Criterion 2.4.2 of Section 3 (Evaluation and Qualification Criteria)		

Form EXP – 3: Specific Experience in Managing Environmental, Health and Safety Aspects

Fill out one form per contract.

Each Bidder must fill out this form.

In case of a Joint Venture, each Joint Venture Partner must fill out this form separately and provide the Joint Venture Partner's name:

Joint Venture Partner: _____

1. Key Requirement no 1 in accordance with Criterion 2.4.3 of Section 3: _____

Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Partner In JV ☐	Management Contractor ☐	Subcontractor ☐
Total Contract Amount			US\$	
Details of relevant experience				

2. Key Requirement no 2 in accordance with Criterion 2.4.3 of Section 3: _____

3. Key Requirement no 3 in accordance with Criterion 2.4.3 of Section 3: _____

Form EXP – 4: Environmental, Health and Safety Certification

Please provide the following information:

Availability of the following valid ISO certification or internationally - recognized equivalent (equivalency to be demonstrated by the Bidder), and applicable to the worksite:

[Select the required certifications from below^a]

- Quality management certificate ISO 9001
- Environmental management certificate ISO 14001
- Health and Safety management certificate ISO 45001

^a Depending on the environmental, health and safety issues of the worksite and the type of competition planned (national or international), the list of required certifications may be restricted to those corresponding to the main issue of the worksite management, or removed altogether.

Form EXP – 5: Environmental, Health and Safety Documentation

Please provide the following information:

Availability of in-house policies and procedures acceptable to the Employer for EHS management:

1. Existence of an Ethics Charter.
2. Existence of a system for monitoring compliance with EHS commitments for the Bidder's Subcontractors and all its partners.
3. Existence of official company procedures for the management of the following relevant points:

[Select 3-5 that apply for the worksite from below options- as per Section 2]

- EHS resources and facilities and EHS monitoring system;
- Project Areas management information (base camps, quarries, burrow pits, storage areas);
- Health and Safety on worksites policy and related guidance;
- Local recruitment and EHS trainings of local staff/subcontractors/local partners;
- Community stakeholder engagement practice;
- Traffic management practice;
- Hazardous products management practice;
- Waste management practice;
- Protection of water resources;
- Biodiversity protection practices;
- Site rehabilitation and revegetation practice;
- Local cultural heritage protection practice;
- Erosion and sedimentation practices;
- Control of infectious and communicable diseases (HIV/AIDS, malaria, COVID-19 etc)

Form EXP – 6: Environmental, Health and Safety Dedicated Personnel

Please provide CV [Form PER-2] of the in-house personnel of the main contractor/ Joint Venture partners for the EHS positions specified in Section 6 (Employers Requirements) :

[For example]

-Environmental Specialist

-Health and Safety Specialist

Form EXP - 7: Subcontractors

Fill out one (1) form per contract.

Contract for the Major Items		
Contract No of	Contract Identification	
Award Date		Completion Date
Role in Contract	☐ Contractor ☐ Management Contractor ☐ Subcontractor	
Total Contract Amount	PKR or US\$ Equivalent	
If partner in a Joint Venture or Subcontractor, specify participation of total contract amount	Percent of Total	Amount
Employer's name Address Telephone number Fax number E-mail		
Description of the Major Items in Accordance with Criterion 2.5 of Section 3 (Evaluation and Qualification Criteria)		

Section 5: Eligible Countries

This section contains the list of eligible countries.

- | | |
|--------------------------------------|---|
| 1. Afghanistan | 35. Micronesia, Federal States of |
| 2. Armenia | 36. Mongolia |
| 3. Australia | 37. Myanmar |
| 4. Austria | 38. Nauru, Republic of |
| 5. Azerbaijan | 39. Nepal |
| 6. Bangladesh | 40. Netherlands |
| 7. Belgium | 41. New Zealand |
| 8. Bhutan | 42. Niue |
| 9. Brunei Darussalam | 43. Norway |
| 10. Cambodia | 44. Pakistan |
| 11. Canada | 45. Palau, Republic of |
| 12. China, People's Republic of | 46. Papua New Guinea |
| 13. Cook Islands | 47. Philippines |
| 14. Denmark | 48. Portugal |
| 15. Fiji Islands, Republic of | 49. Samoa |
| 16. Finland | 50. Singapore |
| 17. France | 51. Solomon Islands |
| 18. Georgia | 52. Spain |
| 19. Germany | 53. Sri Lanka |
| 20. Hong Kong, China | 54. Sweden |
| 21. India | 55. Switzerland |
| 22. Indonesia | 56. Tajikistan |
| 23. Ireland | 57. Taipei, China |
| 24. Italy | 58. Thailand |
| 25. Japan | 59. Timor-Leste, Democratic Republic of |
| 26. Kazakhstan | 60. Tonga |
| 27. Kiribati | 61. Türkiye |
| 28. Korea, Republic of | 62. Turkmenistan |
| 29. Kyrgyz, Republic of | 63. Tuvalu |
| 30. Lao People's Democratic Republic | 64. United Kingdom |
| 31. Luxembourg | 65. United States of America |
| 32. Malaysia | 66. Uzbekistan |
| 33. Maldives | 67. Vanuatu |
| 34. Marshall Islands | 68. Viet Nam |

Note: The list of current member countries is also available at <http://www.adb.org/about/members>

Section 6: Employer's Requirements

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1. SCOPE OF SUPPLY OF PLANT AND SERVICES

1.1 PROJECT DESCRIPTION

The Monsoon/ Floods 2022 in Pakistan, particularly in Sindh had devastation resulting in loss of human lives as well as infrastructural loss in all sectors. The Education sector in Sindh was also badly affected, damaging the schools either partially or fully.

The Government of Sindh has received emergency assistance loan (4409 PAK) from the Asian Development Bank (ADB) for the additional financing of the Sindh Secondary Education Improvement Project in response to the Government of Pakistan's request to the Asian Development Bank (ADB) to support its post- flood recovery processes. The project aims to enhance the quality, accessibility, and gender responsiveness of the Secondary Education System and Infrastructure in Sindh Province Pakistan. The project involves disaster / climate-resilient and gender-responsive designs and reconstruction of up to 722 flood-damaged schools in 15 most affected tehsils (an administrative subdivision of a district) are shown in figure 1.

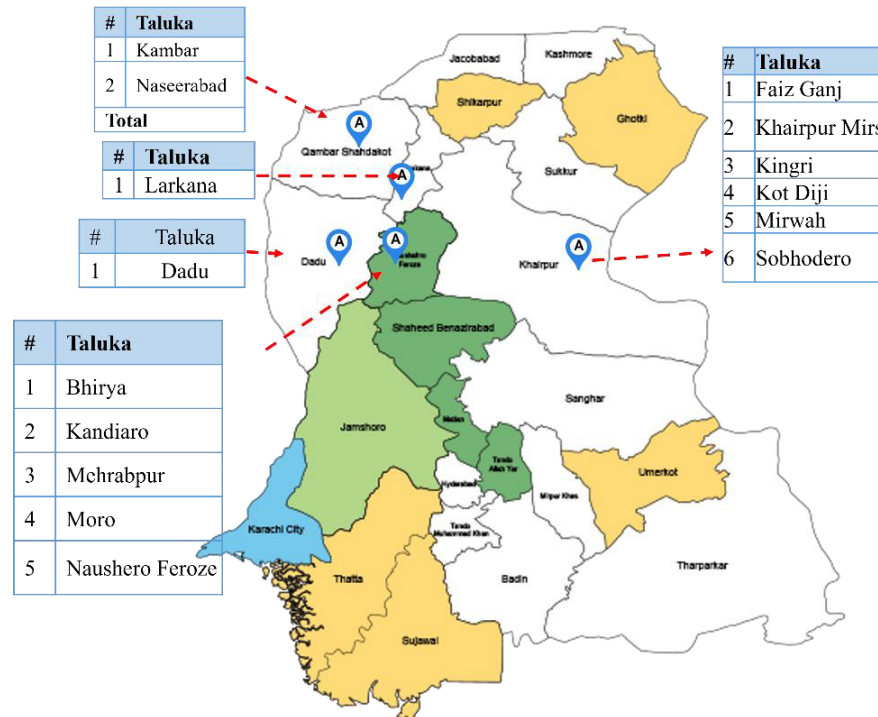


Figure 1 Locations of and Names of talukas

The School Education and Literacy Department (SELD), Government of Sindh is the executing agency (EA) who has setup a dedicated Project Implementation Unit (PIU). SELD is responsible for project execution, while the PIU is responsible for day-to-day project implementation. SELD, Government of Sindh through Project Implementation Unit (PIU), Sindh Secondary Education Improvement Project (SSEIP) has planned to reconstruct 722 schools on Light Gauge Steel Framing Structure technology, based upon prototypes modules which shall be replicated to all the school sites.

The Contract for **SELD/SSEIP-AF/CW-04: Package-4: Reconstruction of 101 Schools using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in District Naushero Feroze [02-Lots]:**

- a. **Lot-1:** Reconstruction of **55 Schools** using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in **Tehsil Moro, District Naushero Feroze** comprises of design, manufacture, supply and installation/ construction of the Works based on light gauge cold formed pre-engineered structure.
- b. **Lot-2:** Reconstruction of **46 Schools** using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in **Tehsil Naushero Feroze, District Naushero Feroze** comprises of design, manufacture, supply and installation/ construction of the Works based on light gauge cold formed pre-engineered structure and remedying of any defects therein and the provisions of all labor, materials, equipment, plant and everything whether of the temporary or permanent nature required in and for such execution, completion and remedying of defects so far as the necessity for providing the same is specified or can reasonably be inferred from the Contract.

The List of Schools with names, SEIMS codes, coordinates, levels, applicable school module and other details of each school is attached as **Appendix -B**.

1.2 SCOPE OF WORKS

1.2.1 General

- a. The Contractor shall design, procure the necessary equipment and materials, construct and hand over the building as described in the Contract. The Works described herein shall be performed by the Contractor under a lump-sum priced EPC contract, to complete the project.
- b. The Contractor shall be responsible for all aspects of design and construction of the Project in accordance with the design criteria and specific requirements elaborated herein, and in accordance with additional and supplementary design criteria and specifications prepared by the Contractor and accepted by the Employer.
- c. The Contractor shall provide all logistic, labor, plant, materials, supplies, documents, equipment, tools, temporary works and any other things, whether of temporary or

permanent nature, whether specifically mentioned or not, necessary to complete, test and remedy any defects. The Contractor shall be responsible to develop detailed design for construction, including detailed design criteria, detailed construction specifications and detailed construction drawings which shall be subject to review of the Employer Requirements and best international engineering practices. The final finished product must be of a very superior quality, A-Grade finishes, using materials accordingly.

- d. The Contractor's team shall liaise and coordinate with all concerned Authorities and shall be familiar with all local government laws and regulations. The scope of Services to be performed and successfully completed by the Contractor to the full satisfaction of the Employer and in accordance with the Contract shall include, but not limited to the phases as described herein:
- e. The Contractor shall carry out Master Planning, detailed design and drawings for architecture, structure, MEP, external development works including solar system, water treatment system and other required works and construction works of the schools in compliance with the Employer's requirements, design and constructions specifications. The design shall be disaster and climate resilient.
- f. All design works, calculations, documents, reports prepared by the Contractor shall be reviewed and approved by the Consultant before the start of the construction works by the Contractor. The prototypes plans/ modules for primary, elementary and secondary schools have been prepared by the Employer along with concept design of LGS structures. The Contractor shall develop its design and layout based on these modules for each school site.

The EPC Contractor shall perform but not limited to the following major phase-wise activities:

1.2.2 Design and Engineering Phase

The design phase shall include the following

- a. Collection of relevant data, Identification of requirements with all stakeholders (Employer, Consultant, Education Department, other Engineering & Line Departments etc.)
- b. Topographic survey
- c. Geotechnical investigation
- d. Environmental studies (REA, IEE)
- e. Social safeguard study
- f. Planning for HSE Implementation
- g. Preparation of Layout Plans and architectural details to suit site specific requirements including location, orientation, configuration, topography and land availability etc.

giving due consideration to acceptability by the local population, end user and other stakeholders.

- h. Architectural Planning and Design of all facilities.
- i. Design of foundations and pedestal including backfill.
- j. Structural Design of all proposed elements of super structure.
- k. MEP Design, internal electrification, water supply/plumbing based on principles of water conservation.
- l. Environmentally safe and sustainable grey and black water collection and disposal works sewerage including sumps, septic tanks, soakage pits etc.
- m. External infrastructure Design like
- n. Ground Development,
- o. External Electrification,
- p. Water Supply and Sewerage,
- q. Compound/ Boundary Wall, Gates,
- r. Hard And Soft Landscaping,
- s. Septic And Water Storage Tanks,
- t. Children Park etc.
- u. Design of Solar power including the supporting frame structure and capacities.
- v. The Contractor shall provide all design calculations, Drawings, documents, reports, routing, layout etc. to the Consultant for review and approval before start of the construction works.

1.3 Supply of Prefabricated structures

EPC contractor will fabricate/ source and transport and may source relevant materials where inhouse production is not feasible/ possible for pre-engineered structures

- w. Cold Formed light gauge steel framing
- x. Hot rolled steel framing where required
- y. Appropriate base material
- z. Insulation of walls and roofs
- aa. Roof and wall sheathing
- bb. Doors, Windows, hardware, louvers, ventilators, accessories and their framing
- cc. Exterior and interior Gutters

- dd. Electrical lighting, wiring and appliances (including fans, lights, switches, sockets, exhaust fans etc.)
- ee. Plumbing and related fixtures and faucets.
- ff. Provide internal and external Sanitation Facilities with provision of water including extraction, storage and circulation (piping etc.) and faucets.
- gg. Necessary architectural and structural provision for installation of drinking water supply and treatment works.
- hh. Solar panels and allied accessories (without backup) with adequate capacity including structural provisions
- ii. Sewage collection and disposal works.
- jj. Approved signs to identify structures
- kk. Packing, transportation, loading, unloading and measures to protect integrity from factory till site.
- ll. Local area network related infrastructure (including network cables and for schools with computer labs.

1.4 Construction Phase

The scope of work for construction phase shall include

- a. Effective project progress management including but not limited to planning, scheduling and tracking using the industry standard protocols and tools.
- b. Dismantling of existing damaged structures (sub & super structures) and rubble removal at environmentally, socially and culturally suitable locations.
- c. Survey, layout, site levelling, clearing, grubbing and all works related to site preparation works. Substructure works including excavation, dewatering (if applicable), foundations, backfilling, compaction and plinth works, termite proofing etc.
- d. Superstructure works frame erection, plumbing, insulations, cladding, electrification and all construction related works.
- e. Quality assurance as per internationally acceptable protocols.
- f. HSE management at sites as per ADB guidelines and internationally accepted protocols.
- g. Social safeguards and Environment management as per ADB guidelines at sites
- h. Provision of experienced, skilled, qualified and certified workforce in the required number for timely project delivery.

1.4.1 Exclusions

- a. Treatment/ supply and cooling of drinking water only as per site requirement and student population.
- b. Batteries and backup for solar system.
- c. Any kind of audio-visual monitoring equipment's, PABX and communication equipment.
- d. Furniture, lab equipment and teaching aids etc.

Note: All Pre-engineered Structure and materials to be supplied and/or utilized to install the Facilities shall be new, unused, of the most recent or current models and incorporate all recent improvements in design and materials considering flood and climate resilient technology.

1.5 PROJECT OBJECTIVES

- a. The project is aligned to provide quality education, inclusive and equitable quality education for all ensured.
- b. Flood-damaged schools along with infrastructure will be reconstructed with disaster and climate resilient and gender responsive designs to make the targeted schools functional for the benefit of the students of the area.
- c. The project will provide access to better education facilities, quality education, improved infrastructure in rain/ flood damaged schools. Furthermore, ignorance ratio will be reduced, economic activities will be generated and the living conditions of the people of the area concerned will be developed.
- d. The schools will have disaster and climate resilient designs. They integrate resilient materials and architectural elements which are robust and adapt to climatic changes.

2. SPECIFICATIONS

2.1 DESIGN PHILOSOPHY

The design shall include climate resilient and gender responsive features in the building to increase the adaptive capacity of the secondary education system in the face of disasters like the flooding event of 2022. The involved Districts are counted at high temperature areas and in the months of May, June and July, in which temperature is very high, sometimes up to 50 centigrade and it also continues up to August and September. The specifications laid down are the minimum requirements only.

The adequacy, strength and serviceability of the product shall be ensured by proper design and adequate selection of the materials as per social and cultural norms of the regions by the Contractor. The design shall integrate sustainable, inclusive, and climate-resilient design principles into the reconstruction of schools. Key strategies include:

- a. **Durable Materials:** Utilize materials resistant to erosion, wear and tear, corrosion and temperature effect to ensure longevity and resilience. Necessary tests be performed to ensure minimum set durability requirements as section 2.3.
- b. **Low Maintenance:** Design should explicitly state the durability conditions to be met during construction phase such that proposed service life of the structures is attained with minimum maintenance cost.
- c. **Fabrication:** Metal sections for LGS construction be fabricated on Automated machines specialized for fabrication of LGS sections. The erection and assembly of panels be carried out in a controlled environment necessary using set down expertise as per applicable standards and procedures.
- d. **Locally Sourced Materials:** The selection of materials be done such that it should be locally available of appropriate quality including Cement, sand, aggregates and other construction materials but excluding light gauge steel super structures and specialized fittings fixtures etc for which the guidelines are defined later),
- e. **Vegetation for Climate Regulation:** Plant trees around the campus to regulate surface temperatures and provide flood protection. Consultant may propose the type of trees and plantation etc. which meets the local climatic standards. The requirements of solar panels may also be considered while planning vegetation.
- f. **Pavement:** Specialized types of pavement designs be considered to ensure the durability and sustainability of the infrastructure.
- g. **Extensive Drainage Systems:** Implement comprehensive drainage systems to efficiently manage and direct floodwaters till their disposal. A consolidated surveys be conducted for possible disposal of drainage in nearby water bodies as well with sufficient capacity to cater for design precipitation

- h. **Floodwater Redirection:** Construct drains and ditches around the campus to redirect and manage floodwaters. The ditches/ dikes be designed in a way such that it should provide maximum advantage to the nearby population.
- i. **Rooftops:** Pitched roofs shall be adopted to ensure that proper drainage with necessary protections to avoid ponding, stagnation and seepage and rust built-up. The roof should be designed for maximum utilization of solar energy while considering the design and economy constraints.
- j. **Elevated Structures:** Construct buildings with elevated foundations to mitigate flood risk and enhance structural integrity. The type of footing be selected such that it's cost effective and should meet the local durability requirements in case of wet and dry season. The elevation of the structures be defined to make sure that design is viable from socio-economic perspective as well.
- k. **Substructure Design:** Sub structure/foundation will be designed on conventional reinforced concrete isolated or strip footings using durable and local soil conditions complaint material selections. The Design of footings be considered in parallel ways such that it is equally cost effective as well sustainable.
- l. **Architectural Layouts:** The proposed architectural plans be ideally planned to be symmetrical at maximum locations. This will facilitate the mass production of LGS panels and development of better-quality control parameters. The Contractor shall ensure that the completed facility has all adequate services in accordance with the relevant Standards to function as a school building.
- m. **Elevation:** The elevation should be as close as to provided 3D elevation as much as it is culturally, economically and structurally viable.
- n. **Superstructure Design:** The Contractor shall design the schools' buildings considering sustainable and resilient Light Gauge Steel (LGS) structure that meets the time sensitive need of the project and mitigates the impact of climate change (as given in Climate Change Risk Assessment Framework of the project) including extreme weather events, rising temperatures and changing precipitation patterns.
- o. **WASH:** The Contractor shall incorporate appropriate elements such as Water, Sanitation and Hygiene promotion (WASH) etc., including gender sensitivity.
- p. **Rapid Environmental Assessment:** The Contractor shall conduct Rapid Environmental Assessment (REA) to assess the potential environmental impacts for the project and prepare IEE and Environmental Management Plan – EMP as required.
- q. **Social Safeguards & HSE:** The Contractor shall perform social and environmental safeguards including Health, Safety and Environment - HSE measures in accordance with ADB policy and local regulations.
- r. **Gender Inclusivity:** Gender sensitivity is essential to ensure that the needs of all students are met equitably. The assessment should identify and address gender-specific needs, such as ensuring separate and safe sanitation facilities for boys and

girls and providing facilities for menstrual hygiene management. It is vital to consider safety, privacy, and accessibility to ensure that all students, including those with disabilities, can use WASH facilities comfortably. Recommendations should include inclusive design features and policies that promote gender equality and safeguard the rights of all students.

The proposed plans are attached with this document for reference and Designers will submit the proposed plans in similar lines while ensuring the cost effectiveness and sustainability of the standards and without compromising on the functionality of the school.

2.2 REFERENCE CODES

Except as otherwise provided by these specifications, all materials, plant fabrication and testing thereof shall conform to the latest applicable standards and specifications. Copies of these standards and specifications may be purchased from the indicated agencies which publish them.

- a. National Building Code of Pakistan 2021
- b. Building Code of Pakistan Fire Safety Provision 2016
- c. ASTM A780 - Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings; 2000.
- d. ASTM A36/A36M - Standard Specification for Carbon Structural Steel for use in construction of buildings, and general structural purposes.
- e. ASTM A572/A572M - Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel for use in welded, riveted, or bolted construction.
- f. ASTM A992/A992M - Standard Specification for Structural Steel Shapes primarily used in building framing.
- g. ASTM A501 - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing used in structural applications such as buildings.
- h. ASTM A500/A500M Grade A or better - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing used in construction for structural purposes.
- i. ASTM A653/A653M SS 50 Class 1 or better - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process, used for structural and miscellaneous steel applications.
- j. ASTM A1011/A1011M - Standard Specification for Steel, Sheet, and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, used for general structural and miscellaneous steel applications.

- k. ASTM A1003/A1003M Structural Grade, Type H, Grade 50 or better - Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members, used in construction for structural framing.
- l. ASTM B633 - Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel.
- m. ASTM C1513 - Standard Specification for Steel Tapping Screws for Cold-Formed Steel Framing Connections.
- n. ASTM C1007 - Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories.
- o. AISI – Standard for Cold-Formed Steel Framing General Provisions.
- p. AISI S240 - Specification for the Design of Cold-Formed Steel Structural Framing; 2015
- q. ASTM C1186 - Standard specifications for flat non-asbestos fiber cement sheets

If the Contractor, at any time and for any reason, wishes to deviate from the above standards or desires to use material or plant not covered by the above standards, he shall state the exact nature of the changes and shall submit complete specifications of the materials and plants to the consultant for approval.

2.3 Quality Health, Safety and Environment

2.3.1 Quality Assurance

The Contractor shall implement a comprehensive quality control program to ensure construction adheres to specifications and relevant codes. This should include:

- a. Appointing qualified quality control personnel to oversee construction activities.
- b. Regular inspections of materials, workmanship, and compliance with approved plans.
- c. Destructive and non-destructive testing of materials (as required) to verify quality.
- d. Maintaining detailed documentation of inspections, test results, and corrective actions taken.

2.3.2 Social Safeguards

- a. The Contractor shall ensure safe working conditions for construction workers by:
- b. Providing personal protective equipment (PPE) like helmets, safety glasses, and safety boots.
- c. Implementing safety protocols to prevent accidents and injuries.
- d. Conducting regular safety training for workers.
- e. Compliance with labor laws and regulations, including:

- f. Minimum wage requirements.
- g. Working hours
- h. Overtime pays regulations.
- i. Provision of basic amenities like clean drinking water and sanitation facilities at the construction site.
- j. Use of fair labor practices, avoiding child labor or unfair treatment of workers.

Grievance redressal mechanism for workers to report any issues or concerns

2.3.3 Gender Responsiveness

The Contractor will perform the following functions, duties, and tasks:

- a. Conduct community consultations with parents, students, and other community members of project districts (with at least 50% female participation) on school design and construction
- b. Design campaign program and develop key awareness messages on the value of sending girls to school, including information on how to access the stipend provided by the Government of Sindh to households for sending their girls to school.
- c. Organize and conduct at least 2 public campaign activities in each project district to sensitize parents and the community on the value of education for girls and the disadvantages of practices such as early marriages that keep girls from going to school
- d. Collect sex-disaggregated data to monitor and report progress in achieving targets in the Gender Action Plan (GAP).
- e. Ensure the timely implementation of the GAP, monitor the achievements of gender targets and regularly report on its implementation.

2.3.4 Environmental Considerations

Important environmental considerations for contractors are as follows

- a. Minimize construction waste and implement proper waste disposal methods:
- b. Where noted on the purchase requisition, design shall include measures for reducing energy usage when the building is unoccupied. This should include automatically extinguishing interior lights, as well as optimizing fresh air intake and energy requirements
- c. Segregate waste materials (e.g., wood, metal, concrete) for recycling or proper disposal at designated landfills.
- d. Minimize packaging waste by encouraging suppliers to use reusable packaging materials.
- e. Implement rainwater harvesting for construction activities like dust suppression or concrete curing (where feasible).

- f. Use water-efficient practices like fixing leaky faucets and hoses on the construction site.
- g. Minimize site clearing and disruption to the natural environment. Transplant existing trees or incorporate them into the landscaping design where possible.
- h. The Contractor is fully responsible for the day-to-day management on waste collection and disposal.
- i. The Contractor shall take all reasonable precautions to avoid causing a nuisance with dust, noise or vibrations arising from his operations

2.4 ARCHITECTURAL DESIGN

The Contractor shall incorporate the following aspects and adhere to the outlined functional specifications and employer's requirements to ensure design, fabrication, supply and construction of high-quality, sustainable, and functional school buildings that effectively cater to the educational needs of students across Sindh, Pakistan.

- a. The proposed architectural plans should ideally be based on L type or U Type structural system with open lawns. A front verandah be constructed alongside the classrooms and care must be exercised to face the buildings towards the south side.
- b. Location of the windows be planned such that in monsoon, the oceanic winds are well received for circulation inside the building. Site selection and observation of skewed patterns of local trees would certainly assist in establishing such parameters.
- c. Toilets be planned separately for boys and girls. Keeping in view the gender sensitivity of the areas, the academic blocks for boys and girls of middle and secondary level be planned separately with separate entry/ exits. Toilets be planned outside the building with separate water tanks and dedicated sewerage disposal systems.
- d. The maximum weight of the parts of the buildings shall be designed to assemble by manpower only and shall light enough to be easily handled by the local labor. The constituent parts of the structural system be machine cut and assembled in a way such that quality control is well ensured. Preferably, the contractor should set up a warehouse in the vicinity from where a good number of sites could be accessed. The discrete elements be assembled to form discrete structural systems and these structural systems to be hauled to the site for installation and erection only.
- e. The recommended type of structural system for the schools is Light Gauge Coated Steel Sections as per standards of suitable structural grades-based design requirements, economy and local availability. The contractor should provide the design such that it suits capacity development at local levels and import of the items to be discouraged.
- f. Framing members should be cut using sawing, abrasive cutting, shearing, plasma cutting, or other methods approved by the Employer/Consultant. Holes in the webs of

framing members (e.g., knockouts) must conform to an approved design or design standards.

- g. The design shall be flood and climate resistant, disable friendly with provisions of ramps, toilets etc. to the standard requirements. Care must be exercised to ensure that gender sensitivity is not be compromised.
- h. Secure space and provisions for monitoring the school premises and storing security equipment. Preferably this room be located near the entry/ exit of the school premises.
- i. Panels should be in one continuous length from the base to the building eaves. The length of wall panels above and below windows should follow the drawings provided. Wall panels must be attached to cold-formed steel members using self-drilling screws and designed to self-drain to the exterior.
- j. Trapezoidal galvanized steel sheet shall be used for the roof covering. Other better alternatives duly supported by technical data and design calculations may also be acceptable
- k. Bolts should comply with turn of nut type such that once tightened, they should not be easily loosened unless worked with specialized tools.
- l. Natural ventilation through windows and clerestories (where applicable) to promote air circulation and minimize reliance on mechanical ventilation.
- m. The access stairs for first floor shall be provided, the stairwell can be hot rolled with water tank placed on top. Ideally the stairwell can be placed outside/ structurally isolated from the hot rolled structure or the most optimum solution may be suggested by the Contractor.
- n. Outdoor playgrounds and recreational areas shall be planned and designed for physical activity and recreation, with age-appropriate equipment and proper surfacing for safety. Accessible pathways for students with disabilities should be incorporated.
- o. When electrical cabling, plastic pipes, or other materials prone to damage pass through these holes, grommets or other protective measures must be provided. However, grommet protection is not required if the conduit passing through the holes is Electrical Metallic Tubing (EMT) or rigid PVC conduit piping.

2.4.1 Fire Safety

- a. Every component of the structure including cladding and walls elements must be fire resistant with recommended fire ratings as per applicable standards. The choice of material for doors and windows be based on fire resistance as well in line with walls. Type of walls panels be selected based on local availability and cost effectiveness.
- b. The insulation facing should have a flame spread index of 25 or less and a smoke-developed index of 50 or less according to ASTM E84.
- c. For roof insulation, Rock wool or glass wool can be used. Glass wool insulation used must be flexible, resilient, odorless, non-irritant, non-corrosive to steel or aluminum,

have a flame spread index of 25 or lower, and a smoke-developed index not exceeding 450.

- d. When electrical cabling, plastic pipes, or other materials prone to damage pass through these holes, grommets or other protective measures must be provided. However, grommet protection is not required if the conduit passing through the holes is Electrical Metallic Tubing (EMT) or rigid PVC conduit piping.

2.4.2 Finishes

- a. Gypsum board/ fiber cement board or similar panels shall be used as ceiling ensuring integrity during operations by fixed with the roof structure ensuring system integrity under varying environmental conditions.
- b. Mineral wool insulation at least 50mm with vapor barrier shall be used for thermal insulation of the roof.
- c. A concrete floor with terrazzo tiles having a minimum thickness of 25 mm (300 x 300mm) as approved by the Engineer shall be provided.
- d. Waterproof weather shield paint to cater for humidity thickness of 25 mm (300 x 300mm) as approved by the Engineer shall be provided.

2.4.3 Doors, Windows & Glazing

- a. All windows should be of durable, fire-resistant materials that require minimal maintenance for operation.
- b. Glazing shall be adequate to prevent transfer of heat and should be double glazed on the South facing side while single glazing may be used on north face.
- c. The design of windows should prevent opening by children and should be provided with safety grill/ barrier and fly mesh based on building elevation.
- d. UPVC Single/double leaf doors with adequate strength and durability maybe provided after approval by the Employer representatives.

2.5 Structural Design

2.5.1 Design Loads

- a. Considering usage of the buildings, all accessible floors must be considered for expected loads as per ANSI/ ASCE 7 requirements for schools with accessible floors.
- b. Dead Load comprises of the self-weight of the structural frame, sheeting, wall cladding, false ceiling, insulation, super imposed loads.
- c. The live load on the roof shall not be less than the specified value for the applicable category in ASCE 7-10 Minimum design Loads. Floor design live loads shall conform to standard on schools.
- d. Load Combinations: All load combinations shall conform to NBCP 2021. Minimum roof live loads shall be in accordance with the requirements of the NBCP 2021.

- e. Being explicitly located in more wind sensitive and partly seismic sensitive areas, the design should explicitly cater for the need based on the local hazard maps. Historical data where the exact maps are not available, may be obtained to carry out the design. NBCP 2021 for seismic design provisions. Preferably, wind exposure shall be based on local designated category however, if unavailable category "C" be assigned with relevant topographic factors and maximum design wind speed.
- f. Earthquake loads shall be calculated using parameters (Seismic Zone Factor (Z), Soil Profile type, Importance Factor, etc.) as specified in NBCP of 2021. Parameters R & T shall be set according to the basic structural systems adopted. The structural system be considered with due consideration to the need and cost effectiveness of the proposed framing system.

2.5.2 Material specifications

- a. Considering usage of the buildings, all accessible floors must be considered for expected loads as per ANSI/ ASCE 7 requirements for schools with accessible floors. All high strength bolts should be adhered to ASTM 490 specifications tightening procedure. Designers may opt of slip critical type connections with (bolted) while considering partly restrained connections for beams and columns and preferably fixed connections with footings.
- b. The design section should contain the specifications which are locally available and are compliant with PSQCA standards as well as applicable ASTM standards.
- c. Nuts utilized for high-strength bolts shall conform to either ASTM A194/A194M or ASTM A563 or ASTM A563M standards and washers for high-strength bolts shall conform to ASTM F436 or ASTM F436M standards.
- d. For steel-to-steel connections, fasteners should comply with ASTM C1513. Fasteners must securely penetrate each component without causing any permanent separation.
- e. Each connection or node the number of screws shall be designed in compliance with AISI S100 standards
- f. Galvanized steel panels must have a minimum yield strength of 230 MPa (33 ksi) and comply with ASTM A653/A653M SS Grade 33 (Grade 230) or better, with a G90 (Z275) coating designation.
- g. Aluminum-zinc alloy-coated steel panels must meet ASTM A792/A792M Grade 345 MPa (50 ksi) with a coating designation of AZ50 (AZM150).
- h. Panels should be attached to cold form steel framing members using self-drilling or self-tapping screws. These screws must be hex head carbon steel with an EPDM washer and mechanically zinc-coated in accordance with ASTM B695, Class 50.
- i. Wall framing constructed with cold form steel studs, should be designed to meet the general requirements. The material specification must comply with ASTM A653/A653M Grade SS Class 1, Grade 50 (Grade 340) or better and be galvanized according to coating designation G90 (Z275). The number of screws at each node or

connection should be designed according to AISI S100. Any required bracing must also be designed in accordance with AISI S100.

- j. Cement Board conforming to standard specifications for Flat Fiber-Cement sheets or cement tiles with specified fire rating as per applicable standards. ASTM1186-08(2012)
- k. Steel Frame Conforming to conforming to ASTM A36/A572
- l. 25 to 50mm extruded rockwool or glass wool with minimum density 16 to 18 kg/m³ as insulation and sound barrier with established to achieve the acoustic and thermal insulations requirements.
- m. 3mm skim coat finish as per TERRACO UK specifications or equivalent.
- n. The maximum U-values for opaque elements like walls, roofs, and floors should comply with Table 1 in SAES N-004. The vapor retarder must be non-permeable (<1 perm) and conform to ASTM C755 specifications, and it should be installed on the side of the insulation that faces the building's interior.

2.5.3 Concrete

- a. Concrete for the sub and super structure shall be structural grade of concrete as per ACI 318-19 based on local conditions and availability of the materials. Contractor should explicitly specify the mix design for each structural member.
- b. The type of mixer machine be also suggested to ensure the desired structural parameters of the concrete.
- c. The design documents must specify the establishment of a site lab/ designated lab at some centralized location by contractor and consultant should specify the type of equipment that must be maintained in site lab.

2.5.4 Substructure Design

- d. Keeping in the flood inundated areas, it is anticipated that schools will be constructed at raised level from NSL having finish floor level at ground floor at least 1.5 feet above the recorded flood level from a reliable source or 3 feet above adjacent paved road level, whichever is higher.
- e. The substructure of the buildings is recommended to be designed based on ACI 318 guidelines with due consideration to be given to sulfate concentration in soil, aggregate alkali silica reaction, provision of cover to concrete to actively prevent process of corrosion etc.
- f. A thorough soil investigation be carried out to determine the geotechnical parameter necessary for safe and economical design.

2.5.5 Structural Design

- a. Design compliance with the latest Sindh Building Code (SBC) 2016 and National Building Code of Pakistan (NBCP) 2021.

- b. Structural design by qualified and licensed Professional engineers registered with the Pakistan Engineering Council.
- c. The structural model is to be developed on any commercial structural analysis software with machine files. Preferably, Structural drawings should be developed using AUTOCAD along with Autodesk REVIT. Object oriented and parametric models may be utilized for clash detection and visualizations.
- d. The design must be structurally integral and sound to withstand the design static and dynamic forces.
- e. Bracing should be designed as per AISI S100, if any bracing is provided. Lateral and bracing members should be connected to the rafters using clips/ cleats, and the webs of lateral support members should not be notched for connection to the main rafters.
- f. Where required, design shall include the provision of bracing points for supporting portable building contents, such as instrument panels, during transport to site.
- g. Structural connection for joints should be done using nuts and bolts, self-drilling screws or rivets. The design of connections should be done while considering the proposed type of connectivity.
- h. Welded connections shall not be permitted for light gauge steel components. Type connections and assemblies be designed in a way such that they should be cold worked.
- i. The welding operation if seem necessary (for hot rolled structures only) may be supported with necessary supporting guidelines as AWS (American Welding Society) with type of coating for electrodes and their minimum ultimate tensile strengths duly compatible with the grade of cold worked steel sections.
- j. Cold formed lateral bridging (cross) members that support loads (dead, live, wind), shall be positively connected to primary or main load bearing elements (roof, wall studs, flooring members) through both flanges and webs.
- k. The design of all built-up and hot-rolled steel members shall comply with the AISC 360 - Specification for Structural Steel Buildings". The design of all cold-formed steel members shall comply with the AISI S100- "North American Specification for the Design of Cold-Formed Steel Structural Members".
- l. The serviceability requirements for deflection and drift to be used in the design of Prefabricated Portable buildings shall be in accordance with IBC.
- m. Serviceability requirements related to floor vibrations caused by walking excitations shall comply with the criteria of AISC Design Guide No. 11: Floor Vibrations Due to Human Activity.

2.6 WASH

- a. Effective WASH facilities are fundamental to restoring the functionality of damaged schools.

- b. The Contractor shall identify the water source and perform sampling and testing of water for each school.
- c. The Contractor shall ensure provision of space for safe drinking water, sanitation and hygiene facilities/services in all schools which is adequate & proportionate to number of boys, girls and staff enrolled in schools.
- d. The Contractor shall design and provide adequate sanitation facilities & services for boys, girls and school staff in all schools that fulfill their gender specific needs that are proportionate to the number of children enrolled in schools.
- e. The assessment must include a thorough evaluation of the current state of water supply systems, sanitation facilities, and hygiene infrastructure. This involves inspecting the space of toilets, assessing the adequacy of water sources, and evaluating hygiene practices and facilities. Further focus on sustainable and resilient WASH solutions, such as improved toilet designs and effective waste management systems.
- f. Engaging with community members and session on hygiene promotions particularly with women and girls, can provide valuable insights into specific needs and preferences, ensuring that the WASH improvements are responsive and effective.
- g. Water supply system for faucets with overhead and underground storage and adequate pressure throughout the school.
- h. Sanitary drainage and sewage disposal system designed to handle wastewater efficiently, adhering to SBC sanitation regulations.
- i. Water-saving fixtures like low-flow faucets and dual-flush toilets to conserve water. Plumbing codes for pipe sizing, materials, and water fixture specifications.

2.7 Electrical System:

- a. All design shall be carried out by qualified and licensed professionals registered with PEC in a particular category of the design.
- b. Necessary protection measures should be provided to ensure safe operation of the facility while providing necessary protection against fire, short circuiting, electrocution with cutoff provided in case of any emergency as per the requirements of relevant codes mentioned in Section 2.2.
- c. Adequate lighting in all areas, complying with NBCP illumination levels for classrooms, laboratories, etc.
- d. Power outlets in classrooms, laboratories, and other spaces for equipment and appliances.
- e. Proper grounding and earthing for safety.

- f. Energy-efficient lighting and appliances:
- g. Use LED lights throughout the building.
- h. Specify energy-efficient appliances for the canteen and administrative areas.
- i. Electrical safety standards for wiring, switchboards, and grounding.
- j. Mechanical exhaust fans in laboratories, and washrooms to remove excess heat, moisture, and odors.
- k. Where noted on the purchase requisition, design shall include for remote monitoring of the building power, Ventilation, occupancy and other systems.

2.8 Submissions

The Contractor shall prepare a Detailed Architecture Design, Engineering Services Design, including final space layout, interior and exterior finishes, Electrical, Plumbing, water treatment system for drinking water, Solar system drawings, etc. The Contractor shall accommodate in the design any environmental considerations that may be required.

The Contractor shall prepare a Design Report that will summarize all of the work undertaken during this Stage. The Design, drawings and all reports shall be submitted to the Employer for review and approval. A Liaison with the Employer and other relevant authorities will be maintained during this period.

The Detail Design shall comprise of detailed and fully coordinated, Specifications and other Documents including but not limited to the following:

2.8.1 Architectural design/ drawings:

- a. Master Plan and details, including external works and site development.
- b. Plans, Sections and elevations.
- c. Windows/ wall sections, etc.
- d. Large scale interior and exterior details.
- e. Reflected ceiling / floor patterns plans.
- f. Door schedule and general details.
- g. Windows/Openings schedule and general details.
- h. Finishes schedule and details.
- i. Furniture and equipment layouts
- j. Toilet Details.
- k. Directions and signage.

- l. Location of service lines/ ducts.
- m. Miscellaneous details to cover the entire project.

2.8.2 Structural Drawings:

- a. Foundation layout plans and details.
- b. Floor framing plans and details.
- c. Wall layout plans and elevations.
- d. Connection details drawings.
- e. Roof framing plans and details.
- f. Reinforcement details for all reinforced concrete works.
- g. Details of expansion joints, water stops, special openings in slabs and beams, etc.
- h. Miscellaneous structures reinforcement details.
- i. Details of water tanks water proofing and roof water proofing.

2.8.3 Plumbing Systems:

- j. Floor plans for all systems including sanitary drainage system, rainwater drainage system with drain fittings, water supply system.
- k. Miscellaneous standard details.
- l. Schedule of sanitary ware.
- m. Schedule of miscellaneous sanitary fittings, towel rails, mirrors, toilet roll holders, etc.
- n. Plan showing piping network.
- o. Plans showing lighting installations layout.

2.8.4 Electrical:

- a. Main distribution boards, feeders and panel boards schedules.
- b. Power and low current systems preliminary diagrams.
- c. Transformers room equipment layouts and details.
- d. Lighting protection and earthing system installations of details.

2.8.5 Infrastructure & Utilities Drawings

- a. Details of connections to public utilities and off-site utilities.
- b. Details of Roads, foot paths and walkways connecting the block.
- c. Boundary wall and gates.
- d. Decorative features and details.

- e. Plans and details of external signage.
- f. Appropriate and necessary plans and details as required.

2.8.6 Landscape Drawings

- a. Design details of hard and soft landscape around the building.
- b. Planting plans.
- c. Lighting layout plans.
- d. Fences & Landscape Furniture details.

2.8.7 Interior Design

- a. Floor plans showing space allocation and furniture layouts.
- b. Longitudinal and transverse buildings sections showing floor to floor heights, ceiling heights and overall heights.
- c. Interior building elevations showing interior finishes, openings and floor levels.
- d. Colored interior perspectives to show the main areas and relations.
- e. Schedules of alternatives (with recommendations) for building materials, interior finishes and methods of construction, etc.
- f. At least 3 options of interior finishes should be proposed, to be finalized by the client.

2.8.8 Specifications

The Contractor shall prepare and submit specifications for all project components. These shall include quality control/ assurance requirements, product detail, technical specifications and execution and workmanship requirements. The project specifications shall also include performance specifications for custom manufactured and assembled systems.

All specifications of materials, equipment, furniture and finishes etc. shall be with proven performance and shall ensure high performance and the capability of withstanding repetitive abuse by users. Specifications of materials shall also be based on being maintenance friendly.

2.9 SITE WORKS

The Contractor shall carry out all surveys and site investigations of the Project site as follows:

2.9.1 Site Survey

- a. The Contractor shall carry out the topographic surveys for each school site and do the Master Planning of each site considering relevant planning standard, climate change impacts, bylaws, codes etc.
- b. Topographic survey of the sites will be undertaken using high-tech survey equipment (GPS and Total Stations). Mapping of all the salient topographic features existing in the project area and its immediate surroundings shall be done. Large number of random spot elevations of the ground shall be surveyed to fully develop the digital terrain model. Ground Digital Terrain Model will be developed by off-loading the field data on computer software. Digital survey maps of the proposed site will be prepared for cost effective overall planning & designing of the facility, land development & drainage system and water harvesting.

2.9.2 Meteorological Data Collection and Studies

- a. The Contractor shall obtain the required met data (historical and future predictions) from the nearby met stations. The met data will essentially include the rain and precipitation data, flood data for planning and design of buildings and other facilities including drainage and water harvesting schemes for the school sites. The rainwater will be collected in the harvesting/collection ponds and tanks as appropriate and will be used for general school purposes.
- b. Besides the rain and precipitation data, other typical yearly relevant data for design, such as wind rose, sun path and temperature etc., will also be acquired for planning and design of the buildings and facilities.

2.9.3 Soil Investigation

- a. The Contractor will carry out soil Investigations through bore holes (at least three bore holes of 10m depth pr site) and testing and submit complete detailed report to prepare design of building foundations and the facilities etc.
 - Important soil test to be carried out are:
 - Grain size analysis.
 - Liquid and plastic limits.
 - Field density test.
 - Moisture density relations (modified AASHTO).
 - Soil bearing capacity test.
- b. SPT for the Bores

- c. Procedure for collection, logging and testing of samples will be in accordance with accepted practices.
- d. Recommendation of net allowable soil bearing capacity according to Terzaghi, Meyerhoff or other established approach.
- e. Recommendation of school building plinth/FFL level considering environmental/ flood historical and future predictions data to assure flood/ climate resilient building.
- f. Based on the findings and results of the investigations and testing, foundation design of buildings and facilities shall be carried out.

2.9.4 Environmental & Social Safeguard

- a. The Contractor shall conduct rapid environment assessment to assess the potential environmental impacts for the project and prepare IEE and develop an Environmental Management Plan in line with the ADB guidelines, in consultation with the stakeholders and complying to the local environmental regulations.
- b. Following the REA, the contractor must prepare an Initial Environmental Examination (IEE). The IEE should provide a more detailed evaluation of the potential environmental impacts identified during the REA and assess the significance of these impacts. This examination will help in understanding the broader environmental implications of the project and guide the development of mitigation measures.
- c. Additionally, the contractor is required to develop an Environmental Management Plan (EMP). The EMP outlines specific strategies and actions to mitigate adverse environmental impacts identified in the IEE. It includes measures for monitoring, reporting, and managing environmental risks throughout the project lifecycle to ensure compliance with environmental regulations and standards.
- d. The Contractor shall also carry out the Social due diligence, will meet the stakeholders and the community and identify the social issues particularly the resettlement issues and prepare Resettlement Plan in line with the ADB guidelines.
- e. The contractor shall prepare and provide complete reports for the above-stated environmental studies and social safeguards.

2.10 CONSTRUCTION WORK

The Contractor shall start the construction work after all designs and drawings prepared by the Contractor have been reviewed and approved by the Employer and the review consultant. The Contractor shall be responsible for, but are not limited to, the following:

- a. The contractor should prepare all working drawings required in the project.
- b. Mark-out the building within the site as per the Master Plan.
- c. Prepare implementation schedule, in coordination with the Client, carefully reviewing interrelations between the various activities, particularly with respect to time allocation, staff allocation for each activity, commencement and completion dates.

- d. The contractor should provide the necessary supervisory and construction team to be employed during the period of implementation, in accordance with the construction contracts.
- e. It will be the responsibility of the contractor to ensure that the work is carried out in a proper workmanship and expeditious manner and in accordance with the contract documents.
- f. The requirements for the safety of the public near construction sites, Labor working on the site and the health of the construction environment will be ensured by the contractor.
- g. At all stages of implementation, the contractor shall carry out regular inspection of materials and workmanship and carry out acceptance tests to ensure compliance with the specifications. Where work on site at any time during the implementation does not meet the requirements of the specifications, it shall be removed or rectified.
- h. Carry out inspection at time of substantial completion of the works and arrange, for issuance of the Initial substantial completion Certificate in coordination with the Client.
- i. The Contractor will keep the Client continually informed on the progress of the works, and all budgetary and financial matters pertaining to the project, by submitting to him the following reports:
- j. Weekly and Monthly progress reports including: information on measurements of works executed, equipment and material supplied to site, used and/or stored – quality tests on earthworks, concrete works, steel works, sewerage and water supply, construction materials and equipment – Safety Measures - labor force – variation orders if any – acceptance tests of structures - problems encountered and recommendations - photographs recording (electronic/digital) the progress of work.
- k. Final report on completion of works.

2.11 Special Provisions-1: Vehicles for Employer / Top Supervision Consultants

A GENERAL

On the instruction of the Employer / Project Manager the Contractor shall provide and make available at all times the following new vehicles for the exclusive use by the Employer / Project Manager and their staff at their designated offices for project supervision and other project purposes

- l. Provide new vehicle 1300 cc, new and latest model: 02 Nos. [each by the contractors of the two (02) Lots (*Lot-1, and Lot-2*)]. Air Conditioned and fully equipped as per manufacturer's specifications (For Employer / Supervision Consultants).

The Contractor shall provide safe, experienced, and competent drivers with the approval of the Employer / Project Manager for the above vehicles. Each Driver shall be responsible for the vehicle allocated to him for the duration of the entire duration of the Contract, and any extended period and for any period of delay attributable to the Contractor. The Contractor shall promptly replace any driver who, in the Employer / Project Manager's opinion, is not performing satisfactorily.

The Contractor shall provide vehicle within 15 days of receipt of such Employer / Project Manager's instruction. In case of failure to provide any or all of the said vehicles within the prescribed period of time, the Contractor will pay penalty to the Employer at a rate equivalent to the per day rental of the vehicles required to be provided during that specific period for which the Contractor fails to provide the vehicle(s).

B MAINTENANCE OF VEHICLES:

All the Vehicles shall be registered, taxed, comprehensively insured, fueled, repaired, serviced, and maintained by the Contractor, for the duration of the Contract and for any extended period under the Contract and for any period of delay attributable to the Contractor, in the following manner:

- m. If a vehicle is not in a road worthy condition, the Contractor shall provide the Employer / Project Manager a temporary replacement of the vehicle, until that vehicle is repaired and returned for use.
- n. Maintaining, cleaning, repairing, and servicing the vehicle(s) according to manufacturer's recommendations and garaging, replacing the tyres, batteries, parts etc. whenever necessary and directed by the Employer / Project Manager.
- o. Supply necessary POL etc.
- p. Procuring and maintaining the validity of vehicle insurance policies and registration. Comprehensive insurance policy including theft, fire (covering a qualified driver authorized by the Employer / Project Manager together with authorized passenger's liability cover) shall also be the responsibility of the Contractor. The policies, license and registration shall be valid till the end of the project.

If the Contractor fails to maintain any or all of the vehicle(s) to the satisfaction of the Employer / Project Manager or otherwise fails to comply fully with this section, the Employer upon the Project Manager's recommendation may do so by himself and the Project Manager may withhold an amount which the Employer incurs in order to fulfil the liabilities which Contractor failed to comply with under this section plus the Employer's overheads incurred in doing so, all in accordance with sub clause of Contract. The Contractor shall bear all costs that may arise including delays due to failure of the Contractor to comply with this section.

C OWNERSHIP OF VEHICLES AFTER COMPLETION:

The vehicles shall remain the property of the Contractor on the completion of the works. The cost of new vehicles including all POL, taxes, comprehensive insurances and renewal of the same as and when required also vehicle registration and the renewal of the same as and when required, ensuring that both registration and comprehensive insurances remain

duly valid till the end of the project which is the day of issuance of the Performance Certificate under sub clauses of the Contract, shall not be payable to the Contractor separately, but shall be deemed to have been included in his bid cost under other items.

D MEASUREMENT AND PAYMENT:

The cost of vehicles, cost of fueling, maintaining, repairing, replacing parts, and servicing the Vehicle as and when required and or scheduled, shall not be payable separately to the Contractor but shall be deemed to have been included in his bid cost.

<u>Pay Item No</u>	<u>Description</u>	<u>Unit of Measurement</u>
SP-1 (a)	Provide new vehicle 1300 cc AC fitted fully equipped as per Manufacturer's Specifications at Employer / Project Manager Office / field offices with all comprehensive insurances, taxes, registrations and renewal of the same including driver. <i>[each by the contractors of the 02 Lots (Lot-1, and Lot-2)].</i>	Not Payable
SP-1 (b)	POL, Maintenance, repairs, replacement parts, servicing etc. of vehicles under item SS 1 (a) <i>[each by the contractors of the 02 Lots (Lot-1, and Lot-2)].</i>	Not Payable

3. ARCHITECTURE MODULES / DRAWINGS

Attached as Annexure 'C'

4. Certificates

4.1 Form of Completion Certificate

Contract: [. . . .insert name of contract and contract identification details. . . .]

Date:

Certificate No.:

To: [. . . .insert name and address of contractor. . . .]

Dear Ladies and/or Gentlemen,

Pursuant to GCC Clause 24 (Completion of the Facilities) of the General Conditions of the Contract entered into between yourselves and the Employer dated [. . . .insert date. . . .], relating to the [. . . .brief description of the Facilities], we hereby notify you that the following part(s) of the Facilities was (were) complete on the date specified below, and that, in accordance with the terms of the Contract, the Employer hereby takes over the said part(s) of the Facilities, together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below.

1. Description of the Facilities or part thereof: [. . . .description]
2. Date of Completion: [. . . .date]

However, you are required to complete the outstanding items listed in the attachment hereto as soon as practicable.

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defect Liability Period.

Very truly yours,

[. . . .Signature]

Project Manager

4.2 Form of Operational Acceptance Certificate

Contract: [. . . .insert name of contract and contract identification details. . . .]

Date:

Certificate No.:

To: [. . . .insert name and address of contractor. . . .]

Pursuant to GCC Subclause 25.3 (Operational Acceptance) of the General Conditions of the Contract entered into between yourselves and the Employer dated [. . .date. . .], relating to the [. . .brief description of the facilities. . .], we hereby notify you that the Functional Guarantees of the following part(s) of the Facilities were satisfactorily attained on the date specified below.

1. Description of the Facilities or part thereof: [. . . description . . .]
2. Date of Operational Acceptance: [. . . date . . .]

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defect Liability Period.

Very truly yours,

[. . . .Signature]

Project Manager

5. Change Orders

5.1 Change Order Procedure

- 5.1.1 General
- 5.1.2 Change Order Log
- 5.1.3 References for Changes

5.2. Change Order Forms

- 5.2.1 Request for Change Proposal
- 5.2.2 Estimate for Change Proposal
- 5.2.3 Acceptance of Estimate
- 5.2.4 Change Proposal
- 5.2.5 Change Order
- 5.2.6 Pending Agreement Change Order
- 5.2.7 Application for Change Proposal

5.1. Change Order Procedure

5.1.1 General

This section provides samples of procedures and forms for implementing changes in the Facilities during the performance of the Contract in accordance with GCC Clause 39 (Change in the Facilities) of the General Conditions.

5.1.2 Change Order Log

The Contractor shall keep an up-to-date Change Order Log to show the current status of Requests for Change and Changes authorized or pending. Entries of the Changes in the Change Order Log shall be made to ensure that the log is up-to-date. The Contractor shall attach a copy of the current Change Order Log in the monthly progress report to be submitted to the Employer.

5.1.3 References for Changes

- (1) Request for Change as referred to in GCC Clause 39 shall be serially numbered CR-X-nnn.
- (2) Estimate for Change Proposal as referred to in GCC Clause 39 shall be serially numbered CN-X-nnn.
- (3) Acceptance of Estimate as referred to in GCC Clause 39 shall be serially numbered CA-X-nnn.
- (4) Change Proposal as referred to in GCC Clause 39 shall be serially numbered CP-X-nnn.
- (5) Change Order as referred to in GCC Clause 39 shall be serially numbered CO-X-nnn.

Note:

- (a) Requests for Change issued from the Employer's Home Office and the Site representatives of the Employer shall have the following respective references:

Home Office	CR-H-nnn
Site	CR-S-nnn

- (b) The above number "nnn" is the same for Request for Change, Estimate for Change Proposal, Acceptance of Estimate, Change Proposal and Change Order.

5.2.2 Estimate for Change Proposal Form

[Contractor's letterhead]

To: [Employer's name and address]

Date:

Attention: [Name and title]

Contract Name: [Contract name]

Contract Number: [Contract number]

Dear Ladies and/or Gentlemen:

With reference to your Request for Change Proposal, we are pleased to notify you of the approximate cost to prepare the below-referenced Change Proposal in accordance with GCC Subclause 39.2.1 of the General Conditions. We acknowledge that your agreement to the cost of preparing the Change Proposal, in accordance with GCC Subclause 39.2.2, is required before estimating the cost for change work.

1. Title of Change: [Title]
2. Change Request No./Rev.: [Number]
3. Brief Description of Change: [Description]
4. Scheduled Impact of Change: [Description]
5. Cost for Preparation of Change Proposal: [insert costs, which shall be in the currencies of the contract]

(a)	Engineering	(Amount)
(i)	Engineer _____ hours (hrs) x _____ rate/hr =	_____
(ii)	Draftsperson _____ hrs x _____ rate/hr =	_____
	Sub-total _____ hrs	_____
	Total Engineering Cost	_____
(b)	Other Cost	_____
	Total Cost (a) + (b)	_____

[Contractor's name]

[Signature]

[Name of signatory]

[Title of signatory]

5.2.3 Acceptance of Estimate Form

[*Employer's letterhead*]

To: [*Contractor's name and address*]

Date:

Attention: [*Name and title*]

Contract Name: [*Contract name*]

Contract Number: [*Contract number*]

Dear Ladies and/or Gentlemen:

We hereby accept your Estimate for Change Proposal and agree that you should proceed with the preparation of the Change Proposal.

1. Title of Change: [*Title*]
2. Change Request No./Rev.: [*Request number/revision*]
3. Estimate for Change Proposal No./Rev.: [*Proposal number/revision*]
4. Acceptance of Estimate No./Rev.: [*Estimate number/revision*]
5. Brief Description of Change: [*Description*]
6. Other Terms and Conditions: In the event that we decide not to order the Change accepted, you shall be entitled to compensation for the cost of preparing the Change Proposal described in your Estimate for Change Proposal mentioned in para. 3 above in accordance with GCC Clause 39 of the General Conditions.

[*Employer's name*]

[*Signature*]

[*Name of signatory*]

[*Title of signatory*]

5.2.4 Change Proposal Form

[Contractor's letterhead]

To: [Employer's name and address]

Date:

Attention: [Name and title]

Contract Name: [Contract name]

Contract Number: [Contract number]

Dear Ladies and/or Gentlemen:

In response to your Request for Change Proposal No. [Number], we hereby submit our proposal as follows:

1. Title of Change: [Name]
2. Change Proposal No./Rev.: [Proposal number / revision]
3. Originator of Change: Employer: [Name] / Contractor: [Name]
4. Brief Description of Change: [Description]
5. Reasons for Change: [Reason]
6. Facilities and/or Item No. of Equipment related to the requested Change: [Facilities]
7. Reference drawings and/or technical documents for the requested Change:
[Drawing/Document No./Description]
8. Estimate of increase/decrease to the Contract Price resulting from the Change Proposal:

Amount

[insert amounts in the currencies of the Contract]

(a) Direct material					
(b) Major construction equipment					
(c) Direct field labor (Total hrs)					
(d) Subcontracts					
(e) Indirect material and labor					
(f) Site supervision					
(g) Head office technical staff salaries					
Process engineer	_____	hrs @	_____	rate/hr	_____
Project engineer	_____	hrs @	_____	rate/hr	_____
Equipment engineer	_____	hrs @	_____	rate/hr	_____
Procurement	_____	hrs @	_____	rate/hr	_____
Draftsperson	_____	hrs @	_____	rate/hr	_____
Total	_____	hrs			

- (h) Extraordinary costs (computer, travel, etc.) _____
- (i) Fee for general administration, % of Items _____
- (j) Taxes and customs duties _____
- Total lump sum cost of Change Proposal [*Sum of items (a) to (j)*]
- Cost to prepare Estimate for Change Proposal [*Amount payable if Change is not accepted*]

9. Additional time for Completion required due to Change Proposal
10. Effect on the Functional Guarantees
11. Effect on the other terms and conditions of the Contract
12. Validity of this Proposal: within [Number] days after receipt of this Proposal by the Employer
13. Other terms and conditions of this Change Proposal:
- (a) You are requested to notify us of your acceptance, comments or rejection of this detailed Change Proposal within [Number] days from your receipt of this Proposal.
- (b) The amount of any increase and/or decrease shall be taken into account in the adjustment of the Contract Price.
- (c) Contractor's cost for preparation of this Change Proposal: [*...insert amount. This cost shall be reimbursed by the employer in case of employer's withdrawal or rejection of this Change Proposal without default of the contractor in accordance with GCC Clause 39 of the General Conditions*]

[*Contractor's name*]
 [*Signature*]
 [*Name of signatory*]
 [*Title of signatory*]

5.2.5 Change Order Form

[Employer's letterhead]

To: [Contractor's name and address]

Date:

Attention: [Name and title]

Contract Name: [Contract name]

Contract Number: [Contract number]

Dear Ladies and/or Gentlemen:

We approve the Change Order for the work specified in the Change Proposal (No. [*number*]), and agree to adjust the Contract Price, Time for Completion, and/or other conditions of the Contract in accordance with GCC Clause 39 of the General Conditions.

1. Title of Change: [*Name*]
2. Change Request No./Rev.: [*Request number / revision*]
3. Change Order No./Rev.: [*Order number / revision*]
4. Originator of Change: Employer: [*Name*] / Contractor: [*Name*]
5. Authorized Price:
Ref. No.: [*Number*] Date: [*Date*]
Foreign currency portion [*Amount*] plus Local currency portion [*Amount*]
6. Adjustment of Time for Completion
None Increase [*Number*] days Decrease [*Number*] days
7. Other effects, if any

Authorized by: _____
Employer

Date: _____

Accepted by: _____
Contractor

Date: _____

5.2.6 Pending Agreement Change Order Form

[*Employer's letterhead*]

To: [*Contractor's name and address*]

Date:

Attention: [*Name and title*]

Contract Name: [*Contract name*]

Contract Number: [*Contract number*]

Dear Ladies and/or Gentlemen:

We instruct you to carry out the work in the Change Order detailed below in accordance with GCC Clause 39 of the General Conditions.

1. Title of Change: [*Name*]
2. Employer's Request for Change Proposal No./Rev.: [*number/revision*] dated: [*date*]
3. Contractor's Change Proposal No./Rev.: [*number / revision*] dated: [*date*]
4. Brief Description of Change: [*Description*]
5. Facilities and/or Item No. of equipment related to the requested Change: [*Facilities*]
6. Reference Drawings and/or technical documents for the requested Change:
[*Drawing / Document No. / Description*]
7. Adjustment of Time for Completion:
8. Other change in the Contract terms:
9. Other terms and conditions:

[*Employer's name*]

[*Signature*]

[*Name of signatory*]

[*Title of signatory*]

5.2.7 Application for Change Proposal Form

[*Contractor's letterhead*]

To: [*Employer's name and address*]

Date:

Attention: [*Name and title*]

Contract Name: [*Contract name*]

Contract Number: [*Contract number*]

Dear Ladies and/or Gentlemen:

We hereby propose that the work mentioned below be treated as a Change in the Facilities.

1. Title of Change: [*Name*]
2. Application for Change Proposal No./Rev.: [*Number / revision*] dated: [*Date*]
3. Brief Description of Change: [*Description*]
4. Reasons for Change:
5. Order of Magnitude Estimation (amount in the currencies of the Contract): [*Amount*]
6. Scheduled Impact of Change:
7. Effect on Functional Guarantees, if any:
8. Appendix:

[*Contractor's name*]

[*Signature*]

[*Name of signatory*]

[*Title of signatory*]

6. Personnel Requirements

Using Form PER - 1 and PER - 2 in Section 4 (Bidding Forms), the Bidder must demonstrate that it has personnel who meet the following requirements:

S/No	Position	Qualification	Total Work Experience [years]	Experience In Similar Work [years]
1	Project Manager	BE/ME Civil Engineering	20	10
2	Planning Engineer	BE/ME Civil Engineering	10	5
3	Architect	Bachelor Degree in Architecture	10	8
4	Structural Design Engineer	Master degree in structural engineering	15	At least 5 years of design experience in pre-engineered building especially cold formed LGSF structures
5	Mechanical Engineer	BE Mechanical	15	10 years of experience in running a pre-engineered/LGS fabrication facility
6	Environmental Specialist	B.E. Civil with Master in environmental engineering	10	8
7	Social Safe Guard Specialist	Bachelor Degree in social sciences	10	8
8	Climate Change Expert	Bachelor Degree in Environmental sciences/ Climate change or related field	15	10
9	LGS Building Installation Expert	BE Civil	15	10 years of experience in execution of cold formed/LGS buildings
10	Geotechnical Engineer	BE Civil Engineering	10	5
11	Gender Specialist	Bachelors in social sciences/ economics/ gender issues and related fields	10	8
12	Public Health Engineer	BE Civil Engineering	10	5
13	Electrical Engineer	BE Electrical Engineering	10	5
14	Construction Manager	BE Civil Engineering	15	10
15	Health and Safety Specialist	BE Civil Engineering / NEBOSH Certificate or equivalent	8	5
16	Quantity Surveyor	BE Civil Engineering / B. Tech (Civil Engineering) or equivalent	10	8
17	Field Surveyor	BE Civil Engineering / B. Tech (Civil Engineering) or equivalent	8	5

7. Equipment Requirements

Using Form EQU in Section 4 (Bidding Forms), the Bidder must demonstrate that it has the key equipment listed below:

S/No	Equipment Type and Characteristics	Minimum Number Required
1	CNC LGS roll forming machines having section size ranging between 75mm to 150mm and thickness ranging between 0.5mm to 1.25mm	3
2	Profiled Roof sheet roll forming machine with thickness ranging from 0.3mm till 0.7mm	3
3	Concrete Mixers (1 Cu.M)	15
4	Excavator	10
5	Dump Trucks	10
6	Crane Mobile (15 ton)	5
7	Form work	50,000 sft
8	Scaffolding pipe	100,000 rft
9	Generator Set (min. 100 KVA)	5

Notes:

1. The Bidder must have in house design team as well as fabrication facility having capacity of at least 20 tons per day.
2. The Bidder must have a licensed FEM based LGS design and detailing software having provisions to produce automatic fabrication file.
3. in case of JV at least one JV member must have indigenous / in-house design and fabrication facilities.

Section 7: General Conditions of Contract

These General Conditions of Contract (GCC) are based on the Model Form of International Contract for Process Plant Construction published by the Engineering Advancement Association of Japan (ENAA). The Multilateral Development Banks (MDBs) participating in the procurement harmonization process gratefully acknowledge the contribution of ENAA to the advancement of good contracting practices by its borrowers. The GCC contain general clauses to be applied on all contracts. The GCC in this section, read in conjunction with the Special Conditions of Contract in Section 8 and other documents listed therein, should be a complete document expressing all the rights and obligations of the contracting parties. The General Conditions herein shall not be altered.

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A. Contract and Interpretation

1. Definitions

- 1.1 The following words and expressions shall have the meanings hereby assigned them:
- (a) "Contract" means the Contract Agreement entered into between the Employer and the Contractor, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term "the Contract" shall in all such documents be construed accordingly.
 - (b) "Contract Documents" means the documents listed in Article 1.1 (Contract Documents) of the Contract Agreement (including any amendments thereto).
 - (c) "GCC" means the General Conditions of Contract.
 - (d) "SCC" means the Special Conditions of Contract.
 - (e) "day" means calendar day.
 - (f) "year" means 365 days.
 - (g) "month" means calendar month.
 - (h) "Party" means the Employer or the Contractor, as the context requires.
 - (i) "Employer" means the person named as such in the SCC and includes the legal successors or permitted assigns of the Employer.
 - (j) "Project Manager" means the person appointed by the Employer in the manner provided in GCC Subclause 17.1 (Project Manager) hereof and named as such in the SCC to perform the duties delegated by the Employer.
 - (k) "Contractor" means the person(s) named as Contractor in the Contract Agreement, and includes the legal successors or permitted assigns of the Contractor.
 - (l) "Contractor's Representative" means any person nominated by the Contractor and approved by the Employer in the manner provided in GCC Subclause 17.2 (Contractor's Representative and Construction Manager) hereof to perform the duties delegated by the Contractor.
 - (m) "Construction Manager" means the person appointed by the Contractor's Representative in the manner provided in GCC Subclause 17.2.4.
 - (n) "Subcontractor," including manufacturers, means any person to whom execution of any part of the Facilities, including preparation of any design or supply of any Plant, is sub-contracted directly or indirectly by the Contractor, and includes its legal successors or permitted assigns.
 - (o) "Dispute Board" means the person or persons named as such in the SCC appointed by agreement between the Employer and the Contractor to make a decision on or to settle any dispute or difference between the Employer and the Contractor referred to him or her by the parties pursuant to GCC Subclause 45.1 (Dispute Board) hereof.
 - (p) "The Bank" means the financing institution named in the SCC.

	(q) “Contract Price” means the sum specified in Article 2.1 (Contract Price) of the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract. (r) “Facilities” means the Plant to be supplied and installed, as well as all the Installation Services to be carried out by the Contractor under the Contract. (s) “Plant” means permanent plant, equipment, machinery, apparatus, articles and things of all kinds to be provided and incorporated in the Facilities by the Contractor under the Contract (including the spare parts to be supplied by the Contractor under GCC Subclause 7.3 hereof), but does not include Contractor’s Equipment. (t) “Installation Services” means all those services ancillary to the supply of the Plant for the Facilities, to be provided by the Contractor under the Contract, such as transportation and provision of marine or other similar insurance, inspection, expediting, site preparation works (including the provision and use of Contractor’s Equipment and the supply of all construction materials required), installation, testing, precommissioning, commissioning, operations, maintenance, the provision of operations and maintenance manuals, training, etc. as the case may require. (u) “Contractor’s Equipment” means all facilities, equipment, machinery, tools, apparatus, appliances, or things of every kind required in or for installation, completion and maintenance of Facilities that are to be provided by the Contractor, but does not include Plant, or other things intended to form or forming part of the Facilities. (v) “Country of Origin” means the countries and territories eligible under the rules of the Bank as further elaborated in the SCC. (w) “Site” means the land and other places upon which the Facilities are to be installed, and such other land or places as may be specified in the Contract as forming part of the Site. (x) “Effective Date” means the date of fulfillment of all conditions stated in Article 3 (Effective Date) of the Contract Agreement, upon which the period until the Time for Completion shall be counted from. (y) “Time for Completion” means the time within which Completion of the Facilities as a whole (or of a part of the Facilities where a separate Time for Completion of such part has been prescribed) is to be attained, as referred to in GCC Clause 8 and in accordance with the relevant provisions of the Contract. (z) “Completion” means that the Facilities (or a specific part thereof where specific parts are specified in the Contract) have been completed operationally and structurally and put in a tight and clean condition, that all work in respect of Precommissioning of the Facilities or such specific part thereof has been completed, and that the Facilities or specific part thereof are ready for Commissioning as provided in GCC Clause 24 (Completion) hereof. (aa) “Precommissioning” means the testing, checking and other requirements specified in the Employer’s Requirements that are to be carried out by the Contractor in preparation for Commissioning as provided in GCC Clause 24 (Completion) hereof.
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	(bb) "Commissioning" means operation of the Facilities or any part thereof by the Contractor following Completion, which operation is to be carried out by the Contractor as provided in GCC Subclause 25.1 (Commissioning) hereof, for the purpose of carrying out Guarantee Test(s). (cc) "Guarantee Test(s)" means the test(s) specified in the Employer's Requirements to be carried out to ascertain whether the Facilities or a specified part thereof is able to attain the Functional Guarantees specified in the Appendix (Functional Guarantees) to the Contract Agreement in accordance with the provisions of GCC Subclause 25.2 (Guarantee Test) hereof. (dd) "Operational Acceptance" means the acceptance by the Employer of the Facilities (or any part of the Facilities where the Contract provides for acceptance of the Facilities in parts), which certifies the Contractor's fulfillment of the Contract in respect of Functional Guarantees of the Facilities (or the relevant part thereof) in accordance with the provisions of GCC Clause 28 (Functional Guarantees) hereof and shall include deemed acceptance in accordance with GCC Clause 25 (Commissioning and Operational Acceptance) hereof. (ee) "Defect Liability Period" means the period of validity of the warranties given by the Contractor commencing at Completion of the Facilities or a part thereof, during which the Contractor is responsible for defects with respect to the Facilities (or the relevant part thereof) as provided in GCC Clause 27 (Defect Liability) hereof.
2. Contract Documents	2.1 Subject to Article 1.2 (Order of Precedence) of the Contract Agreement, all documents forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.
3. Interpretation	3.1 In the Contract, except where the context requires otherwise, (a) words indicating one gender include all genders; (b) words indicating the singular also include the plural and words indicating the plural also include the singular; (c) provisions including the word "agree," "agreed," or "agreement" require the agreement to be record in writing; (d) the word "tender" is synonymous with "bid," "tenderer" with "Bidder," and "tender documents" with "Bidding Documents;" and (e) "written" or "in writing" means handwritten, typewritten, printed or electronically made, and resulting in a permanent record. The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions. 3.2 <u>Incoterms</u> Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms.

	“Incoterms” means international rules for interpreting trade terms published by the International Chamber of Commerce (latest edition), 38 Cours Albert 1^{er}, 75008 Paris, France.
3.3	<u>Entire Agreement</u> Subject to GCC Subclause 16.4 hereof, the Contract constitutes the entire agreement between the Employer and Contractor with respect to the subject matter of Contract and supersedes all communications, negotiations, and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract.
3.4	<u>Amendment</u> No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party hereto.
3.5	<u>Independent Contractor</u> The Contractor shall be an independent contractor performing the Contract. The Contract does not create any agency, partnership, joint venture, or other joint relationship between the parties hereto. Subject to the provisions of the Contract, the Contractor shall be solely responsible for the manner in which the Contract is performed. All employees, representatives, or Subcontractors engaged by the Contractor in connection with the performance of the Contract shall be under the complete control of the Contractor and shall not be deemed to be employees of the Employer, and nothing contained in the Contract or in any subcontract awarded by the Contractor shall be construed to create any contractual relationship between any such employees, representatives, or Subcontractors and the Employer.
3.6	<u>Non-Waiver</u> 3.6.1 Subject to GCC Subclause 3.6.2 below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, nor shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract. 3.6.2 Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, must be dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.
3.7	<u>Severability</u> If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity, or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.
3.8	<u>Country of Origin</u> “Origin” means the place where the plant and component parts thereof are mined, grown, produced, or manufactured, and from which the services are

	provided. Plant components are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that is substantially in its basic characteristics or in purpose or utility from its components.
4. Communications	4.1 Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests, and discharges, these communications shall be (a) in writing and delivered against receipt; and (b) delivered, sent, or transmitted to the address for the recipient's communications as stated in the Contract Agreement. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Project Manager, a copy shall be sent to the Project Manager or the other Party, as the case may be.
5. Law and Language	5.1 The Contract shall be governed by and interpreted in accordance with laws of the country specified in the SCC. 5.2 The ruling language of the Contract shall be that stated in the SCC. 5.3 The language for communications shall be the ruling language unless otherwise stated in the SCC.
6. Fraud and Corruption	6.1 ADB requires Borrowers (including beneficiaries of ADB-financed activity) and their personnel, as well as firms and individuals participating in an ADB-financed activity, including but not limited to, Bidders, Suppliers, and Contractors, agents, subcontractors, subconsultants, service providers, subsuppliers, manufacturers (including their respective officers, directors, employees and personnel) under ADB-financed contracts to observe the highest standard of ethics during the procurement and execution of such contracts in accordance with ADB's Anticorruption Policy (1998, as amended from time to time). In pursuance of this policy, ADB (a) defines, for the purposes of this provision, the terms set forth below as follows: (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party; (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation; (iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party; (iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;

	(v) "abuse" means theft, waste, or improper use of assets related to ADB-related activity, either committed intentionally or through reckless disregard; (vi) "conflict of interest" means any situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations; and (vii) "integrity violation" is any act, as defined under ADB's Integrity Principles and Guidelines (2015, as amended from time to time), which violates ADB's Anticorruption Policy, including (i) to (vi) above and the following: obstructive practice, violations of ADB sanctions, retaliation against whistleblowers or witnesses, and other violations of ADB's Anticorruption Policy, including failure to adhere to the highest ethical standard. (b) will reject a proposal for award if it determines that the Bidder recommended for award or any of its officers, directors, employees, personnel, subconsultants, subcontractors, service providers, suppliers or manufacturers has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for the Contract; (c) will cancel the portion of the financing allocated to a contract if it determines at any time that representatives of the borrower or of a beneficiary of ADB-financing engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations during the procurement or the execution of that contract, without the borrower having taken timely and appropriate action satisfactory to ADB to remedy the situation, including by failing to inform ADB in a timely manner at the time they knew of the integrity violations; (d) will impose remedial actions on a firm or an individual, at any time, in accordance with ADB's Anticorruption Policy and Integrity Principles and Guidelines, including declaring ineligible, either indefinitely or for a stated period of time, to participate¹ in ADB-financed, -administered, or -supported activities or to benefit from an ADB-financed, -administered, or -supported contract, financially or otherwise, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations; and (e) will have the right to require that a provision be included in bidding documents and in contracts financed, administered, or supported by ADB, requiring Bidders, suppliers and contractors, consultants, manufacturers, service providers and other third parties engaged or involved in ADB-related activities, and their respective officers, directors, employees and personnel, to permit ADB or its representative to inspect the site and their assets, accounts and records and other documents relating to the bid submission and
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¹ Whether as a Contractor, Subcontractor, Consultant, Manufacturer or Supplier, or Service Provider; or in any other capacity (different names are used depending on the particular Bidding Document).

	contract performance and to have them audited by auditors appointed by ADB. 6.2 All Bidders, consultants, contractors, suppliers, manufacturers, service providers, and other third parties engaged or involved in ADB-related activities and their respective officers, directors, employees and personnel, are obliged to cooperate fully in any investigation when requested by ADB to do so. As determined on a case by case basis by ADB, such cooperation includes, but is not limited to, the following: (a) being available to be interviewed and replying fully and truthfully to all questions asked; (b) providing ADB with any items requested that are within the party's control including, but not limited to, documents and other physical objects; (c) upon written request by ADB, authorizing other related entities to release directly to ADB such information that is specifically and materially related, directly or indirectly, to the said entities or issues which are the subject of the investigation; (d) cooperating with all reasonable requests to search or physically inspect their person and/or work areas, including files, electronic databases, and personal property used on ADB activities, or that utilizes ADB's Information and Communications Technology (ICT) resources or systems (including mobile phones, personal electronic devices, and electronic storage devices such as external disk drives); (e) cooperating in any testing requested by ADB, including but not limited to, fingerprint identification, handwriting analysis, and physical examination and analysis; and (f) preserving and protecting confidentiality of all information discussed with, and as required by, ADB. 6.3 All Bidders, consultants, contractors and suppliers shall require their officers, directors, employees, personnel, agents to ensure that, in its contract with its sub-consultants, subcontractors, and other third parties engaged or involved in ADB-related activities, such sub-consultants, subcontractors, and other third parties similarly are obliged to cooperate fully in any investigation when requested by ADB to do so. The Contractor undertakes that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the bid, have been given or received in connection with the procurement process or in the contract execution.²
B. Subject Matter of Contract	
7. Scope of Facilities	7.1 Unless otherwise expressly limited in the Employer's Requirements, the Contractor's obligations cover the provision of all Plant and the performance of all Installation Services required for the design, the manufacture (including procurement, quality assurance, construction, installation, associated civil works, pre-commissioning and delivery) of the Plant and the installation, completion, and commissioning of the Facilities

² The undertaking also applies during the period of performance of the contract.

	in accordance with the plans, procedures, specifications, drawings, codes, and any other documents as specified in the section Employer's Requirements. Such specifications include, but are not limited to, the provision of supervision and engineering services; the supply of labor, materials, equipment, spare parts (as specified in GCC Subclause 7.3 below) and accessories; Contractor's Equipment; construction utilities and supplies; temporary materials, structures, and facilities; transportation (including, without limitation, unloading and hauling to, from and at the Site); and storage, except for those supplies, works, and services that will be provided or performed by the Employer, as set forth in the Appendix (Scope of Works and Supply by the Employer) to the Contract Agreement. 7.2 The Contractor shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Completion of the Facilities as if such work and/or items and materials were expressly mentioned in the Contract. 7.3 In addition to the supply of Mandatory Spare Parts included in the Contract, the Contractor agrees to supply spare parts required for the operation and maintenance of the Facilities for the period specified in the SCC and the provisions, if any, specified in the SCC. However, the identity, specifications, and quantities of such spare parts and the terms and conditions relating to the supply thereof are to be agreed between the Employer and the Contractor, and the price of such spare parts shall be that given in Price Schedule No. 6, which shall be added to the Contract Price. The price of such spare parts shall include the purchase price therefore and other costs and expenses (including the Contractor's fees) relating to the supply of spare parts.
8. Time for Commencement and Completion	8.1 The Contractor shall commence work on the Facilities within the period specified in the SCC and without prejudice to GCC Subclause 26.2 hereof, the Contractor shall thereafter proceed with the Facilities in accordance with the time schedule specified in the Appendix 4 (Time Schedule) to the Contract Agreement. 8.2 The Contractor shall attain Completion of the Facilities or of a part where a separate time for Completion of such part is specified in the Contract, within the time stated in the SCC or within such extended time to which the Contractor shall be entitled under GCC Clause 40 hereof.
9. Contractor's Responsibilities	9.1 The Contractor shall design, manufacture, including associated purchases and/or subcontracting, install, and complete the Facilities in accordance with the Contract. When completed, the Facilities should be fit for the purposes for which they are intended as defined in the Contract. 9.2 The Contractor confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the Facilities, including any data as to boring tests provided by the Employer, and on the basis of information that the Contractor could have obtained from a visual inspection of the Site if access thereto was available and of other data readily available to it relating to the Facilities as of the date 28 days prior to bid submission. The Contractor acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Facilities.

	9.3 The Contractor shall acquire and pay for all permits, approvals, and/or licenses from all local, state, or national government authorities or public service undertakings in the country where the Site is located, which such authorities or undertakings require the Contractor to obtain in its name and which are necessary for the performance of the Contract, including, without limitation, visas for the Contractor's and Subcontractor's personnel and entry permits for all imported Contractor's Equipment. The Contractor shall acquire all other permits, approvals, and/or licenses that are not the responsibility of the Employer under GCC Subclause 10.3 hereof and that are necessary for the performance of the Contract. 9.4 The Contractor shall comply with all laws in force in the country where the Facilities are to be implemented. The laws will include all local, state, national, or other laws that affect the performance of the Contract and bind upon the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties, and expenses of whatever nature arising or resulting from the violation of such laws by the Contractor or its personnel, including the Subcontractors and their personnel, but without prejudice to GCC Subclause 10.1 hereof. 9.5 Any plant and services that will be incorporated in or be required for the Facilities and other supplies shall have their origin as specified under GCC Clause 1 (Country of Origin). Any Subcontractors retained by the Contractor shall be from a country as specified in GCC Clause 1 (Country of Origin). 9.6 The Contractor shall permit ADB or its representatives to inspect the Contractor's site, assets, accounts and records, and other documents relating to the bid submission and contract performance of the Contractor and to have them audited by auditors appointed by ADB, if so required by ADB. 9.7 If the Contractor is a joint venture or consortium of two or more persons, all such persons shall be jointly and severally bound to the Employer for the fulfillment of the provisions of the Contract and shall designate one of such persons to act as a leader with authority to bind the joint venture or consortium. The composition or the constitution of the joint venture or consortium shall not be altered without the prior consent of the Employer. 9.8 Protection of the Environment (a) The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise, and other results of his operations. (b) The Contractor shall ensure that emissions, surface discharges, and effluent from the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.
10. Employer's Responsibilities	10.1 All information and/or data to be supplied by the Employer as described in the Appendix (Scope of Works and Supply by the Employer) to the Contract

	Agreement shall be deemed to be accurate, except when the Employer expressly states otherwise. 10.2 The Employer shall be responsible for acquiring and providing legal and physical possession of the Site and access thereto, and for providing possession of and access to all other areas reasonably required for the proper execution of the Contract, including all requisite rights of way, as specified in the Appendix (Scope of Works and Supply by the Employer) to the Contract Agreement. The Employer shall give full possession of and accord all rights of access thereto on or before the date(s) specified in that Appendix. 10.3 The Employer shall acquire and pay for all permits, approvals, and/or licenses from all local, state, or national government authorities, or public service undertakings in the country where the Site is located which (a) such authorities or undertakings require the Employer to obtain in the Employer's name, (b) are necessary for the execution of the Contract, including those required for the performance by both the Contractor and the Employer of their respective obligations under the Contract, and (c) are specified in the Appendix (Scope of Works and Supply by the Employer) to the Contract Agreement. 10.4 If requested by the Contractor, the Employer shall use its best endeavors to assist the Contractor in obtaining in a timely and expeditious manner all permits, approvals, and/or licenses necessary for the execution of the Contract from all local, state, or national government authorities, or public service undertakings that such authorities or undertakings require the Contractor or Subcontractors or the personnel of the Contractor or Subcontractors, as the case may be, to obtain. 10.5 Unless otherwise specified in the Contract or agreed upon by the Employer and the Contractor, the Employer shall provide sufficient, properly qualified operating and maintenance personnel; shall supply and make available all raw materials, utilities, lubricants, chemicals, catalysts, other materials and facilities; and shall perform all work and services of whatsoever nature, including those required by the Contractor to properly carry out Pre-commissioning, Commissioning, and Guarantee Tests, all in accordance with the provisions of the Appendix (Scope of Works and Supply by the Employer) to the Contract Agreement at or before the time specified in the program furnished by the Contractor under GCC Subclause 18.2 hereof and in the manner thereupon specified or as otherwise agreed upon by the Employer and the Contractor. 10.6 The Employer shall be responsible for the continued operation of the Facilities after Completion, in accordance with GCC Subclause 24.8, and shall be responsible for facilitating the Guarantee Test(s) for the Facilities, in accordance with GCC Subclause 25.2. 10.7 All costs and expenses involved in the performance of the obligations under this GCC Clause 10 shall be the responsibility of the Employer, except those incurred by the Contractor with respect to the performance of Guarantee Tests, in accordance with GCC Subclause 25.2. 10.8 In the event that the Employer shall be in breach of any of his obligations imposed by the Contract, then the additional cost reasonably incurred by
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	the Contractor in consequence thereof shall be added to the Contract Price.
C. Payment	
11. Contract Price	11.1 The Contract Price shall be as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement. 11.2 Unless an adjustment clause is provided for in the SCC, the Contract Price shall be a firm lump sum not subject to any alteration, except in the event of a Change in the Facilities or as otherwise provided in the Contract. 11.3 Subject to GCC Subclauses 9.2, 10.1, and 35 hereof, the Contractor shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.
12. Terms of Payment	12.1 The Contract Price shall be paid as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement and in the Appendix (Terms and Procedures of Payment) to the Contract Agreement, which also outlines the procedures to be followed in making application for and processing payments. 12.2 No payment made by the Employer herein shall be deemed to constitute acceptance by the Employer of the Facilities or any part(s) thereof. 12.3 In the event that the Employer fails to make any payment by its respective due date or within the period set forth in the Contract, the Employer shall pay to the Contractor interest on the amount of such delayed payment at the rate(s) shown in the Appendix (Terms and Procedures of Payment) to the Contract Agreement for the period of delay until payment has been made in full, whether before or after judgment or arbitration award. 12.4 The currency or currencies in which payments are made to the Contractor under this Contract shall be specified in the Appendix (Terms and Procedures of Payment) to the Contract Agreement, subject to the general principle that payments will be made in the currency or currencies in which the Contract Price has been stated in the Contractor's bid.
13. Securities	13.1 <u>Issuance of Securities</u> The Contractor shall provide the securities specified below in favor of the Employer at the times, and in the amount, manner, and form specified below. 13.2 <u>Advance Payment Security</u> 13.2.1 The Contractor shall, within 28 days of the notification of contract award, provide a security in an amount equal to the advance payment calculated in accordance with the Appendix (Terms and Procedures of Payment) to the Contract Agreement, and in the same currency or currencies. 13.2.2 The security shall be in the form provided in the Bidding Documents or in another form acceptable to the Employer. The amount of the security shall be reduced in proportion to the value of the Facilities

	executed by and paid to the Contractor from time to time, and shall automatically become null and void when the full amount of the advance payment has been recovered by the Employer. The security shall be returned to the Contractor immediately after its expiration. 13.3 <u>Performance Security</u> 13.3.1 The Contractor shall, within 28 days of the notification of contract award, provide a security for the due performance of the Contract in the amount specified in the SCC. 13.3.2 The security shall be denominated in the currency or currencies of the Contract, or in a freely convertible currency acceptable to the Employer, and shall be in one of the forms of bank guarantees provided in the Bidding Documents, as stipulated by the Employer in the SCC, or in another form acceptable to the Employer. 13.3.3 Unless otherwise specified in the SCC, the security shall be reduced by half on the date of the Operational Acceptance. The Security shall become null and void, or shall be reduced pro rata to the Contract Price of a part of the Facilities for which a separate Time for Completion is provided, 540 days after Completion of the Facilities or 365 days after Operational Acceptance of the Facilities, whichever occurs first; provided, however, that if the Defects Liability Period has been extended on any part of the Facilities pursuant to GCC Subclause 27.8 hereof, the Contractor shall issue an additional security in an amount proportionate to the Contract Price of that part. The security shall be returned to the Contractor immediately after its expiration, provided, however, that if the Contractor, pursuant to GCC Subclause 27.10, is liable for an extended defect liability obligation, the performance security shall be extended for the period and up to the amount specified in the SCC.
14. Taxes and Duties	14.1 Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies, and charges assessed on the Contractor, its Subcontractors, or their employees by all municipal, state, or national government authorities in connection with the Facilities in and outside of the country where the Site is located. 14.2 Notwithstanding GCC Subclause 14.1 above, the Employer shall bear and promptly pay all customs and import duties as well as other local taxes like, e.g., a value-added tax (VAT), imposed by the law of the country where the Site is located on the Plant specified in Price Schedule No. 1 and that are to be incorporated into the Facilities. 14.3 If any tax exemptions, reductions, allowances, or privileges may be available to the Contractor in the country where the Site is located, the Employer shall use its best endeavors to enable the Contractor to benefit from any such tax savings to the maximum allowable extent. 14.4 For the purpose of the Contract, it is agreed that the Contract Price specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement is based on the taxes, duties, levies, and charges prevailing at the date 28 days prior to the date of bid submission in the country where the Site is located (hereinafter called "Tax" in this GCC

	Subclause 14.4). If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of Contract, which was or will be assessed on the Contractor, Subcontractors, or their employees in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction therefrom, as the case may be, in accordance with GCC Clause 36 hereof.
D. Intellectual Property	
15. License/Use of Technical Information	15.1 For the operation and maintenance of the Plant, the Contractor hereby grants a non-exclusive and nontransferable license (without the right to sublicense) to the Employer under the patents, utility models, or other industrial property rights owned by the Contractor or by a third party from whom the Contractor has received the right to grant licenses thereunder, and shall also grant to the Employer a nonexclusive and nontransferable right (without the right to sublicense) to use the know-how and other technical information disclosed to the Employer under the Contract. Nothing contained herein shall be construed as transferring ownership of any patent, utility model, trademark, design, copyright, know-how, or other intellectual property right from the Contractor or any third party to the Employer. 15.2 The copyright in all drawings, documents, and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or, if they are furnished to the Employer directly or through the Contractor by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.
16. Confidential Information	16.1 The Employer and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during, or following termination of the Contract. Notwithstanding the above, the Contractor may furnish to its Subcontractor(s) such documents, data, and other information it receives from the Employer to the extent required for the Subcontractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this GCC Clause 16. 16.2 The Employer shall not use such documents, data, and other information received from the Contractor for any purpose other than the operation and maintenance of the Facilities. Similarly, the Contractor shall not use such documents, data, and other information received from the Employer for any purpose other than the design, procurement of Plant, construction, or such other work and services as are required for the performance of the Contract.

	16.3 The obligation of a party under GCC Subclauses 16.1 and 16.2 above, however, shall not apply to that information, which (a) now or hereafter enters the public domain through no fault of that party; (b) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party hereto; and (c) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality. 16.4 The above provisions of this GCC Clause 16 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Facilities or any part thereof. 16.5 The provisions of this GCC Clause 16 shall survive termination, for whatever reason, of the Contract.
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E. Execution of the Facilities

17. Representatives	17.1 <u>Project Manager</u> If the Project Manager is not named in the Contract, then within 14 days of the Effective Date, the Employer shall appoint and notify the Contractor in writing of the name of the Project Manager. The Employer may from time to time appoint some other person as the Project Manager in place of the person previously so appointed, and shall give notice of the name of such other person to the Contractor without delay. No such appointment shall be made at such a time or in such a manner as to impede the progress of work on the Facilities. Such appointment shall only take effect upon receipt of such notice by the Contractor. The Project Manager shall represent and act for the Employer at all times during the performance of the Contract. All notices, instructions, orders, certificates, approvals, and all other communications under the Contract shall be given by the Project Manager, except as herein otherwise provided. All notices, instructions, information, and other communications given by the Contractor to the Employer under the Contract shall be given to the Project Manager, except as herein otherwise provided. 17.2 <u>Contractor's Representative and Construction Manager</u> 17.2.1 If the Contractor's Representative is not named in the Contract, then within 14 days of the Effective Date, the Contractor shall appoint the Contractor's Representative and shall request the Employer in writing to approve the person so appointed. If the Employer makes no objection to the appointment within 14 days, the Contractor's Representative shall be deemed to have been approved. If the Employer objects to the appointment within 14 days giving the reason therefor, then the Contractor shall appoint a replacement within 14 days of such objection, and the foregoing provisions of this GCC Subclause 17.2.1 shall apply thereto. 17.2.2 The Contractor's Representative shall represent and act for the Contractor at all times during the performance of the Contract and shall give to the Project Manager all the Contractor's notices,
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	instructions, information, and all other communications under the Contract. All notices, instructions, information, and all other communications given by the Employer or the Project Manager to the Contractor under the Contract shall be given to the Contractor's Representative or, in its absence, its deputy, except as herein otherwise provided. The Contractor shall not revoke the appointment of the Contractor's Representative without the Employer's prior written consent, which shall not be unreasonably withheld. If the Employer consents thereto, the Contractor shall appoint some other person as the Contractor's Representative, pursuant to the procedure set out in GCC Subclause 17.2.1. 17.2.3 The Contractor's Representative may, subject to the approval of the Employer which shall not be unreasonably withheld, at any time delegate to any person any of the powers, functions and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Contractor's Representative, and shall specify the powers, functions, and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until a copy thereof has been delivered to the Employer and the Project Manager. Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with this GCC Subclause 17.2.3 shall be deemed to be an act or exercise by the Contractor's Representative. 17.2.4 From the commencement of installation of the Facilities at the Site until Completion, the Contractor's Representative shall appoint a suitable person as the Construction Manager. The Construction Manager shall supervise all work done at the Site by the Contractor and shall be present at the Site throughout normal working hours except when on leave, sick, or absent for reasons connected with the proper performance of the Contract. Whenever the Construction Manager is absent from the Site, the Contractor's Representative or the Construction Manager shall appoint a suitable person to act as the Construction Manager's deputy. 17.2.5 The Employer may by notice to the Contractor object to any representative or person employed by the Contractor in the execution of the Contract who, in the reasonable opinion of the Employer, may behave inappropriately, may be incompetent or negligent, or may commit a serious breach of the Site regulations provided under GCC Subclause 22.4. The Employer shall provide evidence of the same, whereupon the Contractor shall remove such person from the Facilities. 17.2.6 If any representative or person employed by the Contractor is removed in accordance with GCC Subclause 17.2.5, the Contractor shall, where required, promptly appoint a replacement.
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18. Work Program	18.1 <u>Contractor's Organization</u> The Contractor shall supply to the Employer and the Project Manager a chart showing the proposed organization to be established by the Contractor for carrying out work on the Facilities within 21 days of the Effective Date. The chart shall include the identities of the key personnel, and the curricula vitae of such key personnel to be employed shall be supplied together with the chart. The Contractor shall promptly inform the Employer and the Project Manager in writing of any revision or alteration of such an organization chart. 18.2 <u>Program of Performance</u> Within 28 days after the Effective Date, the Contractor shall submit to the Project Manager a detailed program of performance of the Contract, made in a form acceptable to the Project Manager and showing the sequence in which it proposes to design, manufacture, transport, assemble, install, and pre-commission the Facilities, as well as the date by which the Contractor reasonably requires that the Employer shall have fulfilled its obligations under the Contract so as to enable the Contractor to execute the Contract in accordance with the program and to achieve Completion, Commissioning, and Acceptance of the Facilities in accordance with the Contract. The program so submitted by the Contractor shall accord with the Time Schedule included in the Appendix (Time Schedule) to the Contract Agreement and any other dates and periods specified in the Contract. The Contractor shall update and revise the program as and when appropriate or when required by the Project Manager, but without modification in the Times for Completion given in the SCC and any extension granted in accordance with GCC Clause 40, and shall submit all such revisions to the Project Manager. 18.3 <u>Progress Report</u> The Contractor shall monitor progress of all the activities specified in the program referred to in GCC Subclause 18.2 above, and supply a progress report to the Project Manager every month. The progress report shall be in a form acceptable to the Project Manager and shall indicate: (a) percentage completion achieved compared with the planned percentage completion for each activity; and (b) where any activity is behind the program, giving comments and likely consequences and stating the corrective action being taken. 18.4 <u>Progress of Performance</u> If at any time the Contractor's actual progress falls behind the program referred to in GCC Subclause 18.2, or it becomes apparent that it will so fall behind, the Contractor shall, at the request of the Employer or the Project Manager, prepare and submit to the Project Manager a revised program, taking into account the prevailing circumstances, and shall notify the Project Manager of the steps being taken to expedite progress so as to attain Completion of the Facilities within the Time for Completion under GCC Subclause 8.2, any extension thereof entitled under GCC Subclause 40.1, or any extended period as may otherwise be agreed upon between the Employer and the Contractor. 18.5 <u>Procedures</u>
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	The Contract shall be executed in accordance with the Contract Documents including the procedures given in the Forms and Procedures of the Employer's Requirements. The Contractor may execute the Contract in accordance with its own standard project execution plans and procedures to the extent that they do not conflict with the provisions contained in the Contract.
19.Subcontracting	19.1 The Appendix 5 (List of Major Items of Plant and Services and List of Approved Subcontractors) to the Contract Agreement specifies major items of plant and services and a list of approved Subcontractors against each item, including manufacturers. Insofar as no Subcontractors are listed against any such item, the Contractor shall prepare a list of Subcontractors for such item for inclusion in such list. The Contractor may from time to time propose any addition to or deletion from any such list. The Contractor shall submit any such list or any modification thereto to the Employer for its approval in sufficient time so as not to impede the progress of work on the Facilities. Such approval by the Employer for any of the Subcontractors shall not relieve the Contractor from any of its obligations, duties, or responsibilities under the Contract. 19.2 The Contractor shall select and employ its Subcontractors for such major items from those listed in the lists referred to in GCC Subclause 19.1. 19.3 For items or parts of the Facilities not specified in the Appendix (List of Major Items of Plant and Services and List of Approved Subcontractors for Major Items) to the Contract Agreement, the Contractor may employ such Subcontractors as it may select, at its discretion. 19.4 Each subcontract shall include provisions which would entitle the Employer to require the sub-contract to be assigned to the Employer under GCC 19.5 (if and when applicable), or in event of termination by the Employer under GCC 42.2. 19.5 If a Sub-contractor's obligations extend beyond the expiry date of the relevant Defects Liability Period and the Project Manager, prior to that date, instructs the Contractor to assign the benefits of such obligations to the Employer, then the Contractor shall do so.
20. Design and Engineering	20.1 <u>Specifications and Drawings</u> 20.1.1 The Contractor shall execute the basic and detailed design and the engineering work in compliance with the provisions of the Contract, or where not so specified, in accordance with good engineering practice. The Contractor shall be responsible for any discrepancies, errors, or omissions in the specifications, drawings, and other technical documents that it has prepared, whether such specifications, drawings, and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors, or omissions are not because of inaccurate information furnished in writing to the Contractor by or on behalf of the Employer. 20.1.2 The Contractor shall be entitled to disclaim responsibility for any design, data, drawing, specification, or other document, or any modification thereof provided or designated by or on behalf of the Employer, by giving a notice of such disclaimer to the Project Manager.

20.2 Codes and Standards

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date 28 days prior to date of bid submission shall apply unless otherwise specified. During Contract execution, any changes in such codes and standards shall be applied subject to approval by the Employer and shall be treated in accordance with GCC Clause 39.

20.3 Approval/Review of Technical Documents by Project Manager

20.3.1 The Contractor shall prepare or cause its Subcontractors to prepare, and furnish to the Project Manager the documents listed in the Appendix (List of Documents for Approval or Review) to the Contract Agreement for its approval or review as specified and in accordance with the requirements of GCC Subclause 18.2 (Program of Performance).

Any part of the Facilities covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager's approval thereof.

GCC Subclauses 20.3.2 through 20.3.7 shall apply to those documents requiring the Project Manager's approval, but not to those furnished to the Project Manager for its review only.

20.3.2 Within 14 days after receipt by the Project Manager of any document requiring the Project Manager's approval in accordance with GCC Subclause 20.3.1, the Project Manager shall either return one copy thereof to the Contractor with its approval endorsed thereon or shall notify the Contractor in writing of its disapproval thereof and the reasons therefor and the modifications that the Project Manager proposes.

If the Project Manager fails to take such action within the said 14 days, then the said document shall be deemed to have been approved by the Project Manager.

20.3.3 The Project Manager shall not disapprove any document, except on the grounds that the document does not comply with the Contract or that it is contrary to good engineering practice. If the Project Manager disapproves a document, he shall specify the reasons for his decision.

20.3.4 If the Project Manager disapproves the document, the Contractor shall modify the document and resubmit it for the Project Manager's approval in accordance with GCC Subclause 20.3.2. If the Project Manager approves the document subject to modification(s), the Contractor shall make the required modification(s), whereupon the document shall be deemed to have been approved.

20.3.5 If any dispute or difference occurs between the Employer and the Contractor in connection with or arising out of the disapproval by the Project Manager of any document and/or any modification(s) thereto that cannot be settled between the parties within a reasonable period, then such dispute or difference may be referred to a Dispute Board for determination in accordance with GCC

	Subclause 45.3 hereof. If such dispute or difference is referred to a Dispute Board, the Project Manager shall give instructions as to whether and, if so, how, performance of the Contract is to proceed. The Contractor shall proceed with the Contract in accordance with the Project Manager's instructions, provided that if the Dispute Board upholds the Contractor's view on the dispute and if the Employer has not given notice under Subclause 45.3 hereof, then the Contractor shall be reimbursed by the Employer for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as the Dispute Board shall decide, and the Time for Completion shall be extended accordingly. 20.3.6 The Project Manager's approval, with or without modification of the document furnished by the Contractor, shall not relieve the Contractor of any responsibility or liability imposed upon it by any provisions of the Contract except to the extent that any subsequent failure results from modifications required by the Project Manager. 20.3.7 The Contractor shall not depart from any approved document unless the Contractor has first submitted to the Project Manager an amended document and obtained the Project Manager's approval thereof, pursuant to the provisions of this GCC Subclause 20.3. If the Project Manager requests any change in any already approved document and/or in any document based thereon, the provisions of GCC Clause 39 shall apply to such request.
21. Procurement	21.1 <u>Materials</u> Subject to GCC Subclause 14.2, the Contractor shall procure and transport all materials in an expeditious and orderly manner to the Site. 21.2 <u>Employer-Supplied Materials</u> If the Appendix (Scope of Works and Supply by the Employer) to the Contract Agreement provides that the Employer shall furnish any specific items to the Contractor, the following provisions shall apply: 21.2.1 The Employer shall, at its own risk and expense, transport each item to the place on or near the Site as agreed upon by the parties and make such item available to the Contractor at the time specified in the program furnished by the Contractor, pursuant to GCC Subclause 18.2, unless otherwise mutually agreed. 21.2.2 Upon receipt of such item, the Contractor shall inspect the same visually and notify the Project Manager of any detected shortage, defect, or default. The Employer shall immediately remedy any shortage, defect, or default, or the Contractor shall, if practicable and possible, at the request of the Employer, remedy such shortage, defect, or default at the Employer's cost and expense. After inspection, such item shall fall under the care, custody, and control of the Contractor. The provision of this GCC Subclause 21.2.2 shall apply to any item supplied to remedy any such shortage or default or to substitute for any defective item, or shall apply to defective items that have been repaired. 21.2.3 The foregoing responsibilities of the Contractor and its obligations of care, custody, and control shall not relieve the Employer of liability for any undetected shortage, defect, or default, nor place

	the Contractor under any liability for any such shortage, defect or default whether under GCC Clause 27 or under any other provision of Contract. 21.3 <u>Transportation</u> 21.3.1 The Contractor shall at its own risk and expense transport all the materials and the Contractor's Equipment to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances. 21.3.2 Unless otherwise provided in the Contract, the Contractor shall be entitled to select any safe mode of transport operated by any person to carry the materials and the Contractor's Equipment. 21.3.3 Upon dispatch of each shipment of materials and the Contractor's Equipment, the Contractor shall notify the Employer by telex, cable, facsimile, or electronic means, of the description of the materials and of the Contractor's Equipment, the point and means of dispatch, and the estimated time and point of arrival in the country where the Site is located, if applicable, and at the Site. The Contractor shall furnish the Employer with relevant shipping documents to be agreed upon between the parties. 21.3.4 The Contractor shall be responsible for obtaining, if necessary, approvals from the authorities for transportation of the materials and the Contractor's Equipment to the Site. The Employer shall use its best endeavors in a timely and expeditious manner to assist the Contractor in obtaining such approvals, if requested by the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any claim for damage to roads, bridges, or any other traffic facilities that may be caused by the transport of the materials and the Contractor's Equipment to the Site. 21.4 <u>Customs Clearance</u> The Contractor shall, at its own expense, handle all imported materials and Contractor's Equipment at the point(s) of import and shall handle any formalities for customs clearance, subject to the Employer's obligations under GCC Subclause 14.2, provided that if applicable laws or regulations require any application or act to be made by or in the name of the Employer, the Employer shall take all necessary steps to comply with such laws or regulations. In the event of delays in customs clearance that are not the fault of the Contractor, the Contractor shall be entitled to an extension in the Time for Completion, pursuant to GCC Clause 40.
22. Installation	22.1 Setting Out/Supervision 22.1.1 <u>Benchmark</u> (a) The Contractor shall be responsible for the true and proper setting-out of the Facilities in relation to bench marks, reference marks, and lines provided to it in writing by or on behalf of the Employer. (b) If, at any time during the progress of installation of the Facilities, any error shall appear in the position, level, or alignment of the Facilities, the Contractor shall forthwith notify

the Project Manager of such error and, at its own expense, immediately rectify such error to the reasonable satisfaction of the Project Manager. If such error is based on incorrect data provided in writing by or on behalf of the Employer, the expense of rectifying the same shall be borne by the Employer.

22.1.2 Contractor's Supervision

The Contractor shall give or provide all necessary superintendence during the installation of the Facilities, and the Construction Manager or its deputy shall be constantly on the Site to provide full-time superintendence of the installation. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

22.2 Labor

22.2.1 Engagement of Staff and Labor

- (a) Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, housing, feeding, and transport.
- (b) The Contractor shall provide and employ on the Site in the installation of the Facilities such skilled, semi-skilled, and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged to use local labor that has the necessary skills.
- (c) The Contractor shall be responsible for obtaining all necessary permit(s) and/or visa(s) from the appropriate authorities for the entry of all labor and personnel to be employed on the Site into the country where the Site is located. The Employer will, if requested by the Contractor, use his best endeavors in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national, or government permission required for bringing in the Contractor's personnel.
- (d) The Contractor shall at its own expense provide the means of repatriation to all of its and its Subcontractor's personnel employed on the Contract at the Site to the place where they were recruited or to their domicile. It shall also provide suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.

22.2.2 Persons in the Service of Employer

The Contractor shall not recruit, or attempt to recruit, staff and labor from amongst the Employer's Personnel.

22.2.3 Labor Laws

- (a) The Contractor shall comply with all the relevant labor Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration, and emigration, and shall allow them all their legal rights.
- (b) The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous, or disorderly conduct or behavior by or amongst its employees and the labor of its Subcontractors.
- (c) The Contractor shall, in all dealings with its labor and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious, or other customs and all local laws and regulations pertaining to the employment of labor.

22.2.4 Rates of Wages and Conditions of Labor

- (a) The Contractor shall pay rates of wages, and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.
- (b) The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages, and allowances as are chargeable under the Laws for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.

22.2.5 Working Hours

- (a) No work shall be carried out on the Site on locally recognized days of rest, or outside the normal working hours stated in the SCC, unless
 - (i) otherwise stated in the Contract;
 - (ii) the Project Manager gives consent; or
 - (iii) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Project Manager.
- (b) If and when the Contractor considers it necessary to carry out work at night or on public holidays so as to meet the Time for Completion and requests the Project Manager's consent thereto, the Project Manager shall not unreasonably withhold such consent.

	(c) This Subclause shall not apply to any work which is customarily carried out by rotary or double shifts. 22.2.6 Facilities for Staff and Labor (a) Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Specification. (b) The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works. 22.2.7 Health and Safety (a) The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay, and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics. (b) The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the performance of the Contract, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority. (c) The Contractor shall send to the Project Manager, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety, and welfare of persons, and damage to property, as the Project Manager may reasonably require. 22.2.8 Funeral Arrangements In the event of the death of any of the Contractor's personnel or accompanying members of their families, the Contractor shall be responsible for making the appropriate arrangements for their return or burial, unless otherwise specified in the SCC. 22.2.9 Records of Contractor's Personnel The Contractor shall keep accurate records of the Contractor's personnel, including the number of each class of Contractor's Personnel on the Site and the names, ages, gender, hours worked, and wages paid to all workers. These records shall be summarized on a monthly basis in a form approved by the Project
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	Manager and shall be available for inspection by the Project Manager until the Contractor has completed all work. 22.2.10 <u>Supply of Foodstuff</u> The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract. 22.2.11 <u>Supply of Water</u> The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel. 22.2.12 <u>Measures against Insect and Pest Nuisance</u> The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide. 22.2.13 <u>Alcoholic Liquor or Drugs</u> The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give barter, or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift barter, or disposal by Contractor's Personnel. 22.2.14 <u>Arms and Ammunition</u> The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so. 22.2.15 <u>Prohibition of All Forms of Forced or Compulsory Labor</u> The contractor shall not employ "forced or compulsory labor" in any form. "Forced or compulsory labor" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty. 22.2.16 <u>Prohibition of Harmful Child Labor</u> The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. 22.3 <u>Contractor's Equipment</u> 22.3.1 All Contractor's Equipment brought by the Contractor onto the Site shall be deemed to be intended to be used exclusively for the execution of the Contract. The Contractor shall not remove the same from the Site without the Project Manager's consent that such Contractor's Equipment is no longer required for the execution of the Contract. 22.3.2 Unless otherwise specified in the Contract, upon completion of the Facilities, the Contractor shall remove from the Site all
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	Equipment brought by the Contractor onto the Site and any surplus materials remaining thereon. 22.3.3 The Employer will, if requested, use its best endeavors to assist the Contractor in obtaining any local, state or national government permission required by the Contractor for the export of the Contractor's Equipment imported by the Contractor for use in the execution of the Contract that is no longer required for the execution of the Contract. 22.4 <u>Site Regulations and Safety</u> The Employer and the Contractor shall establish Site regulations setting out the rules to be observed in the execution of the Contract at the Site and shall comply therewith. The Contractor shall prepare and submit to the Employer, with a copy to the Project Manager, proposed Site regulations for the Employer's approval, which approval shall not be unreasonably withheld. Such Site regulations shall include, but shall not be limited to, rules in respect of security, safety of the Facilities, gate control, sanitation, medical care, and fire prevention. 22.5 <u>Opportunities for Other Contractors</u> 22.5.1 The Contractor shall, upon written request from the Employer or the Project Manager, give all reasonable opportunities for carrying out the work to any other contractors employed by the Employer on or near the Site. 22.5.2 If the Contractor, upon written request from the Employer or the Project Manager, makes available to other contractors any roads or ways the maintenance for which the Contractor is responsible, permits the use by such other contractors of the Contractor's Equipment, or provides any other service of whatsoever nature for such other contractors, the Employer shall fully compensate the Contractor for any loss or damage caused or occasioned by such other contractors in respect of any such use or service, and shall pay to the Contractor reasonable remuneration for the use of such equipment or the provision of such services. 22.5.3 The Contractor shall also so arrange to perform its work as to minimize, to the extent possible, interference with the work of other contractors. The Project Manager shall determine the resolution of any difference or conflict that may arise between the Contractor and other contractors and the workers of the Employer in regard to their work. 22.5.4 The Contractor shall notify the Project Manager promptly of any defects in the other Contractors' work that come to its notice, and that could affect the Contractor's work. The Project Manager shall determine the corrective measures, if any, required to rectify the situation after inspection of the Facilities. Decisions made by the Project Manager shall be binding on the Contractor. 22.6 <u>Emergency Work</u> If, by reason of an emergency arising in connection with and during the execution of the Contract, any protective or remedial work is necessary as
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	a matter of urgency to prevent damage to the Facilities, the Contractor shall immediately carry out such work. If the Contractor is unable or unwilling to do such work immediately, the Employer may do or cause such work to be done as the Employer may determine is necessary in order to prevent damage to the Facilities. In such event the Employer shall, as soon as practicable after the occurrence of any such emergency, notify the Contractor in writing of such emergency, the work done and the reasons therefor. If the work done or caused to be done by the Employer is work that the Contractor was liable to do at its own expense under the Contract, the reasonable costs incurred by the Employer in connection therewith shall be paid by the Contractor to the Employer. Otherwise, the cost of such remedial work shall be borne by the Employer. 22.7 <u>Site Clearance</u> 22.7.1 <u>Site Clearance in Course of Performance</u> In the course of carrying out the Contract, the Contractor shall keep the Site reasonably free from all unnecessary obstruction, store, or remove any surplus materials, clear away any wreckage, rubbish, or temporary works from the Site, and remove any Contractor's Equipment no longer required for execution of the Contract. 22.7.2 <u>Clearance of Site after Completion</u> After Completion of all parts of the Facilities, the Contractor shall clear away and remove all wreckage, rubbish, and debris of any kind from the Site, and shall leave the Site and Facilities in a clean and safe condition. 22.8 <u>Watching and Lighting</u> The Contractor shall provide and maintain at its own expense all lighting, fencing, and watching when and where necessary for the proper execution and the protection of the Facilities, or for the safety of the owners and occupiers of adjacent property and for the safety of the public.
23. Test and Inspection	23.1 The Contractor shall at its own expense carry out at the place of manufacture and/or on the Site all such tests and/or inspections of the Plant and any part of the Facilities as are specified in the Contract. 23.2 The Employer and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection, provided that the Employer shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses. 23.3 Whenever the Contractor is ready to carry out any such test and/or inspection, the Contractor shall give a reasonable advance notice of such test and/or inspection and of the place and time thereof to the Project Manager. The Contractor shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Employer and the Project Manager or their designated representatives to attend the test and/or inspection.

	23.4 The Contractor shall provide the Project Manager with a certified report of the results of any such test and/or inspection. If the Employer or Project Manager or their designated representatives fails to attend the test and/or inspection, or if it is agreed between the parties that such persons shall not do so, then the Contractor may proceed with the test and/or inspection in the absence of such persons, and may provide the Project Manager with a certified report of the results thereof. 23.5 The Project Manager may require the Contractor to carry out any test and/or inspection not required by the Contract, provided that the Contractor's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of work on the Facilities and/or the Contractor's performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Completion and the other obligations so affected. 23.6 If any Plant or any part of the Facilities fails to pass any test and/or inspection, the Contractor shall either rectify or replace such Plant or part of the Facilities and shall repeat the test and/or inspection upon giving a notice under GCC Subclause 23.3. 23.7 If any dispute or difference of opinion shall arise between the parties in connection with or arising out of the test and/or inspection of the Plant or part of the Facilities that cannot be settled between the parties within a reasonable period of time, it may be referred to an Dispute Board for determination in accordance with GCC Subclause 45.3. 23.8 The Contractor shall afford the Employer and the Project Manager, at the Employer's expense, access at any reasonable time to any place where the Plant are being manufactured or the Facilities are being installed, in order to inspect the progress and the manner of manufacture or installation, provided that the Project Manager shall give the Contractor a reasonable prior notice. 23.9 The Contractor agrees that neither the execution of a test and/or inspection of Plant or any part of the Facilities, nor the attendance by the Employer or the Project Manager, nor the issue of any test certificate pursuant to GCC Subclause 23.4, shall release the Contractor from any other responsibilities under the Contract. 23.10 No part of the Facilities or foundations shall be covered up on the Site without the Contractor carrying out any test and/or inspection required under the Contract. The Contractor shall give a reasonable notice to the Project Manager whenever any such parts of the Facilities or foundations are ready or about to be ready for test and/or inspection; such test and/or inspection and notice thereof shall be subject to the requirements of the Contract. 23.11 The Contractor shall uncover any part of the Facilities or foundations, or shall make openings in or through the same as the Project Manager may from time to time require at the Site, and shall reinstate and make good such part or parts.
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	If any parts of the Facilities or foundations have been covered up at the Site after compliance with the requirement of GCC Subclause 23.10 and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating, and making good the same shall be borne by the Employer, and the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been delayed or impeded in the performance of any of its obligations under the Contract.
24. Completion of the Facilities	24.1 As soon as the Facilities or any part thereof has, in the opinion of the Contractor, been completed operationally and structurally and put in a tight and clean condition as specified in the Employer's Requirements, excluding minor items not materially affecting the operation or safety of the Facilities, the Contractor shall so notify the Employer in writing. 24.2 Within 7 days after receipt of the notice from the Contractor under GCC Subclause 24.1, the Employer shall supply the operating and maintenance personnel specified in the Appendix (Scope of Works and Supply by the Employer) to the Contract Agreement for Pre-commissioning of the Facilities or any part thereof. Pursuant to the Appendix (Scope of Works and Supply by the Employer) to the Contract Agreement, the Employer shall also provide, within the said 7-day period, the raw materials, utilities, lubricants, chemicals, catalysts, facilities, services, and other matters required for Pre-commissioning of the Facilities or any part thereof. 24.3 As soon as reasonably practicable after the operating and maintenance personnel have been supplied by the Employer and the raw materials, utilities, lubricants, chemicals, catalysts, facilities, services, and other matters have been provided by the Employer in accordance with GCC Subclause 24.2, the Contractor shall commence Pre-commissioning of the Facilities or the relevant part thereof in preparation for Commissioning, subject to GCC Subclause 25.5. 24.4 As soon as all works in respect of Pre-commissioning are completed and, in the opinion of the Contractor, the Facilities or any part thereof is ready for Commissioning, the Contractor shall so notify the Project Manager in writing. 24.5 The Project Manager shall, within 14 days after receipt of the Contractor's notice under GCC Subclause 24.4, either issue a Completion Certificate in the form specified in the Employer's Requirements (Forms and Procedures), stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor's notice under GCC Subclause 24.4, or notify the Contractor in writing of any defects and/or deficiencies. If the Project Manager notifies the Contractor of any defects and/or deficiencies, the Contractor shall then correct such defects and/or deficiencies, and shall repeat the procedure described in GCC Subclause 24.4. If the Project Manager is satisfied that the Facilities or that part thereof have reached Completion, the Project Manager shall, within 7 days after receipt of the Contractor's repeated notice, issue a Completion Certificate

	stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor's repeated notice. If the Project Manager is not so satisfied, then it shall notify the Contractor in writing of any defects and/or deficiencies within 7 days after receipt of the Contractor's repeated notice, and the above procedure shall be repeated. 24.6 If the Project Manager fails to issue the Completion Certificate and fails to inform the Contractor of any defects and/or deficiencies within 14 days after receipt of the Contractor's notice under GCC Subclause 24.4 or within 7 days after receipt of the Contractor's repeated notice under GCC Subclause 24.5, or if the Employer makes use of the Facilities or part thereof, then the Facilities or that part thereof shall be deemed to have reached Completion as of the date of the Contractor's notice or repeated notice, or as of the Employer's use of the Facilities, as the case may be. 24.7 As soon as possible after Completion, the Contractor shall complete all outstanding minor items so that the Facilities are fully in accordance with the requirements of the Contract, failing which the Employer will undertake such completion and deduct the costs thereof from any monies owing to the Contractor. 24.8 Upon Completion, the Employer shall be responsible for the care and custody of the Facilities or the relevant part thereof, together with the risk of loss or damage thereto, and shall thereafter take over the Facilities or the relevant part thereof.
25. Commissioning and Operational Acceptance	25.1 <u>Commissioning</u> 25.1.1 Commissioning of the Facilities or any part thereof shall be commenced by the Contractor immediately after issue of the Completion Certificate by the Project Manager, pursuant to GCC Subclause 24.5, or immediately after the date of the deemed Completion, under GCC Subclause 24.6. 25.1.2 The Employer shall supply the operating and maintenance personnel and all raw materials, utilities, lubricants, chemicals, catalysts, facilities, services, and other matters required for Commissioning. 25.1.3 In accordance with the requirements of the Contract, the Contractor's and Project Manager's advisory personnel shall attend the Commissioning, including the Guarantee Test, and shall advise and assist the Employer. 25.2 <u>Guarantee Test</u> 25.2.1 Subject to GCC Subclause 25.5, the Guarantee Test and repeats thereof shall be conducted by the Contractor during Commissioning of the Facilities or the relevant part thereof to ascertain whether the Facilities or the relevant part can attain the Functional Guarantees specified in the Appendix (Functional Guarantees) to the Contract Agreement. The Employer shall promptly provide the Contractor with such information as the Contractor may reasonably require in

relation to the conduct and results of the Guarantee Test and any repeats thereof.

25.2.2 If for reasons not attributable to the Contractor, the Guarantee Test of the Facilities or the relevant part thereof cannot be successfully completed within the period from the date of Completion specified in the SCC or any other period agreed upon by the Employer and the Contractor, the Contractor shall be deemed to have fulfilled its obligations with respect to the Functional Guarantees, and GCC Subclauses 28.2 and 28.3 shall not apply.

25.3 Operational Acceptance

25.3.1 Subject to GCC Subclause 25.4 below, Operational Acceptance shall occur in respect of the Facilities or any part thereof when

- (a) the Guarantee Test has been successfully completed and the Functional Guarantees are met; or
- (b) the Guarantee Test has not been successfully completed or has not been carried out for reasons not attributable to the Contractor within the period from the date of Completion specified in the SCC, or any other agreed upon period as specified in GCC Subclause 25.2.2 above; or
- (c) the Contractor has paid the liquidated damages specified in GCC Subclause 28.3 hereof; and
- (d) any minor items mentioned in GCC Subclause 24.7 hereof relevant to the Facilities or that part thereof have been completed.

25.3.2 At any time after any of the events set out in GCC Subclause 25.3.1 have occurred, the Contractor may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate in the form provided in the Employer's Requirements (Forms and Procedures) in respect of the Facilities or the part thereof specified in such notice as of the date of such notice.

25.3.3 The Project Manager shall, after consultation with the Employer, and within 7 days after receipt of the Contractor's notice, issue an Operational Acceptance Certificate.

25.3.4 If within 7 days after receipt of the Contractor's notice, the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Contractor in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the Facilities or the relevant part thereof shall be deemed to have been accepted as of the date of the Contractor's said notice.

25.4 Partial Acceptance

25.4.1 If the Contract specifies that Completion and Commissioning shall be carried out in respect of parts of the Facilities, the provisions relating to Completion and Commissioning including the Guarantee

	Test shall apply to each such part of the Facilities individually, and the Operational Acceptance Certificate shall be issued accordingly for each such part of the Facilities. 25.4.2 If a part of the Facilities comprises facilities such as buildings, for which no Commissioning or Guarantee Test is required, then the Project Manager shall issue the Operational Acceptance Certificate for such facility when it attains Completion, provided that the Contractor shall thereafter complete any outstanding minor items that are listed in the Operational Acceptance Certificate. 25.5 <u>Delayed Pre-Commissioning and/or Guarantee Test</u> 25.5.1 In the event that the Contractor is unable to proceed with the Pre-commissioning of the Facilities pursuant to Subclause 24.3, or with the Guarantee Test pursuant to Subclause 25.2, for reasons attributable to the Employer either on account of non availability of other facilities under the responsibilities of other contractor(s), or for reasons beyond the Employer's control, the provisions leading to "deemed" completion of activities such as Completion, pursuant to GCC Subclause 24.6, and Operational Acceptance, pursuant to GCC Subclause 25.3.4, and Contractor's obligations regarding Defect Liability Period, pursuant to GCC Subclause 27.2, Functional Guarantee, pursuant to GCC Clause 28, and Care of Facilities, pursuant to GCC Clause 32, and GCC Clause 41.1, Suspension, shall not apply. In this case, the following provisions shall apply. 25.5.2 When the Contractor is notified by the Project Manager that he will be unable to proceed with the activities and obligations pursuant to above Subclause 25.5.1, the Contractor shall be entitled to the following: (a) the Time of Completion shall be extended for the period of suspension without imposition of liquidated damages pursuant to GCC Subclause 26.2; (b) payments due to the Contractor in accordance with the provision specified in the Appendix (Terms and Procedures of Payment) to the Contract Agreement, which would not have been payable in normal circumstances due to noncompletion of the subject activities, shall be released to the Contractor against submission of a security in the form of a bank guarantee of equivalent amount acceptable to the Employer, and which shall become null and void when the Contractor will have complied with its obligations regarding those payments, subject to the provision of Subclause 25.5.3 below; (c) the expenses towards the above security and extension of other securities under the contract, of which validity needs to be extended, shall be reimbursed to the Contractor by the Employer; (d) the additional charges towards the care of the Facilities pursuant to GCC Subclause 32.1 shall be reimbursed to the
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	Contractor by the Employer for the period between the notification mentioned above and the notification mentioned in Subclause 25.5.4 below. The provision of GCC Subclause 33.2 shall apply to the Facilities during the same period. 25.5.3 In the event that the period of suspension under above Subclause 25.5.1 actually exceeds 180 days, the Employer and Contractor shall mutually agree to any additional compensation payable to the Contractor. 25.5.4 When the Contractor is notified by the Project Manager that the plant is ready for Pre-commissioning, the Contractor shall proceed without delay in performing all the specified activities and obligations under the contract.
F. Guarantees and Liabilities	
26. Completion Time Guarantee	26.1 The Contractor guarantees that it shall attain Completion of the Facilities (or a part for which a separate time for completion is specified) within the Time for Completion specified in the SCC pursuant to GCC Subclause 8.2, or within such extended time to which the Contractor shall be entitled under GCC Clause 40 hereof. 26.2 If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GCC Clause 40, the Contractor shall pay to the Employer liquidated damages in the amount specified in the SCC as a percentage rate of the Contract Price or the relevant part thereof. The aggregate amount of such liquidated damages shall in no event exceed the amount specified as “Maximum” in the SCC as a percentage rate of the Contract Price. Once the “Maximum” is reached, the Employer may consider termination of the Contract, pursuant to GCC Subclause 42.2.2. Such payment shall completely satisfy the Contractor’s obligation to attain Completion of the Facilities or the relevant part thereof within the Time for Completion or any extension thereof under GCC Clause 40. The Contractor shall have no further liability whatsoever to the Employer in respect thereof. However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Facilities or from any other obligations and liabilities of the Contractor under the Contract. Save for liquidated damages payable under this GCC Subclause 26.2, the failure by the Contractor to attain any milestone or other act, matter or thing by any date specified in the Appendix (Time Schedule) to the Contract Agreement and/or other program of work prepared pursuant to GCC Subclause 18.2 shall not render the Contractor liable for any loss or damage thereby suffered by the Employer. 26.3 If the Contractor attains Completion of the Facilities or any part thereof before the Time for Completion or any extension thereof under GCC Clause 40, the Employer shall pay to the Contractor a bonus in the amount

	specified in the SCC. The aggregate amount of such bonus shall in no event exceed the amount specified as "Maximum" in the SCC.
27. Defect Liability	27.1 The Contractor warrants that the Facilities or any part thereof shall be free from defects in the design, engineering, materials, and workmanship of the Plant supplied and of the work executed. 27.2 The Defect Liability Period shall be 540 days from the date of Completion of the Facilities (or any part thereof) or 1 year from the date of Operational Acceptance of the Facilities (or any part thereof), whichever first occurs, unless specified otherwise in the SCC pursuant to GCC Subclause 27.10. If during the Defect Liability Period any defect should be found in the design, engineering, materials, and workmanship of the Plant supplied or of the work executed by the Contractor, the Contractor shall promptly, in consultation and agreement with the Employer regarding appropriate remedying of the defects, and at its cost, repair, replace, or otherwise make good as the Contractor shall determine at its discretion, such defect as well as any damage to the Facilities caused by such defect. The Contractor shall not be responsible for the repair, replacement, or making good of any defect or of any damage to the Facilities arising out of or resulting from any of the following causes: (a) improper operation or maintenance of the Facilities by the Employer, (b) operation of the Facilities outside specifications provided in the Contract, or (c) normal wear and tear. 27.3 The Contractor's obligations under this GCC Clause 27 shall not apply to: (a) any materials that are supplied by the Employer under GCC Subclause 21.2, are normally consumed in operation, or have a normal life shorter than the Defect Liability Period stated herein; (b) any designs, specifications or other data designed, supplied, or specified by or on behalf of the Employer or any matters for which the Contractor has disclaimed responsibility herein; or (c) any other materials supplied or any other work executed by or on behalf of the Employer, except for the work executed by the Employer under GCC Subclause 27.7. 27.4 The Employer shall give the Contractor a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. The Employer shall afford all reasonable opportunity for the Contractor to inspect any such defect. 27.5 The Employer shall afford the Contractor all necessary access to the Facilities and the Site to enable the Contractor to perform its obligations under this GCC Clause 27. The Contractor may, with the consent of the Employer, remove from the Site any Plant or any part of the Facilities that are defective if the nature of the defect, and/or any damage to the Facilities caused by the defect, is such that repairs cannot be expeditiously carried out at the Site.

	27.6 If the repair, replacement or making good is of such a character that it may affect the efficiency of the Facilities or any part thereof, the Employer may give to the Contractor a notice requiring that tests of the defective part of the Facilities shall be made by the Contractor immediately upon completion of such remedial work, whereupon the Contractor shall carry out such tests. If such part fails the tests, the Contractor shall carry out further repair, replacement or making good, as the case may be, until that part of the Facilities passes such tests. The tests shall be agreed upon by the Employer and the Contractor. 27.7 If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within a reasonable time (which shall in no event be considered to be less than 15 days), the Employer may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor or may be deducted by the Employer from any monies due the Contractor or claimed under the Performance Security. 27.8 If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Employer because of any of the aforesaid reasons. 27.9 Except as provided in GCC Clauses 27 and 33, the Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities or any part thereof, the Plant, design, or engineering, or work executed that appear after Completion of the Facilities or any part thereof, except where such defects are the result of the gross negligence, fraud, criminal, or willful action of the Contractor. 27.10 In addition, any such component of the Facilities and during the period of time as may be specified in the SCC shall be subject to an extended Defect Liability Period. Such obligation of the Contractor shall be in addition to the Defect Liability Period specified under GCC Subclause 27.2.
28. Functional Guarantees	28.1 The Contractor guarantees that during the Guarantee Test, the Facilities and all parts thereof shall attain the Functional Guarantees specified in the Appendix (Functional Guarantees) to the Contract Agreement, subject to, and upon the conditions therein specified. 28.2 If, for reasons attributable to the Contractor, the minimum level of the Functional Guarantees specified in the Appendix (Functional Guarantees) to the Contract Agreement are not met either in whole or in part, the Contractor shall at its cost and expense make such changes, modifications, and/or additions to the Plant or any part thereof as may be necessary to meet at least the minimum level of such Guarantees. The Contractor shall notify the Employer upon completion of the necessary changes, modifications, and/or additions, and shall request the Employer to repeat the Guarantee Test until the minimum level of the Guarantees has been met. If the Contractor eventually fails to meet the minimum level of Functional Guarantees, the Employer may consider termination of the Contract, pursuant to GCC Subclause 42.2.2.

	28.3 If, for reasons attributable to the Contractor, the Functional Guarantees specified in the Appendix (Functional Guarantees) to the Contract Agreement are not attained either in whole or in part, but the minimum level of the Functional Guarantees specified in the said Appendix to the Contract Agreement is met, the Contractor shall, at the Contractor's option, either (a) make such changes, modifications, and/or additions to the Facilities or any part thereof that are necessary to attain the Functional Guarantees at its cost and expense, and shall request the Employer to repeat the Guarantee Test or (b) pay liquidated damages to the Employer in respect of the failure to meet the Functional Guarantees in accordance with the provisions in the Appendix (Functional Guarantees) to the Contract Agreement. 28.4 The payment of liquidated damages under GCC Subclause 28.3, up to the limitation of liability specified in the Appendix (Functional Guarantees) to the Contract Agreement, shall completely satisfy the Contractor's guarantees under GCC Subclause 28.3, and the Contractor shall have no further liability whatsoever to the Employer in respect thereof. Upon the payment of such liquidated damages by the Contractor, the Project Manager shall issue the Operational Acceptance Certificate for the Facilities or any part thereof in respect of which the liquidated damages have been so paid.
29. Patent Indemnity	29.1 The Contractor shall, subject to the Employer's compliance with GCC Subclause 29.2, indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions, or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Employer may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of (a) the installation of the Facilities by the Contractor or the use of the Facilities in the country where the Site is located, and (b) the sale of the products produced by the Facilities in any country. Such indemnity shall not cover any use of the Facilities or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the Facilities or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Contractor, pursuant to the Contract Agreement. 29.2 If any proceedings are brought or any claim is made against the Employer arising out of the matters referred to in GCC Subclause 29.1, the Employer shall promptly give the Contractor a notice thereof, and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the Contractor fails to notify the Employer within 28 days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the 28-day period,

	the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Employer shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing. 29.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Contractor may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Employer.
30. Limitation of Liability	30.1 Except in cases of criminal negligence or willful misconduct, (a) the Contractor shall not be liable to the Employer, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer, and (b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed a multiple of the Contract Price specified in the SCC or, if a multiple is not so specified, the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement.
G. Risk Distribution	
31. Transfer of Ownership	31.1 Ownership of the Plant (including spare parts) to be imported into the country where the Site is located shall be transferred to the Employer upon loading on to the mode of transport to be used to convey the Plant from the country of origin to that country. 31.2 Ownership of the Plant (including spare parts) procured in the country where the Site is located shall be transferred to the Employer when the Plant are brought on to the Site. 31.3 Ownership of the Contractor's Equipment used by the Contractor and its Subcontractors in connection with the Contract shall remain with the Contractor or its Subcontractors. 31.4 Ownership of any Plant in excess of the requirements for the Facilities shall revert to the Contractor upon Completion of the Facilities or at such earlier time when the Employer and the Contractor agree that the Plant in question are no longer required for the Facilities.

	31.5 Notwithstanding the transfer of ownership of the Plant, the responsibility for care and custody thereof together with the risk of loss or damage thereto shall remain with the Contractor pursuant to GCC Clause 32 (Care of Facilities) hereof until Completion of the Facilities or the part thereof in which such Plant are incorporated.
32. Care of Facilities	32.1 The Contractor shall be responsible for the care and custody of the Facilities or any part thereof until the date of Completion of the Facilities pursuant to GCC Clause 24 or, where the Contract provides for Completion of the Facilities in parts, until the date of Completion of the relevant part, and shall make good at its own cost any loss or damage that may occur to the Facilities or the relevant part thereof from any cause whatsoever during such period. The Contractor shall also be responsible for any loss or damage to the Facilities caused by the Contractor or its Subcontractors in the course of any work carried out, pursuant to GCC Clause 27. Notwithstanding the foregoing, the Contractor shall not be liable for any loss or damage to the Facilities or that part thereof caused by reason of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GCC Subclauses 32.2 and 38.1. 32.2 If any loss or damage occurs to the Facilities or any part thereof or to the Contractor's temporary facilities by reason of (a) insofar as they relate to the country where the Site is located, nuclear reaction, nuclear radiation, radioactive contamination, pressure wave caused by aircraft or other aerial objects, or any other occurrences that an experienced contractor could not reasonably foresee, or if reasonably foreseeable could not reasonably make provision for or insure against, insofar as such risks are not normally insurable on the insurance market and are mentioned in the general exclusions of the policy of insurance, including War Risks and Political Risks, taken out under GCC Clause 34 hereof; or (b) any use or occupation by the Employer or any third party other than a Subcontractor, authorized by the Employer of any part of the Facilities; or (c) any use of or reliance upon any design, data, or specification provided or designated by or on behalf of the Employer, or any such matter for which the Contractor has disclaimed responsibility herein, the Employer shall pay to the Contractor all sums payable in respect of the Facilities executed, notwithstanding that the same be lost, destroyed, or damaged, and will pay to the Contractor the replacement value of all temporary facilities and all parts thereof lost, destroyed, or damaged. If the Employer requests the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Contractor shall make good the same at the cost of the Employer in accordance with GCC Clause 39. If the Employer does not request the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Employer shall either request a change in accordance with GCC Clause 39, excluding the performance of that part of the Facilities thereby lost, destroyed or damaged, or, where the loss or damage affects a substantial part of the Facilities, the Employer shall terminate the Contract pursuant to GCC Subclause 42.1 hereof.

	32.3 The Contractor shall be liable for any loss of or damage to any Contractor's Equipment, or any other property of the Contractor used or intended to be used for purposes of the Facilities, except (i) as mentioned in GCC Subclause 32.2 with respect to the Contractor's temporary facilities, and (ii) where such loss or damage arises by reason of any of the matters specified in GCC Subclauses 32.2 (b) and (c) and 38.1. 32.4 With respect to any loss or damage caused to the Facilities or any part thereof or to the Contractor's Equipment by reason of any of the matters specified in GCC Subclause 38.1, the provisions of GCC Subclause 38.3 shall apply.
33. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification	33.1 Subject to GCC Subclause 33.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions, or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property other than the Facilities whether accepted or not, arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, officers, or agents, except any injury, death, or property damage caused by the negligence of the Employer, its contractors, employees, officers, or agents. 33.2 If any proceedings are brought or any claim is made against the Employer that might subject the Contractor to liability under GCC Subclause 33.1, the Employer shall promptly give the Contractor a notice thereof and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the Contractor fails to notify the Employer within 28 days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the 28-day period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Employer shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing. 33.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers, and Subcontractors from any liability for loss of or damage to property of the Employer, other than the Facilities not yet taken over, that is caused by fire, explosion, or any other perils, in excess of the amount recoverable from insurances procured under GCC Clause 34, provided that such fire, explosion, or other perils were not caused by any act or failure of the Contractor. 33.4 The party entitled to the benefit of an indemnity under this GCC Clause 33 shall take all reasonable measures to mitigate any loss or damage which

	has occurred. If the party fails to take such measures, the other party's liabilities shall be correspondingly reduced.
34. Insurance	34.1 To the extent specified in the Appendix (Insurance Requirements) to the Contract Agreement, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified in the said Appendix. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, who should not unreasonably withhold such approval. (a) <u>Cargo Insurance During Transport</u> Covering loss or damage occurring while in transit from the Contractor's or Subcontractor's works or stores until arrival at the Site, to the Plant (including spare parts therefor) and to the Contractor's Equipment. (b) <u>Installation All Risks Insurance</u> Covering physical loss or damage to the Facilities at the Site, occurring prior to Completion of the Facilities, with an extended maintenance coverage for the Contractor's liability in respect of any loss or damage occurring during the Defect Liability Period while the Contractor is on the Site for the purpose of performing its obligations during the Defect Liability Period. (c) <u>Third Party Liability Insurance</u> Covering bodily injury or death suffered by third parties including the Employer's personnel, and loss of or damage to property occurring in connection with the supply and installation of the Facilities. (d) <u>Automobile Liability Insurance</u> Covering use of all vehicles used by the Contractor or its Subcontractors, whether or not owned by them, in connection with the execution of the Contract. (e) <u>Workers' Compensation</u> In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed. (f) <u>Employer's Liability</u> In accordance with the statutory requirements applicable in any country where the Contract or any part thereof is executed. (g) <u>Other Insurances</u> Such other insurances as may be specifically agreed upon by the parties hereto as listed in the Appendix (Insurance Requirements) to the Contract Agreement. 34.2 The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC Subclause 34.1, except for the Third Party Liability, Workers' Compensation, and Employer's Liability Insurances, and the Contractor's Subcontractors shall be named as co-

	insureds under all insurance policies taken out by the Contractor pursuant to GCC Subclause 34.1 except for the Cargo Insurance During Transport, Workers' Compensation, and Employer's Liability Insurances. All insurer's rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies. 34.3 The Contractor shall, in accordance with the provisions of the Appendix (Insurance Requirements) to the Contract Agreement, deliver to the Employer certificates of insurance or copies of the insurance policies as evidence that the required policies are in full force and effect. The certificates shall provide that no less than 21 days' notice shall be given to the Employer by insurers prior to cancellation or material modification of a policy. 34.4 The Contractor shall ensure that, where applicable, its Subcontractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such Subcontractors are covered by the policies taken out by the Contractor. 34.5 The Employer shall at its expense take out and maintain in effect during the performance of the Contract those insurances specified in the Appendix (Insurance Requirements) to the Contract Agreement, in the sums and with the deductibles and other conditions specified in the said Appendix. The Contractor and the Contractor's Subcontractors shall be named as co-insureds under all such policies. All insurers' rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies. The Employer shall deliver to the Contractor satisfactory evidence that the required insurances are in full force and effect. The policies shall provide that not less than 21 days' notice shall be given to the Contractor by all insurers prior to any cancellation or material modification of the policies. If so requested by the Contractor, the Employer shall provide copies of the policies taken out by the Employer under this GCC Subclause 34.5. 34.6 If the Contractor fails to take out and/or maintain in effect the insurances referred to in GCC Subclause 34.1, the Employer may take out and maintain in effect any such insurances and may from time to time deduct from any amount due the Contractor under the Contract any premium that the Employer shall have paid to the insurer, or may otherwise recover such amount as a debt due from the Contractor. If the Employer fails to take out and/or maintain in effect the insurances referred to in GCC 34.5, the Contractor may take out and maintain in effect any such insurances and may from time to time deduct from any amount due the Employer under the Contract any premium that the Contractor shall have paid to the insurer, or may otherwise recover such amount as a debt due from the Employer. If the Contractor fails to or is unable to take out and maintain in effect any such insurances, the Contractor shall nevertheless have no liability or responsibility towards the Employer, and the Contractor shall have full recourse against the Employer for any and all liabilities of the Employer herein. 34.7 Unless otherwise provided in the Contract, the Contractor shall prepare and conduct all and any claims made under the policies effected by it pursuant to this GCC Clause 34, and all monies payable by any insurers shall be paid to the Contractor. The Employer shall give to the Contractor
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	all such reasonable assistance as may be required by the Contractor. With respect to insurance claims in which the Employer's interest is involved, the Contractor shall not give any release or make any compromise with the insurer without the prior written consent of the Employer. With respect to insurance claims in which the Contractor's interest is involved, the Employer shall not give any release or make any compromise with the insurer without the prior written consent of the Contractor.
35. Unforeseen Conditions	35.1 If, during the execution of the Contract, the Contractor shall encounter on the Site any physical conditions other than climatic conditions, or artificial obstructions that could not have been reasonably foreseen prior to the date of the Contract Agreement by an experienced contractor on the basis of reasonable examination of the data relating to the Facilities including any data as to boring tests, provided by the Employer, and on the basis of information that it could have obtained from a visual inspection of the Site if access thereto was available, or other data readily available to it relating to the Facilities, and if the Contractor determines that it will in consequence of such conditions or obstructions incur additional cost and expense or require additional time to perform its obligations under the Contract that would not have been required if such physical conditions or artificial obstructions had not been encountered, the Contractor shall promptly, and before performing additional work or using additional Plant or Contractor's Equipment, notify the Project Manager in writing of (a) the physical conditions or artificial obstructions on the Site that could not have been reasonably foreseen; (b) the additional work and/or Plant and/or Contractor's Equipment required, including the steps which the Contractor will or proposes to take to overcome such conditions or obstructions; (c) the extent of the anticipated delay; and (d) the additional cost and expense that the Contractor is likely to incur. On receiving any notice from the Contractor under this GCC Subclause 35.1, the Project Manager shall promptly consult with the Employer and Contractor and decide upon the actions to be taken to overcome the physical conditions or artificial obstructions encountered. Following such consultations, the Project Manager shall instruct the Contractor, with a copy to the Employer, of the actions to be taken. 35.2 Any reasonable additional cost and expense incurred by the Contractor in following the instructions from the Project Manager to overcome such physical conditions or artificial obstructions referred to in GCC Subclause 35.1 shall be paid by the Employer to the Contractor as an addition to the Contract Price. 35.3 If the Contractor is delayed or impeded in the performance of the Contract because of any such physical conditions or artificial obstructions referred to in GCC Subclause 35.1, the Time for Completion shall be extended in accordance with GCC Clause 40.

36. Change in Laws and Regulations	36.1 If, after the date 28 days prior to the date of Bid submission, in the country where the Site is located, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated, or changed, which shall be deemed to include any change in interpretation or application by the competent authorities, that subsequently affects the costs and expenses of the Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with the SCC, pursuant to GCC Subclause 11.2.
37. Force Majeure	37.1 “Force Majeure” shall mean any event beyond the reasonable control of the Employer or of the Contractor, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected, and shall include, without limitation, the following: (a) war, hostilities, or warlike operations whether a state of war be declared or not, invasion, act of foreign enemy and civil war; (b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion, and terrorist acts; (c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler or any other act or failure to act of any local state or national government authority; (d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine, and plague; (e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear, and pressure waves or other natural or physical disaster; and (f) shortage of labor, materials, or utilities where caused by circumstances that are themselves Force Majeure. 37.2 If either party is prevented, hindered, or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within 14 days after the occurrence of such event. 37.3 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered, or delayed. The Time for Completion shall be extended in accordance with GCC Clause 40.

	37.4 The party or parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect thereof upon its or their performance of the Contract and to fulfill its or their obligations under the Contract, but without prejudice to either party's right to terminate the Contract under GCC Subclauses 37.6 and 38.5. 37.5 No delay or nonperformance by either party hereto caused by the occurrence of any event of Force Majeure shall (a) constitute a default or breach of the Contract; or (b) give rise to any claim for damages or additional cost or expense occasioned thereby, subject to GCC Subclauses 32.2, 38.3 and 38.4 if and to the extent that such delay or nonperformance is caused by the occurrence of an event of Force Majeure. 37.6 If the performance of the Contract is substantially prevented, hindered, or delayed for a single period of more than 60 days or an aggregate period of more than 120 days on account of one or more events of Force Majeure during the currency of the Contract, the parties will attempt to develop a mutually satisfactory solution, failing which either party may terminate the Contract by giving a notice to the other, but without prejudice to either party's right to terminate the Contract under GCC Subclause 38.5. 37.7 In the event of termination pursuant to GCC Subclause 37.6, the rights and obligations of the Employer and the Contractor shall be as specified in GCC Subclauses 42.1.2 and 42.1.3. 37.8 Notwithstanding GCC Subclause 37.5, Force Majeure shall not apply to any obligation of the Employer to make payments to the Contractor herein.
38. War Risks	38.1 "War Risks" shall mean any event specified in paragraphs (a) and (b) of GCC Subclause 37.1 and any explosion or impact of any mine, bomb, shell, grenade, or other projectile, missile, munitions or explosive of war, occurring or existing in or near the country (or countries) where the Site is located. 38.2 Notwithstanding anything contained in the Contract, the Contractor shall have no liability whatsoever for or with respect to (a) destruction of or damage to Facilities, Plant, or any part thereof; (b) destruction of or damage to property of the Employer or any third party; or (c) injury or loss of life if such destruction, damage, injury or loss of life is caused by any war risks, and the Employer shall indemnify and hold the Contractor harmless from and against any and all claims, liabilities, actions, lawsuits, damages, costs, charges, or expenses arising in consequence of or in connection with the same. 38.3 If the Facilities or any Plant or Contractor's Equipment or any other property of the Contractor used or intended to be used for the purposes of the

	Facilities shall sustain destruction or damage by reason of any war risks, the Employer shall pay the Contractor for (a) any part of the Facilities or the Plant so destroyed or damaged to the extent not already paid for by the Employer and so far as may be required by the Employer, and as may be necessary for completion of the Facilities; (b) replacing or making good any Contractor's Equipment or other property of the Contractor so destroyed or damaged; and (c) replacing or making good any such destruction or damage to the Facilities or the Plant or any part thereof. If the Employer does not require the Contractor to replace or make good any such destruction or damage to the Facilities, the Employer shall either request a change in accordance with GCC Clause 39, excluding the performance of that part of the Facilities thereby destroyed or damaged or, where the loss, destruction, or damage affects a substantial part of the Facilities, shall terminate the Contract, pursuant to GCC Subclause 42.1. If the Employer requires the Contractor to replace or make good on any such destruction or damage to the Facilities, the Time for Completion shall be extended in accordance with GCC 40. 38.4 Notwithstanding anything contained in the Contract, the Employer shall pay the Contractor for any increased costs or incidentals to the execution of the Contract that are in any way attributable to, consequent on, resulting from, or in any way connected with any war risks, provided that the Contractor shall as soon as practicable notify the Employer in writing of any such increased cost. 38.5 If during the performance of the Contract any war risks shall occur that financially or otherwise materially affect the execution of the Contract by the Contractor, the Contractor shall use its reasonable efforts to execute the Contract with due and proper consideration given to the safety of its and its Subcontractors' personnel engaged in the work on the Facilities, provided, however, that if the execution of the work on the Facilities becomes impossible or is substantially prevented for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of any war risks, the parties will attempt to develop a mutually satisfactory solution, failing which either party may terminate the Contract by giving a notice to the other. 38.6 In the event of termination pursuant to GCC Subclauses 38.3 or 38.5, the rights and obligations of the Employer and the Contractor shall be specified in GCC Subclauses 42.1.2 and 42.1.3.
H. Change in Contract Elements	
39. Change in the Facilities	39.1 <u>Introducing a Change</u> 39.1.1 Subject to GCC Subclauses 39.2.5 and 39.2.7, the Employer shall have the right to propose, and subsequently require, that the Project Manager order the Contractor from time to time during the performance of the Contract to make any change, modification, addition, or deletion to, in or from the Facilities hereinafter called

	“Change,” provided that such Change falls within the general scope of the Facilities and does not constitute unrelated work and that it is technically practicable, taking into account both the state of advancement of the Facilities and the technical compatibility of the Change envisaged with the nature of the Facilities as specified in the Contract. 39.1.2 The Contractor may from time to time during its performance of the Contract propose to the Employer with a copy to the Project Manager, any Change that the Contractor considers necessary or desirable to improve the quality, efficiency, or safety of the Facilities. The Employer may at its discretion approve or reject any Change proposed by the Contractor, provided that the Employer shall approve any Change proposed by the Contractor to ensure the safety of the Facilities. 39.1.3 Notwithstanding GCC Subclauses 39.1.1 and 39.1.2, no change made necessary because of any default of the Contractor in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Completion. 39.1.4 The procedure on how to proceed with and execute Changes is specified in GCC Subclauses 39.2 and 39.3, and further details and forms are provided in the Employer’s Requirements (Forms and Procedures). 39.2 <u>Changes Originating from Employer</u> 39.2.1 If the Employer proposes a Change pursuant to GCC Subclause 39.1.1, it shall send to the Contractor a “Request for Change Proposal,” requiring the Contractor to prepare and furnish to the Project Manager as soon as reasonably practicable a “Change Proposal,” which shall include the following: (a) brief description of the Change, (b) effect on the Time for Completion, (c) estimated cost of the Change, (d) effect on Functional Guarantees (if any), (e) effect on the Facilities, and (f) effect on any other provisions of the Contract. 39.2.2 Prior to preparing and submitting the “Change Proposal,” the Contractor shall submit to the Project Manager an “Estimate for Change Proposal,” which shall be an estimate of the cost of preparing and submitting the Change Proposal. Upon receipt of the Contractor’s Estimate for Change Proposal, the Employer shall do one of the following:
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	(a) accept the Contractor's estimate with instructions to the Contractor to proceed with the preparation of the Change Proposal, (b) advise the Contractor of any part of its Estimate for Change Proposal that is unacceptable and request the Contractor to review its estimate (c) advise the Contractor that the Employer does not intend to proceed with the Change. 39.2.3 Upon receipt of the Employer's instruction to proceed under GCC Subclause 39.2.2 (a), the Contractor shall, with proper expedition, proceed with the preparation of the Change Proposal, in accordance with GCC Subclause 39.2.1. 39.2.4 The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices included in the Contract. If such rates and prices are inequitable, the parties thereto shall agree on specific rates for the valuation of the Change. 39.2.5 If before or during the preparation of the Change Proposal it becomes apparent that the aggregate effect of compliance therewith and with all other Change Orders that have already become binding upon the Contractor under this GCC Clause 39 would be to increase or decrease the Contract Price as originally set forth in Article 2 (Contract Price) of the Contract Agreement by more than 15%, the Contractor may give a written notice of objection thereto prior to furnishing the Change Proposal as aforesaid. If the Employer accepts the Contractor's objection, the Employer shall withdraw the proposed Change and shall notify the Contractor in writing thereof. The Contractor's failure to so object shall neither affect its right to object to any subsequent requested Changes or Change Orders herein, nor affect its right to take into account, when making such subsequent objection, the percentage increase or decrease in the Contract Price that any Change not objected to by the Contractor represents. 39.2.6 Upon receipt of the Change Proposal, the Employer and the Contractor shall mutually agree upon all matters therein contained. Within 14 days after such agreement, the Employer shall, if it intends to proceed with the Change, issue the Contractor with a Change Order. If the Employer is unable to reach a decision within 14 days, it shall notify the Contractor with details of when the Contractor can expect a decision. If the Employer decides not to proceed with the Change for whatever reason, it shall, within the said period of 14 days, notify the Contractor accordingly. Under such circumstances, the Contractor shall be entitled to reimbursement of all costs reasonably incurred by it in the preparation of the Change Proposal, provided that these do not exceed the amount given by the
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	Contractor in its Estimate for Change Proposal submitted in accordance with GCC Subclause 39.2.2. 39.2.7 If the Employer and the Contractor cannot reach agreement on the price for the Change, an equitable adjustment to the Time for Completion, or any other matters identified in the Change Proposal, the Employer may nevertheless instruct the Contractor to proceed with the Change by issue of a "Pending Agreement Change Order." Upon receipt of a Pending Agreement Change Order, the Contractor shall immediately proceed with effecting the Changes covered by such Order. The parties shall thereafter attempt to reach agreement on the outstanding issues under the Change Proposal. If the parties cannot reach agreement within 60 days from the date of issue of the Pending Agreement Change Order, then the matter may be referred to the Dispute Board in accordance with the provisions of GCC Subclause 45.3. 39.3 <u>Changes Originating from Contractor</u> 39.3.1 If the Contractor proposes a Change pursuant to GCC Subclause 39.1.2, the Contractor shall submit to the Project Manager a written "Application for Change Proposal," giving reasons for the proposed Change and including the information specified in GCC Subclause 39.2.1. Upon receipt of the Application for Change Proposal, the parties shall follow the procedures outlined in GCC Subclauses 39.2.6 and 39.2.7. However, should the Employer choose not to proceed, the Contractor shall not be entitled to recover the costs of preparing the Application for Change Proposal.
40. Extension of Time for Completion	40.1 The Time(s) for Completion specified in the SCC shall be extended if the Contractor is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following: (a) any Change in the Facilities as provided in GCC Clause 39; (b) any occurrence of Force Majeure as provided in GCC Clause 37, unforeseen conditions as provided in GCC Clause 35, or other occurrence of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GCC Subclause 32.2; (c) any suspension order given by the Employer under GCC Clause 41 hereof or reduction in the rate of progress pursuant to GCC Subclause 41.2; or (d) any changes in laws and regulations as provided in GCC Clause 36; or (e) any default or breach of the Contract by the Employer, or any activity, act or omission of the Employer, or the Project Manager, or any other contractors employed by the Employer; or

	(f) any other matter specifically mentioned in the Contract; or (g) any delay on the part of a sub-contractor, provided such delay is due to a cause for which the Contractor himself would have been entitled to an extension of time under this Subclause by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Contractor. 40.2 Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Project Manager a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Employer and the Contractor shall agree upon the period of such extension. In the event that the Contractor does not accept the Employer's estimate of a fair and reasonable time extension, the Contractor shall be entitled to refer the matter to a Dispute Board, pursuant to GCC Subclause 45.3. 40.3 The Contractor shall at all times use its reasonable efforts to minimize any delay in the performance of its obligations under the Contract. In all cases where the Contractor has given a notice of a claim for an extension of time under GCC 40.2, the Contractor shall consult with the Project Manager in order to determine the steps (if any) which can be taken to overcome or minimize the actual or anticipated delay. The Contractor shall there after comply with all reasonable instructions, which the Project Manager shall give in order to minimize such delay. If compliance with such instructions shall cause the Contractor to incur extra costs and the Contractor is entitled to an extension of time under GCC 40.1, the amount of such extra costs shall be added to the Contract Price.
41. Suspension	41.1 The Employer may request the Project Manager, by notice to the Contractor, to order the Contractor to suspend performance of any or all of its obligations under the Contract. Such notice shall specify the obligation of which performance is to be suspended, the effective date of the suspension and the reasons therefor. The Contractor shall thereupon suspend performance of such obligation, except those obligations necessary for the care or preservation of the Facilities, until ordered in writing to resume such performance by the Project Manager. If, by virtue of a suspension order given by the Project Manager, other than by reason of the Contractor's default or breach of the Contract, the Contractor's performance of any of its obligations is suspended for an aggregate period of more than 90 days, then at any time thereafter and provided that at that time such performance is still suspended, the Contractor may give a notice to the Project Manager requiring that the Employer shall, within 28 days of receipt of the notice, order the resumption of such performance or request and subsequently order a change in accordance with GCC Clause 39, excluding the performance of the suspended obligations from the Contract.

	If the Employer fails to do so within such period, the Contractor may, by a further notice to the Project Manager, elect to treat the suspension, where it affects a part only of the Facilities, as a deletion of such part in accordance with GCC Clause 39 or, where it affects the whole of the Facilities, as termination of the Contract under GCC Subclause 42.1. 41.2 If (a) the Employer has failed to pay the Contractor any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to the Appendix (Terms and Procedures of Payment) to the Contract Agreement, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that requires payment of such sum, with interest thereon as stipulated in GCC Subclause 12.3, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, or fails to remedy the breach or take steps to remedy the breach within 14 days after receipt of the Contractor's notice; or (b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer's failure to provide possession of or access to the Site or other areas in accordance with GCC Subclause 10.2, or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities, then the Contractor may by 14 days' notice to the Employer suspend performance of all or any of its obligations under the Contract, or reduce the rate of progress. 41.3 If the Contractor's performance of its obligations is suspended, or the rate of progress is reduced pursuant to this GCC Clause 41, then the Time for Completion shall be extended in accordance with GCC Subclause 40.1, and any and all additional costs or expenses incurred by the Contractor as a result of such suspension or reduction shall be paid by the Employer to the Contractor in addition to the Contract Price, except in the case of suspension order or reduction in the rate of progress by reason of the Contractor's default or breach of the Contract. 41.4 During the period of suspension, the Contractor shall not remove from the Site any Plant, any part of the Facilities or any Contractor's Equipment, without the prior written consent of the Employer.
42. Termination	42.1 <u>Termination for Employer's Convenience</u> 42.1.1 The Employer may at any time terminate the Contract for any reason by giving the Contractor a notice of termination that refers to this GCC Subclause 42.1. 42.1.2 Upon receipt of the notice of termination under GCC Subclause 42.1.1, the Contractor shall, either immediately or upon the date specified in the notice of termination,

	(a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition; (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii) below; (c) remove all Contractor's Equipment from the Site, repatriate the Contractor's and its Subcontractors' personnel from the Site, remove from the Site any wreckage, rubbish and debris of any kind, and leave the whole of the Site in a clean and safe condition; and (d) subject to the payment specified in GCC Subclause 42.1.3, (i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination; (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors; and (iii) deliver to the Employer all non-proprietary drawings, specifications and other documents prepared by the Contractor or its Subcontractors as at the date of termination in connection with the Facilities. 42.1.3 In the event of termination of the Contract under GCC Subclause 42.1.1, the Employer shall pay to the Contractor the following amounts: (a) the Contract Price, properly attributable to the parts of the Facilities executed by the Contractor as of the date of termination; (b) the costs reasonably incurred by the Contractor in the removal of the Contractor's Equipment from the Site and in the repatriation of the Contractor's and its Subcontractors' personnel; (c) any amounts to be paid by the Contractor to its Subcontractors in connection with the termination of any subcontracts, including any cancellation charges; (d) costs incurred by the Contractor in protecting the Facilities and leaving the Site in a clean and safe condition pursuant to paragraph (a) of GCC Subclause 42.1.2; and (e) the cost of satisfying all other obligations, commitments and claims that the Contractor may in good faith have undertaken
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	with third parties in connection with the Contract and that are not covered by paragraphs (a) through (d) above. 42.2 Termination for Contractor's Default 42.2.1 The Employer, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefor to the Contractor, referring to this GCC Subclause 42.2: (a) if the Contractor becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Contractor is a corporation, a resolution is passed or order is made for its winding up, other than a voluntary liquidation for the purposes of amalgamation or reconstruction, a receiver is appointed over any part of its undertaking or assets, or if the Contractor takes or suffers any other analogous action in consequence of debt; (b) if the Contractor assigns or transfers the Contract or any right or interest therein in violation of the provision of GCC Clause 43; and (c) if the Contractor, in the judgment of the Employer has engaged in integrity violations, as defined in GCC Clause 6, in competing for or in executing the Contract. 42.2.2 If the Contractor (a) has abandoned or repudiated the Contract; (b) has without valid reason failed to commence work on the Facilities promptly or has suspended, other than pursuant to GCC Subclause 41.2, the progress of Contract performance for more than 28 days after receiving a written instruction from the Employer to proceed; (c) persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause; (d) refuses or is unable to provide sufficient materials, services or labor to execute and complete the Facilities in the manner specified in the program furnished under GCC Subclause 18.2 at rates of progress that give reasonable assurance to the Employer that the Contractor can attain Completion of the Facilities by the Time for Completion as extended; then the Employer may, without prejudice to any other rights it may possess under the Contract, give a notice to the Contractor, stating the nature of the default and requiring the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within 14 days of its receipt of such notice, then the Employer may terminate the Contract forthwith by giving a notice of
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	termination to the Contractor that refers to this GCC Subclause 42.2. 42.2.3 Upon receipt of the notice of termination under GCC Subclauses 42.2.1 or 42.2.2, the Contractor shall, either immediately or upon such date as is specified in the notice of termination, (a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition; (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) below; (c) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination; (d) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors; and (e) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as of the date of termination in connection with the Facilities. 42.2.4 The Employer may enter upon the Site, expel the Contractor, and complete the Facilities itself or by employing any third party. The Employer may, to the exclusion of any right of the Contractor over the same, take over and use with the payment of a fair rental rate to the Contractor, with all the maintenance costs to the account of the Employer and with an indemnification by the Employer for all liability including damage or injury to persons arising out of the Employer's use of such equipment, any Contractor's Equipment owned by the Contractor and on the Site in connection with the Facilities for such reasonable period as the Employer considers expedient for the supply and installation of the Facilities. Upon completion of the Facilities or at such earlier date as the Employer thinks appropriate, the Employer shall give notice to the Contractor that such Contractor's Equipment will be returned to the Contractor at or near the Site and shall return such Contractor's Equipment to the Contractor in accordance with such notice. The Contractor shall thereafter without delay and at its cost remove or arrange removal of the same from the Site. 42.2.5 Subject to GCC Subclause 42.2.6, the Contractor shall be entitled to be paid the Contract Price attributable to the Facilities executed as of the date of termination, the value of any unused or partially used Plant on the Site, and the costs, if any, incurred in protecting the Facilities and in leaving the Site in a clean and safe condition pursuant to paragraph (a) of GCC Subclause 42.2.3. Any sums due the Employer from the Contractor accruing prior to the date of
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	termination shall be deducted from the amount to be paid to the Contractor under this Contract. 42.2.6 If the Employer completes the Facilities, the cost of completing the Facilities by the Employer shall be determined. If the sum that the Contractor is entitled to be paid, pursuant to GCC Subclause 42.2.5, plus the reasonable costs incurred by the Employer in completing the Facilities, exceeds the Contract Price, the Contractor shall be liable for such excess. If such excess is greater than the sums due the Contractor under GCC Subclause 42.2.5, the Contractor shall pay the balance to the Employer, and if such excess is less than the sums due the Contractor under GCC Subclause 42.2.5, the Employer shall pay the balance to the Contractor. The Employer and the Contractor shall agree, in writing, on the computation described above and the manner in which any sums shall be paid. 42.3 <u>Termination by Contractor</u> 42.3.1 If (a) the Employer has failed to pay the Contractor any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to the Appendix (Terms and Procedures of Payment) to the Contract Agreement, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that requires payment of such sum, with interest thereon as stipulated in GCC Subclause 12.3, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, fails to remedy the breach or take steps to remedy the breach within 14 days after receipt of the Contractor's notice; or (b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer's failure to provide possession of or access to the Site or other areas or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities; then the Contractor may give a notice to the Employer thereof, and if the Employer has failed to pay the outstanding sum, to approve the invoice or supporting documents, to give its reasons for withholding such approval, or to remedy the breach within 28 days of such notice, or if the Contractor is still unable to carry out any of its obligations under the Contract for any reason attributable to the Employer within 28 days of the said notice, the Contractor may by a further notice to the Employer referring to this GCC Subclause 42.3.1, forthwith terminate the Contract.
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	42.3.2 The Contractor may terminate the Contract forthwith by giving a notice to the Employer to that effect, referring to this GCC Subclause 42.3.2, if the Employer becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Employer takes or suffers any other analogous action in consequence of debt. 42.3.3 If the Contract is terminated under GCC Subclauses 42.3.1 or 42.3.2, then the Contractor shall immediately (a) cease all further work, except for such work as may be necessary for the purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition; (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii); (c) remove all Contractor's Equipment from the Site and repatriate the Contractor's and its Subcontractors' personnel from the Site; and (d) subject to the payment specified in GCC Subclause 42.3.4, (i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination; (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors; and (iii) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as of the date of termination in connection with the Facilities. 42.3.4 If the Contract is terminated under GCC Subclauses 42.3.1 or 42.3.2, the Employer shall pay to the Contractor all payments specified in GCC Subclause 42.1.3, and reasonable compensation for all loss, except for loss of profit, or damage sustained by the Contractor arising out of, in connection with or in consequence of such termination. 42.3.5 Termination by the Contractor pursuant to this GCC Subclause 42.3 is without prejudice to any other rights or remedies of the Contractor that may be exercised in lieu of or in addition to rights conferred by GCC Subclause 42.3. 42.4 In this GCC Clause 42, the expression "Facilities executed" shall include all work executed, Installation Services provided, and all Plant acquired, or subject to a legally binding obligation to purchase, by the Contractor and
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	used or intended to be used for the purpose of the Facilities, up to and including the date of termination. 42.5 In this GCC Clause 42, in calculating any monies due from the Employer to the Contractor, account shall be taken of any sum previously paid by the Employer to the Contractor under the Contract, including any advance payment paid pursuant to the Appendix (Terms and Procedures of Payment) to the Contract Agreement.
43. Assignment	43.1 Neither the Employer nor the Contractor shall, without the express prior written consent of the other party which consent shall not be unreasonably withheld, assign to any third party the Contract or any part thereof, or any right, benefit, obligation or interest therein or thereunder, except that the Contractor shall be entitled to assign either absolutely or by way of charge any monies due and payable to it or that may become due and payable to it under the Contract.
I. Claims, Disputes, and Arbitration	
44. Contractor's Claims	44.1 If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall submit a notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance. If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Subclause shall apply. The Contractor shall also submit any other notices, which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance. The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Employer's liability, the Project Manager may, after receiving any notice under this Subclause, monitor the record keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager. Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim, which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect,

	(a) this fully detailed claim shall be considered as interim; (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager. Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time. Each payment certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate. The Project Manager shall agree with the Contractor or estimate: (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with GCC Clause 40, and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract. The requirements of this Subclause are in addition to those of any other Subclause, which may apply to a claim. If the Contractor fails to comply with this or another Subclause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Subclause. In the event that the Contractor and the Employer cannot agree on any matter relating to a claim, either party may refer the matter to the Dispute Board pursuant to GCC 45 hereof.
45. Disputes and Arbitration	45.1 <u>Appointment of the Dispute Board</u> Disputes shall be referred to a Dispute Board for decision in accordance with GCC Subclause 45.3. The Parties shall appoint a Dispute Board by the date stated in the SCC. The Dispute Board shall comprise, as stated in the SCC, either one or three suitably qualified persons ("the members"), each of whom shall be fluent in the language for communication defined in the Contract and shall be a professional experienced in the type of activities involved in the performance of the Contract and with the interpretation of contractual documents. If the number is not so stated and the Parties do not agree

	otherwise, the Dispute Board shall comprise three persons, one of whom shall serve as chairman. If the Parties have not jointly appointed the Dispute Board 21 days before the date stated in the SCC and the Dispute Board is to comprise three persons, each Party shall nominate one member for the approval of the other Party. The first two members shall recommend and the Parties shall agree upon the third member, who shall act as chairman. However, if a list of potential members is included in the SCC, the members shall be selected from those on the list, other than anyone who is unable or unwilling to accept appointment to the Dispute Board. The agreement between the Parties and either the sole member or each of the three members shall incorporate by reference the General Conditions of Dispute Board Agreement contained in the Appendix to these General Conditions, with such amendments as are agreed between them. The terms of the remuneration of either the sole member or each of the three members, including the remuneration of any expert whom the Dispute Board consults, shall be mutually agreed upon by the Parties when agreeing the terms of appointment of the member or such expert (as the case may be). Each Party shall be responsible for paying one-half of this remuneration. If a member declines to act or is unable to act as a result of death, disability, resignation or termination of appointment, a replacement shall be appointed in the same manner as the replaced person was required to have been nominated or agreed upon, as described in this Subclause. The appointment of any member may be terminated by mutual agreement of both Parties, but not by the Employer or the Contractor acting alone. Unless otherwise agreed by both Parties, the appointment of the Dispute Board (including each member) shall expire when the Operational Acceptance Certificate has been issued in accordance with GCC Clause 25.3.
	45.2 <u>Failure to Agree Dispute Board</u> If any of the following conditions apply, namely: (a) the Parties fail to agree upon the appointment of the sole member of the Dispute Board by the date stated in the first paragraph of GCC Subclause 45.1; (b) either Party fails to nominate a member (for approval by the other Party) of a Dispute Board of three persons by such date; (c) the Parties fail to agree upon the appointment of the third member (to act as chairman) of the Dispute Board by such date; or (d) the Parties fail to agree upon the appointment of a replacement person within 42 days after the date on which the sole member or

	one of the three members declines to act or is unable to act as a result of death, disability, resignation, or termination of appointment; then the appointing entity or official named in the SCC shall, upon the request of either or both of the Parties and after due consultation with both Parties, appoint this member of the Dispute Board. This appointment shall be final and conclusive. Each Party shall be responsible for paying one-half of the remuneration of the appointing entity or official.
	45.3 <u>Obtaining Dispute Board's Decision</u> If a dispute (of any kind whatsoever) arises between the Parties in connection with the performance of the Contract, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Project Manager, either Party may refer the dispute in writing to the Dispute Board for its decision, with copies to the other Party and the Project Manager. Such reference shall state that it is given under this Subclause. For a Dispute Board of three persons, the Dispute Board shall be deemed to have received such reference on the date when it is received by the chairman of the Dispute Board. Both Parties shall promptly make available to the Dispute Board all such additional information, further access to the Site, and appropriate facilities, as the Dispute Board may require for the purposes of making a decision on such dispute. The Dispute Board shall be deemed to be not acting as arbitrator(s). Within 84 days after receiving such reference, or within such other period as may be proposed by the Dispute Board and approved by both Parties, the Dispute Board shall give its decision, which shall be reasoned and shall state that it is given under this Subclause. The decision shall be binding on both Parties, who shall promptly give effect to it unless and until it shall be revised in an amicable settlement or an arbitral award as described below. Unless the Contract has already been abandoned, repudiated or terminated, the Contractor shall continue to proceed with the performance of the Facilities in accordance with the Contract. If either Party is dissatisfied with the Dispute Board's decision, then either Party may, within 28 days after receiving the decision, give notice to the other Party of its dissatisfaction and intention to commence arbitration. If the Dispute Board fails to give its decision within the period of 84 days (or as otherwise approved) after receiving such reference, then either Party may, within 28 days after this period has expired, give notice to the other Party of its dissatisfaction and intention to commence arbitration. In either event, this notice of dissatisfaction shall state that it is given under this Subclause, and shall set out the matter in dispute and the reason(s) for dissatisfaction. Except as stated in GCC Subclauses 45.6 and 45.7, neither Party shall be entitled to commence arbitration of a dispute unless a notice of dissatisfaction has been given in accordance with this Subclause. If the Dispute Board has given its decision as to a matter in dispute to both Parties, and no notice of dissatisfaction has been given by either Party

	within 28 days after it received the Dispute Board's decision, then the decision shall become final and binding upon both Parties.
	45.4 <u>Amicable Settlement</u> Where notice of dissatisfaction has been given under GCC Subclause 45.3 above, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, arbitration may be commenced on or after the fifty-sixth day after the day on which notice of dissatisfaction and intention to commence arbitration was given, even if no attempt at amicable settlement has been made.
	45.5 <u>Arbitration</u> Unless settled amicably, any dispute in respect of which the Dispute Board's decision (if any) has not become final and binding shall be finally settled by international arbitration. Unless otherwise agreed by both Parties, (a) arbitration proceedings shall be conducted as stated in the Special Conditions; (b) if no arbitration proceedings is so stated, the dispute shall be finally settled by institutional arbitration under the Rules of Arbitration of the International Chamber of Commerce; (c) the dispute shall be settled by three arbitrators; and (d) the arbitration shall be conducted in the language for communications defined in GCC Subclause 5.3. The arbitrator(s) shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Project Manager, and any decision of the Dispute Board, relevant to the dispute. Nothing shall disqualify the Project Manager from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute. Neither Party shall be limited in the proceedings before the arbitrator(s) to the evidence or arguments previously put before the Dispute Board to obtain its decision, or to the reasons for dissatisfaction given in its notice of dissatisfaction. Any decision of the Dispute Board shall be admissible in evidence in the arbitration. Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, the Project Manager and the Dispute Board shall not be altered by reason of any arbitration being conducted during the progress of the Works.
	45.6 <u>Failure to Comply with Dispute Board's Decision</u> In the event that a Party fails to comply with a Dispute Board decision which has become final and binding, then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under GCC Subclause 45.5. GCC Subclauses 45.3 and 45.4 shall not apply to this reference.

45.7 Expiry of Dispute Board's Appointment

If a dispute arises between the Parties in connection with the performance of the Contract, and there is no Dispute Board in place, whether by reason of the expiry of the Dispute Board's appointment or otherwise,

- (a) GCC Subclauses 45.3 and 45.4 shall not apply, and
- (b) the dispute may be referred directly to arbitration under GCC Subclause 45.5.

APPENDIX A

General Conditions of Dispute Board Agreement

1 Definitions

Each "Dispute Board Agreement" is a tripartite agreement by and between

- (a) the "Employer";
- (b) the "Contractor"; and
- (c) the "Member" who is defined in the Dispute Board Agreement as being
 - (i) the sole member of the "Dispute Board" and, where this is the case, all references to the "Other Members" do not apply; or
 - (ii) one of the three persons who are jointly called the "Dispute Board" (or "dispute board") and, where this is the case, the other two persons are called the "Other Members".

The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the "Contract" and is defined in the Dispute Board Agreement, which incorporates this Appendix. In the Dispute Board Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.

2 General Provisions

Unless otherwise stated in the Dispute Board Agreement, it shall take effect on the latest of the following dates:

- (a) the Commencement Date defined in the Contract;
- (b) when the Employer, the Contractor and the Member have each signed the Dispute Board Agreement; or
- (c) when the Employer, the Contractor and each of the Other Members (if any) have respectively each signed a dispute board agreement.

This employment of the Member is a personal appointment. At any time, the Member may give not less than 70 days' notice of resignation to the Employer and to the Contractor, and the Dispute Board Agreement shall terminate upon the expiry of this period.

3 Warranties

The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Project Manager. The Member shall promptly disclose, to each of them and to the Other Members (if any), any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.

When appointing the Member, the Employer and the Contractor relied upon the Member's representations that he/she is

- (a) experienced in the work, which the Contractor is to carry out under the Contract,
- (b) experienced in the interpretation of contract documentation, and
- (c) fluent in the language for communications defined in the Contract.

4 General Obligations of the Member

The Member shall

- (a) have no interest financial or otherwise in the Employer, the Contractor or the Project Manager, nor any financial interest in the Contract except for payment under the Dispute Board Agreement;
- (b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor, or the Project Manager, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Board Agreement;
- (c) have disclosed in writing to the Employer, the Contractor, and the Other Members (if any), before entering into the Dispute Board Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer, or employee of the Employer, the Contractor, or the Project Manager, and any previous involvement in the overall project of which the Contract forms part;
- (d) not, for the duration of the Dispute Board Agreement, be employed as a consultant or otherwise by the Employer, the Contractor, or the Project Manager, except as may be agreed in writing by the Employer, the Contractor, and the Other Members (if any);
- (e) comply with the annexed procedural rules and with GCC Subclause 45.3;
- (f) not give advice to the Employer, the Contractor, the Employer's Personnel, or the Contractor's Personnel concerning the conduct of the Contract, other than in accordance with the annexed procedural rules;
- (g) not while a Member enter into discussions or make any agreement with the Employer, the Contractor, or the Project Manager regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Board Agreement;
- (h) ensure his/her availability for all site visits and hearings as are necessary;
- (i) become conversant with the Contract and with the progress of the Facilities (and of any other parts of the project of which the Contract forms part) by studying all documents received, which shall be maintained in a current working file;
- (j) treat the details of the Contract and all the Dispute Board's activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Employer, the Contractor, and the Other Members (if any); and
- (k) be available to give advice and opinions on any matter relevant to the Contract when requested by both the Employer and the Contractor, subject to the agreement of the Other Members (if any).

5 General Obligations of the Employer and the Contractor

The Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the Dispute Board's activities under the Contract and the Dispute Board Agreement. The Employer and the Contractor shall be responsible for compliance with this provision, by the Employer's Personnel and the Contractor's Personnel respectively.

The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members (if any)

- (a) be appointed as an arbitrator in any arbitration under the Contract;
- (b) be called as a witness to give evidence concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract; or
- (c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member's functions, unless the act or omission is shown to have been in bad faith.

The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he is relieved from liability under the preceding paragraph.

Whenever the Employer or the Contractor refers a dispute to the Dispute Board under GCC Subclause 45.3, which will require the Member to make a site visit and attend a hearing, the Employer or the Contractor shall provide appropriate security for a sum equivalent to the reasonable expenses to be incurred by the Member. No account shall be taken of any other payments due or paid to the Member.

6 Payment

The Member shall be paid as follows, in the currency named in the Dispute Board Agreement:

- (a) a retainer fee per calendar month, which shall be considered as payment in full for
 - (i) being available on 28 days' notice for all site visits and hearings;
 - (ii) becoming and remaining conversant with all project developments and maintaining relevant files;
 - (iii) all office and overhead expenses including secretarial services, photocopying and office supplies incurred in connection with his duties; and
 - (iv) all services performed hereunder except those referred to in sub-paragraphs (b) and (c) of this Clause.

The retainer fee shall be paid with effect from the last day of the calendar month in which the Dispute Board Agreement becomes effective; until the last day of the calendar month in which the Taking-Over Certificate is issued for the whole of the Works.

With effect from the first day of the calendar month following the month in which Taking-Over Certificate is issued for the whole of the Works, the retainer fee shall be reduced by one-third. This reduced fee shall be paid until the first day of the calendar month in which the Member resigns or the Dispute Board Agreement is otherwise terminated.

- (b) a daily fee, which shall be considered as payment in full for
 - (i) each day or part of a day up to a maximum of 2 days' travel time in each direction for the journey between the Member's home and the site, or another location of a meeting with the Other Members (if any);
 - (ii) each working day on site visits, hearings, or preparing decisions; and
 - (iii) each day spent reading submissions in preparation for a hearing.
- (c) all reasonable expenses, including necessary travel expenses (air fare in less than first class, hotel and subsistence and other direct travel expenses) incurred in connection with the Member's duties, as well as the cost of telephone calls, courier charges, facsimiles, and telexes, and use of the internet: a receipt shall be required for each item in excess of 5% of the daily fee referred to in sub-paragraph (b) of this Clause;
- (d) any taxes properly levied in the Country on payments made to the Member (unless a national or permanent resident of the Country) under this Clause 6.

The retainer and daily fees shall be as specified in the Dispute Board Agreement. Unless it specifies otherwise, these fees shall remain fixed for the first 24 calendar months, and shall thereafter be adjusted by agreement between the Employer, the Contractor and the Member, at each anniversary of the date on which the Dispute Board Agreement became effective.

If the parties fail to agree on the retainer fee or the daily fee, the appointing entity or official named in the SCC shall determine the amount of the fees to be used.

The Member shall submit invoices for payment of the monthly retainer and air fares quarterly in advance. Invoices for other expenses and for daily fees shall be submitted following the conclusion of a site visit or hearing. All invoices shall be accompanied by a brief description of activities performed during the relevant period and shall be addressed to the Contractor.

The Contractor shall pay each of the Member's invoices in full within 56 calendar days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract) for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.

If the Contractor fails to pay to the Member the amount to which he/she is entitled under the Dispute Board Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the operation of the Dispute Board; and without prejudice to the Employer's rights or remedies. In addition to all other rights arising from this default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in accordance with GCC Subclause 12.3.

If the Member does not receive payment of the amount due within 70 days after submitting a valid invoice, the Member may (i) suspend his/her services (without notice) until the payment is received, and/or (ii) resign his/her appointment by giving notice under Clause 7.

7 Termination

At any time: (i) the Employer and the Contractor may jointly terminate the Dispute Board Agreement by giving 42 days' notice to the Member, or (ii) the Member may resign as provided for in Clause 2.

If the Member fails to comply with the Dispute Board Agreement, the Employer and the Contractor may, without prejudice to their other rights, terminate it by notice to the Member. The notice shall take effect when received by the Member.

If the Employer or the Contractor fails to comply with the Dispute Board Agreement, the Member may, without prejudice to his other rights, terminate it by notice to the Employer and the Contractor. The notice shall take effect when received by them both.

Any such notice, resignation and termination shall be final and binding on the Employer, the Contractor and the Member. However, a notice by the Employer or the Contractor, but not by both, shall be of no effect.

8 Default of the Member

If the Member fails to comply with any of his obligations under Clause 4 concerning his impartiality or independence in relation to the Employer or the Contractor, he/she shall not be entitled to any fees or expenses hereunder and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Members (if any), for proceedings or decisions (if any) of the Dispute Board which are rendered void or ineffective by the said failure to comply.

9 Disputes

Any dispute or claim arising out of or in connection with this Dispute Board Agreement, or the breach, termination or invalidity thereof, shall be finally settled by institutional arbitration. If no other arbitration institute is agreed, the arbitration shall be conducted under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed in accordance with these Rules of Arbitration.

Annex - DISPUTE BOARD GUIDELINES

1. Unless otherwise agreed by the Employer and the Contractor, the Dispute Board shall visit the site at intervals of not more than 140 days, including times of critical construction events, at the request of either the Employer or the Contractor. Unless otherwise agreed by the Employer, the Contractor, and the Dispute Board, the period between consecutive visits shall not be less than 70 days, except as required to convene a hearing as described below.
2. The timing of and agenda for each site visit shall be as agreed jointly by the Dispute Board, the Employer, and the Contractor, or in the absence of agreement, shall be decided by the Dispute Board. The purpose of site visits is to enable the Dispute Board to become and remain acquainted with the progress of the Works and of any actual or potential problems or claims, and, as far as reasonable, to prevent potential problems or claims from becoming disputes.
3. Site visits shall be attended by the Employer, the Contractor, and the Project Manager and shall be coordinated by the Employer in cooperation with the Contractor. The Employer shall ensure the provision of appropriate conference facilities and secretarial and copying services. At the conclusion of each site visit and before leaving the site, the Dispute Board shall prepare a report on its activities during the visit and shall send copies to the Employer and the Contractor.
4. The Employer and the Contractor shall furnish to the Dispute Board one copy of all documents which the Dispute Board may request, including Contract documents, progress reports, variation instructions, certificates, and other documents pertinent to the performance of the Contract. All communications between the Dispute Board and the Employer or the Contractor shall be copied to the other Party. If the Dispute Board comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.
5. If any dispute is referred to the Dispute Board in accordance with GCC Subclause 45.3, the Dispute Board shall proceed in accordance with GCC Subclause 45.3 and these Guidelines. Subject to the time allowed to give notice of a decision and other relevant factors, the Dispute Board shall
 - (a) act fairly and impartially as between the Employer and the Contractor, giving each of them a reasonable opportunity of putting his case and responding to the other's case; and
 - (b) adopt procedures suitable to the dispute, avoiding unnecessary delay or expense.
6. The Dispute Board may conduct a hearing on the dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.
7. Except as otherwise agreed in writing by the Employer and the Contractor, the Dispute Board shall have power to adopt an inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor, and the Project Manager, and to proceed in the absence of any party who the Dispute Board is satisfied received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.
8. The Employer and the Contractor empower the Dispute Board, among other things, to
 - (a) establish the procedure to be applied in deciding a dispute;
 - (b) decide upon the Dispute Board's own jurisdiction, and as to the scope of any dispute referred to it;

- (c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Guidelines;
 - (d) take the initiative in ascertaining the facts and matters required for a decision;
 - (e) make use of its own specialist knowledge, if any;
 - (f) decide upon the payment of financing charges in accordance with the Contract;
 - (g) decide upon any provisional relief such as interim or conservatory measures;
 - (h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Project Manager, relevant to the dispute; and
 - (i) appoint, should the Dispute Board so consider necessary and the Parties agree, a suitable expert at the cost of the Parties to give advice on a specific matter relevant to the dispute.
9. The Dispute Board shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the Dispute Board shall make and give its decision in accordance with GCC Subclause 45.3, or as otherwise agreed by the Employer and the Contractor in writing. If the Dispute Board comprises three persons
- (a) it shall convene in private after a hearing, in order to have discussions and prepare its decision;
 - (b) it shall endeavour to reach a unanimous decision: if this proves impossible the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare a written report for submission to the Employer and the Contractor; and
 - (c) if a Member fails to attend a meeting or hearing, or to fulfil any required function, the other two Members may nevertheless proceed to make a decision, unless
 - (i) either the Employer or the Contractor does not agree that they do so, or
 - (ii) the absent Member is the chairman and he/she instructs the other Members to not make a decision.

Section 8: Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC. The clause number of the SCC is the corresponding clause number of the GCC.

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1.	Definitions
	The Employer is: School Education and Literacy Department, Government of Sindh Employer's Representative means Project Director, Project Implementation Unit, Sindh Secondary Education Improvement Project, School Education and Literacy Department, Government of Sindh <u>or</u> any other person appointed by the Employer and notified to the Project Manager and Contractor from time to time. The Project Manager is: Team Leader of the Top Supervision Consultant shall be appointed as Project Manager. Employer will notify before Start Date. The Bank is: Asian Development Bank (ADB) Country of Origin: Refer to Section 5 of the Bidding Document Site: As specified below: • For Delivery of Plant for the Facilities: District Naushero Feroze, Sindh. • For installation of Plant for the Facilities: ➤ <u>Lot-1:</u> Reconstruction of 55 Schools using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in Tehsil Moro, District Naushero Feroze ➤ <u>Lot-2:</u> Reconstruction of 46 Schools using Light Gauge Steel Frame Structures with Solar Panels Installation on Design-Build Basis in Tehsil Naushero Feroze, District Naushero Feroze
5.	Law and Language
5.1	The Contract shall be interpreted in accordance with the laws of: Islamic Republic of Pakistan.
5.2	The ruling language is: English.
5.3	The language for communications is: English
6.	Fraud and Corruption
6.4	The Contractor has the obligation to notify the Employer of any changes in connection with the matters described in paragraphs (f), (h), (i), (j), (k), (l), (m) and (n) of the Letter of Technical Bid.
6.5	If the Contactor is debarred or temporarily suspended by ADB, it shall inform the Employer of such debarment or suspension, and that the endorsement of ADB's Office of Anticorruption and Integrity is required for any variations, extensions or modifications to the Contract.

7.	Scope of Facilities
	7.3 The Contractor agrees to supply spare parts for a period of years: One (01) year The Contractor shall carry sufficient inventories to ensure an ex-stock supply of consumable spares for the Plant. Other spare parts and components shall be supplied as promptly as possible, but at the most within 6 months of placing the order and opening the letter of credit. In addition, in the event of termination of the production of spare parts, advance notification will be made to the Employer of the pending termination, with sufficient time to permit the Employer to procure the needed requirement. Following such termination, the Contractor will furnish to the extent possible and at no cost to the Employer the blueprints, drawings and specifications of the spare parts, if requested.
8.	Time for Commencement and Completion
	8.1 The Contractor shall commence work on the Facilities within twenty-one (21) days from the Effective Date for determining Time for Completion as specified in the Contract Agreement provided that access to and possession of the Site or any part thereof have been given under subclause 10.2 and shall then proceed with the work on the Facilities with due expedition and without delay.
	8.2 The Time for Completion of the whole of the Facilities shall be 330 days <i>[Tentative 90 days for Design and Tentative 240 days for engineering, procurement of Plant to the location specified as Site (for the purposes of delivery), construction, installation, testing & commissioning at the Site]</i> from the Effective Date as described in the Contract Agreement. Time for Completion for parts of the Facilities: Not Applicable
9.	Contractor's Responsibilities
	9.6 To add the following paragraph at the end of GCC 9.6: "ADB's right to inspect the Site and/or the Contractor's accounts and records relating to the performance of the Contract stated in Subclause 6.1 (e) and 9.6 shall survive termination and/ or expiration of this Contract."
	9.8 Protection of the Environment At the end of the sub-clause in 9.8 Protection of the Environment, add the following paragraphs: "The Contractor shall comply with all applicable national, provincial, and local environmental laws and regulations. The Contractor shall also comply with all reasonable requests of the national and local authorities responsible for enforcing environmental controls. Within 28 days of the Commencement Date the Contractor shall submit a detailed Site Specific Environmental Management Plan (SSEMP), based on the Environmental Health and Safety Management Plan submitted in the technical proposal, for the Project Manager's no objection showing how the Contractor intends to comply with environmental laws and regulations and other specific requirements prescribed in the Contract, addressing all the monitoring and mitigation measures set forth in the

	Environmental Impact Assessment (“EIA”) and the Environmental Management Plan (“EMP”) of the project attached in Section 6- Employer’s Requirements. Work shall not commence on the Site until the no objection of SSEMP has been obtained from the Project Manager and is being implemented. The Contractor shall (a) establish an operational system for managing environmental impacts, (b) comply with the approved SSEMP and any corrective or preventative actions set out in safeguards monitoring reports that the Employer will prepare from time to time to monitor the implementation of the project EMP through the SSEMP, (c) allocate the budget required to ensure that such measures, requirements and actions are carried out, (d) submit semi-annual reports on the compliance of such measures to the Employer. Where unanticipated environmental risks or impacts become apparent during the Contract, the Contractor is required to update the SSEMP to outline the potential impacts to site works and associated mitigation measures for the Project Manager’s approval.”
10.	Employer’s Responsibilities
	10.2 There shall be no work nor construction activities at the Site or any part thereof (as the case may be) unless the Employer has granted access to the Site or part thereof (as the case may be) in accordance with this Subclause 10.2.
11.	Contract Price
	11.2 Not Applicable.
13.	Securities
	13.3.1 The amount of performance security, as a percentage of the Contract Price for the Facility shall be: in the amount and currency(ies) equivalent to Ten Percent (10%) of the Contract Price excluding Provisional Sum.
	13.3.2 The performance security shall be in the form of an unconditional bank guarantee as per form included in Section 9 (Contract Forms). At the Contractor’s option, it shall be in the form of a bank guarantee from either (a) any reputable bank, which includes any Scheduled Bank in Pakistan, or (b) a bank located outside Pakistan duly counter-guaranteed by a correspondent bank in Pakistan to make it enforceable.
	13.3.3 The performance security shall not be reduced on the date of the Operational Acceptance.
19.	Subcontracting
	19.6 The Contractor shall not subcontract (i) works with a total accumulated value greater than the specified percentage of the Contract Price, or (ii) any part of the Works for which subcontracting is not permitted as specified below; (i) Maximum allowable accumulated value of work subcontracted (as a percentage of the Contract Price): 25% (ii) Parts of the Works for which subcontracting is not permitted: Light Gauge

	Steel Structure Building.
20.	Design and Engineering
	20.3 Approval/Review of Technical Documents by Project Manager 20.3.2 Within 21 days after receipt by the Project Manager of any document requiring the Project Manager's approval in accordance with GCC Subclause 20.3.1, the Project Manager shall either return one copy thereof to the Contractor with its approval endorsed thereon or shall notify the Contractor in writing of its disapproval thereof and the reasons therefor and the modifications that the Project Manager proposes. If the Project Manager fails to take such action within the said 21 days, then the said document shall be deemed to have been approved by the Project Manager.
22.	Installation
	22.2 Labor 22.2.5 Working Hours (a) Normal working hours are: eight (08) hours per day (generally 8:30 hrs-16:30 hrs but may change as per directions of Project Manager) 22.2.7 Health and Safety (d) The Contractor shall throughout the contract (including the Defect Liability Period): (i) conduct Information, Education and Consultation Communication (IEC) campaigns, at least every other month, addressed to all the Site staff and labor (including all the Contractor's employees, all Subcontractors and Employer's and Project Manager's employees, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to of Sexually Transmitted Diseases (STD)—or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular; (ii) provide male or female condoms for all Site staff and labor as appropriate; and (iii) provide for STI and HIV/AIDS screening, diagnosis, counseling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labor. The Contractor shall include in the program to be submitted for the execution of the Facilities under Subclause 18.2 an alleviation program for Site staff and labor and their families in respect of STI and STD including HIV/AIDS. The STI, STD and HIV/AIDS alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Subclause and the related specification. For each component, the program shall detail the resources to be provided or utilized and any related subcontracting proposed. The program shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for the preparation and implementation this program shall not exceed the amount dedicated for this purpose.

After the existing paragraph in GCC 22.2.7 (a), add the following:

“The Contractor is responsible for establishment of preventive and emergency preparedness and response measures to avoid, and where avoidance is not possible, to minimize, adverse impacts and risks of the construction site work to the health and safety of local communities.

Within 28 days of the Effective Date the Contractor shall submit a detailed Site Specific Health and Safety Management Plan (SSHSMP), based on the Environmental Health and Safety Management Plan submitted in the technical proposal, for the Project Manager’s no objection showing how he/she intends to comply with the local Health and Safety laws and regulations and other specific requirements prescribed in the Contract, taking into account the Supplementary Information in Section 6- Employer’s Requirements. Work shall not commence on the Site until the confirmation of no objection of the SSHSMP has been obtained from the Project Manager and is being implemented.

Where unanticipated health and safety hazards or risks become apparent during the Contract, the Contractor is required to update the SSHSMP to outline the potential impacts to site works and associated mitigation measures for the Project Manager’s no objection.

The Contractor shall comply with the approved SSHSMP, and any corrective or preventative actions set out in safeguards monitoring reports that the Employer will prepare from time to time to monitor the implementation of the project EMP through the SSHSMP.

In particular, the Contractor is required to provide all personnel on site including Employer’s Personnel and visitors with personal protective equipment, including protection for feet (safety boots), head, eyes, ears (safety helmets) and hands, etc., in accordance with the Contractor’s SSHSMP. The Contractor should ensure that his Subcontractors comply with the SSHSMP and provide all such necessary equipment to their personnel.

The Contractor shall bear the costs to ensure that such measures, requirements and actions are carried out.

The Contractor shall submit semi-annual reports on the compliance of such measures to the Employer.”

Add after the existing paragraph in GCC 22.2.7 (c) the following:

“In the event of a significant injury involving medical treatment or hospitalization and fatal accident the Contractor shall notify the Project Manager immediately by verbal communication and submit a formal report as soon as practicable after its occurrence. For all accidents, whether fatal or not, the Contractor shall also notify the appropriate local authorities in accordance with the Laws of the Country.”

22.2.8 Funeral Arrangements

The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of its local employees who may die while engaged upon the Works.

22.2.17 Respectful Work Environment

The Contractor shall ensure that its employees and Subcontractors observe the highest ethical standards and refrain from any form of bullying, discrimination, misconduct, and harassment, including sexual harassment and shall, at all times, behave in a manner that creates an environment free of unethical behavior, bullying,

	misconduct, and harassment, including sexual harassment. The Contractor shall take appropriate action against any employees or Subcontractors, including suspension or termination of employment or subcontract, if any form of unethical or inappropriate behavior is identified. The Contractor shall conduct training programs for its employees and Subcontractors to raise awareness on and prevent any form of bullying, discrimination, misconduct, and harassment including sexual harassment, and to promote a respectful work environment. The Contractor shall keep an up-to-date record of its employees and subcontractors who have attended and completed such training programs and provide such records to the Employer or the Engineer at their first written request.
25.	Commissioning and Operational Acceptance
	25.2.2 The Guarantee Test of the Facilities shall be successfully completed within ninety (90) days from the date of Completion.
26.	Completion Time Guarantee
	26.2 Applicable rate for liquidated damages: 0.1% per day of the total Contract Price Maximum deduction for liquidated damages: 10% of the Contract Price.
	26.3 Bonus on early Completion of Works is 0.05% of the final Contract Price per day, up to a maximum of 5%, for each day the Works are completed before the Intended Completion Date defined in PCC.
27.	Defect Liability
	27.10 The critical components covered under the extended defect liability are Light Gauge Steel Structural components, the Solar Power Supply System, and the RO Plant and the period shall be five (05) years for all critical components specified hereinabove.
30.	Limitation of Liability
	30.1 (b) The multiplier of the Contract Price is: 2.0
42.	Termination
	42.1 Termination for Employer's Convenience 42.1.3 (f) a reasonable amount of profit for the parts of the Works not executed by the Contractor as at the date of termination.
45.	Disputes and Arbitration
	45.1 The Dispute Board shall be appointed within 28 days after the Effective Date. The Dispute Board shall be a Dispute Board of Three (03) Members List of potential Dispute Board members is: None

	45.2 Appointment (if not agreed) to be made by: Chartered Institute of Arbitrators, Pakistan
	45.3 This sentence shall be added as last paragraph in GCC Subclause <u>45.3</u>: If the decision of the Dispute Board requires a payment by one Party to the other Party, the Dispute Board may require the payee to provide an appropriate security in respect of such payment.
	45.5 Rules of procedure for arbitration proceedings: (a) Contracts with foreign contractors: International arbitration shall be conducted in accordance with the Rules of the Singapore International Arbitration Centre (SIAC). Arbitration shall be administered by SIAC. The place of arbitration shall be the place of the institution administering the arbitration. The place of arbitration shall be the place of the institution administering the arbitration. (b) Contracts with contractors being nationals of the Employer's country: Any dispute between the employer and a contractor who is a national of the Employer's country arising in connection with the present contract shall be referred to arbitration in accordance with the laws (rules and provision of Arbitration Act 1940 of Islamic Republic of Pakistan) of the Employer's country. The place of arbitration shall be "Karachi", Pakistan.
	45.6 GCC Subclause <u>45.6</u> shall be replaced with the following sentence: In the event that a Party fails to comply with a Dispute Board decision which has become either binding or final and binding, then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under Subclause 45.5 [Arbitration] for summary or other expedited relief, as may be appropriate. Subclause 45.3 [Obtaining Dispute Board's Decision] and Subclause 45.4 [Amicable Settlement] shall not apply to this reference.
46.	Eligibility
	46.1 The Contractor shall have the nationality of an ADB member country. The Contractor shall be deemed to have the nationality of a country if the Contractor is a citizen or is constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services. 46.2 The materials, equipment and services to be supplied under the Contract shall have their origin in eligible source countries and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, the Contractor may be required to provide evidence of the origin of materials, equipment and services. 46.3 For purposes of SCC 46.2, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.

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Notice of Intention for Award of Contract

[on letterhead paper of the Employer]

[date of notification]

To: [name of the Bidder]
 Attention: [insert name of the Bidder's authorized representative]
 Address: [insert address of the Bidder's authorized representative]
 Telephone/Fax numbers: [insert telephone/fax numbers of the Bidder's authorized representative]
 E-mail Address: [insert e-mail address of the Bidder's authorized representative]

This is to notify you of our intention to award the contract [insert name of the contract and identification number, as given in the Bid Data Sheet]. You have [insert number of days as specified in ITB 40.1 of the BDS] days, from the date of this notification to (i) request for a debriefing in relation to the evaluation of your Bid, and/or (ii) submit a bidding-related complaint in relation to the intention for award of contract, in accordance with the procedures specified in ITB 45.1.

The summary of the evaluation are as follows:

1. List of Bidders

Name of Bidder	Bid Price as Read Out at Opening	Evaluated Bid Price

2. Reason/s Why Your Bid Was Unsuccessful

.....

3. The Successful Bidder

Name of Bidder:	
Address:	
Accepted Contract Amount:	
Duration of Contract:	
Scope of the Contract Awarded:	
Amount Performance Security Required:	

Authorized Signature:

Name and Title of Signatory:

Name of Agency:

Letter of Acceptance

[date]

To: [Name and address of the contractor]

Subject: Contract No. [please specify]

This is to notify you that your Bid dated [date] for execution of the [name of the contract and identification number, as given in the Bid Data Sheet] for the Contract Price in the aggregate of [amounts in words and figures] [name of currency], as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract and any additional security required as a result of the evaluation of your bid, using for that purpose one of the Performance Security Forms included in Section 9 (Contract Forms) of the Bidding Document.

Authorized Signature:

Name and Title of Signatory:

Name of Agency:

Attachment: Contract Agreement

Contract Agreement

THIS AGREEMENT made on the [*insert number*] day of [*insert month*], [*insert year*],

BETWEEN

(1) [*name of the employer*], a corporation incorporated under the laws of [*country of the Employer*] and having its principal place of business at [*address of the Employer*] (hereinafter called “the Employer”), and (2) [*name of the contractor*], a corporation incorporated under the laws of [*country of the contractor*] and having its principal place of business at [*address of the contractor*] (hereinafter called “the Contractor”).

WHEREAS the Employer desires to engage the Contractor to design, manufacture, test, deliver, install, complete and commission certain Facilities, viz. [*list of facilities*] (“the Facilities”) and the Contractor have agreed to such engagement upon and subject to the terms and conditions hereinafter appearing.

NOW IT IS HEREBY AGREED as follows:

Article 1 Contract Documents

1.1 Contract Documents (Reference GCC Clause 2)

The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read and construed as an integral part of the Contract:

- (a) This Contract Agreement and the Appendixes hereto
- (b) Letter of Bid and Price Schedules submitted by the Contractor
- (c) Special Conditions of Contract
- (d) List of Eligible Countries that was specified in Section 5 of the Bidding Document
- (e) General Conditions of Contract
- (f) Specifications
- (g) Drawings
- (h) Other completed Bidding Forms submitted with the Letter of Bid
- (i) Any other documents forming part of the Employer’s Requirements
- (j) Any other documents shall be added here¹

1.2 Order of Precedence (Reference GCC Clause 2)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

1.3 Definitions (Reference GCC Clause 1)

Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the General Conditions.

¹ Tables of Adjustment Data may be added if the contract provides for price adjustment (see GCC 11).

Article 2
Contract Price and
Terms of Payment

2.1 Contract Price (Reference GCC Clause 11)

The Employer hereby agrees to pay to the Contractor the Contract Price in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price shall be the aggregate of *[amounts of foreign currency in words]*, *[amounts in figures]* as specified in Price Schedule No. 5 (Grand Summary), *[amounts of local currency in words]*, *[amounts in figures]*, or such other sums as may be determined in accordance with the terms and conditions of the Contract.

2.2 Terms of Payment (Reference GCC Clause 12)

The terms and procedures of payment according to which the Employer will reimburse the Contractor are given in the Appendix (Terms and Procedures of Payment) hereto.

The Employer shall instruct its bank to issue an irrevocable confirmed documentary credit made available to the Contractor in a bank in the country of the Contractor. The credit shall be for an amount of *[amount equal to the total named in Schedule 1 less the advance payment to be made for plant and mandatory spare parts supplied from abroad]*; and shall be subject to the Uniform Customs and Practice for Documentary Credits 1993 Revision, ICC Publication No. 500.²

In the event that the amount payable under Schedule No. 1 is adjusted in accordance with GCC 11.2 or with any of the other terms of the Contract, the Employer shall arrange for the documentary credit to be amended accordingly

Article 3
Effective Date

3.1 Effective Date (Reference GCC Clause 1)

The Effective Date upon which the period until the Time for Completion of the Facilities shall be counted from is the date when all of the following conditions have been fulfilled:

- (a) This Contract Agreement has been duly executed for and on behalf of the Employer and the Contractor.
- (b) The Contractor has submitted to the Employer the performance security and the advance payment guarantee.
- (c) The Employer has paid the Contractor the advance payment.
- (d) The Contractor has been advised that the documentary credit referred to in Article 2.2 above has been issued in its favor.

Each party shall use its best efforts to fulfill the above conditions for which it is responsible as soon as practicable.

- 3.2** If the conditions listed under 3.1 are not fulfilled within 2 months from the date of this Contract notification because of reasons not attributable to the Contractor, the parties shall discuss and agree on an equitable adjustment to the Contract Price and the Time for Completion and/or other relevant conditions of the Contract.

² Or Uniform Customs and Practice for Documentary Credits 2007 Revision, ICC Publication No. 600 (or the latest version).

**Article 4
Communications**

- 4.1 The address of the Employer for notice purposes, pursuant to GCC 4.1 is: [*Employer's address*].
- 4.2 The address of the Contractor for notice purposes, pursuant to GCC 4.1 is: [*Contractor's address*].

**Article 5.
Appendixes**

- 5.1 The Appendixes listed in the attached List of Appendixes shall be deemed to form an integral part of this Contract Agreement.
- 5.2 Reference in the Contract to any Appendix shall mean the Appendixes attached hereto, and the Contract shall be read and construed accordingly.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by, for and on behalf of the Employer

[*Signature*]

[*Title*]

in the presence of

[*Signature*]

[*Title*]

Signed by, for and on behalf of the Contractor

[*Signature*]

[*Title*]

in the presence of

[*Signature*]

[*Title*]

APPENDIXES

Appendix 1: Terms and Procedures of Payment

Appendix 2: Price Adjustment

Appendix 3: Insurance Requirements

Appendix 4: Time Schedule

Appendix 5: List of Major Items of Plant and Services and List of Approved Subcontractors

Appendix 6: Scope of Works and Supply by the Employer

Appendix 7: List of Documents for Approval or Review

Appendix 8: Functional Guarantees

Appendix 1: Terms and Procedures of Payment

In accordance with the provisions of GCC Clause 12 (Terms of Payment), the Employer shall pay the Contractor in the following manner and at the following times, based on the Price Breakdown given in the section on Price Schedules. Payments will be made in the currencies quoted by the Bidder unless otherwise agreed between the parties. Applications for payment in respect of part deliveries may be made by the Contractor as work proceeds.

(A) Terms of Payment

Schedule No. 1 - Plant and Mandatory Spare Parts Supplied from Abroad

In respect of plant and mandatory spare parts supplied from abroad, the following payments shall be made:

Twenty percent (20%) of the total CIP amount as an advance payment against receipt of invoice and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. The advance payment security may be reduced in proportion to the value of the plant and mandatory spare parts delivered to the site, as evidenced by delivery documents.

Seventy percent (70%) of the total or pro rata CIP or amount upon Incoterm "CIP," upon delivery to the site within 45 days after receipt of invoice.

Five percent (5%) of the total or pro rata CIP or amount upon issue of the Completion Certificate, within 45 days after receipt of invoice.

Five percent (5%) of the total or pro rata CIP or amount upon issue of the Operational Acceptance Certificate, within 45 days after receipt of invoice.

Schedule No. 2 - Plant and Mandatory Spare Parts Supplied from Within the Employer's Country

In respect of plant and mandatory spare parts supplied from within the Employer's country, the following payments shall be made:

Twenty percent (20%) of the total EXW amount as an advance payment against receipt of invoice, and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. The advance payment security may be reduced in proportion to the value of the plant and mandatory spare parts delivered to the site, as evidenced by delivery documents.

Seventy percent (70%) of the total or pro rata EXW amount upon Incoterm "Ex-Works," upon delivery to the site within 45 days after receipt of invoice.

Five percent (5%) of the total or pro rata EXW amount upon issue of the Completion Certificate, within 45 days after receipt of invoice.

Five percent (5%) of the total or pro rata EXW amount upon issue of the Operational Acceptance Certificate, within 45 days after receipt of invoice.

Schedule No. 3 - Design Services

In respect of design services for both the foreign currency and the local currency portions, the following payments shall be made:

Twenty percent (20%) of the total design services amount as an advance payment against receipt of invoice and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer.

Eighty percent (80%) of the total or pro rata design services amount upon acceptance of design by the Project Manager within 45 days after receipt of invoice.

Schedule No. 4 - Installation and Other Services

In respect of installation services for both the foreign and local currency portions, the following payments shall be made:

Twenty percent (20%) of the total installation and other services amount as an advance payment against receipt of invoice and an irrevocable advance payment security for the equivalent amount made out in favor of the Employer. The advance payment security may be reduced in proportion to the value of work performed by the Contractor as evidenced by the invoices for installation services.

Seventy percent (70%) of the total or pro rata of the measured value of work performed by the Contractor, as identified in the said Program of Performance, during the preceding month, as evidenced by the Employer's authorization of the Contractor's application, will be made monthly within 45 days after receipt of invoice.

Five percent (5%) of the total or pro rata value of installation services performed by the Contractor as evidenced by the Employer's authorization of the Contractor's monthly applications, upon issue of the Completion Certificate, within 45 days after receipt of invoice.

Five percent (5%) of the total or pro rata value of installation services performed by the Contractor as evidenced by the Employer's authorization of the Contractor's monthly applications, upon issue of the Operational Acceptance Certificate, within 45 days after receipt of invoice.

(B) Payment Procedures

When applying for certification and making payments for 2nd instalment of payments under Schedule-4 of Appendix-1, the procedures shall be as follows:

The charges for opening of the irrevocable letter of credit shall be paid by the Contractor.

Procedure

S/No	Item	Procedure
1	Dismantling of existing damaged sub and superstructures and rubble removal and its disposal at safe locations, clearing and grubbing the site, cutting of trees including removal of stumps and roots, removal of minor rocks from uphill side endangering the structure, dewatering, levelling and dressing, construction and installation/erection of all internal and external architectural, structural, civil, RCC foundations, doors, windows, vents etc, (including water supply, tube well, motor with pump, sanitation and rain water harvesting) and electrical & solar works, i/c all materials, fittings and fixtures except LGS Structures for in these works etc. Complete execution and payment of the facilities / works as approved specifications and Technical Provisions on covered area (plinth area basis) for: Single Storey Structures Only G.F Double Storey Structures: G.F + 1	The Contractor shall submit the invoice which will be certified and verified by the Supervision Consultant.
2	Boundary Wall & Main Gates: I/C all kind of civil works as approved by the Project Manager.	The Contractor shall submit the invoice which will be certified and verified by the Supervision Consultant.
3	Construction of Water Storage Tank (minimum 3000 Gal. Per Unit)	The Contractor shall submit the invoice which will be certified and verified by the Supervision Consultant.
4	Construction of Septic Tank / Soak Pit (minimum 3000 Gal. Per Unit)	The Contractor shall submit the invoice which will be certified and verified by the Supervision Consultant.
5	Electrical / Solar System (External) for all schools	The Contractor shall submit the invoice which will be certified and verified by the Supervision Consultant.
6	Plumbing and Water Supply System (External) for all schools	The Contractor shall submit the invoice which will be certified and verified by the Supervision Consultant.
7	Drainage / Sewerage System (External) for all schools	The Contractor shall submit the invoice which will be certified and verified by the Supervision Consultant.

S/No	Item	Procedure
8	Hard / Soft Landscape / ground development works all schools	The Contractor shall submit the invoice which will be certified and verified by the Supervision Consultant.

Note:

LC shall be established by PIU-SSEIP, SELD, however charges for opening of Letter of Credit and subsequent amendments, if any, shall be borne by the Contractor.

Certificates and Payment**1. Method of Application for Certificate of Payment**

- (a) The Contractor shall submit to the Employer ten (10) copies of Application for Certificate of Payment each signed by the Contractor and in such form as the Employer may from time to time prescribe. Such invoices, receipts, or other documentary evidence shall accompany as the employer may from time to time require
- (b) The application for certificate of payment for progress of Work under Schedule 4 shall be submitted accompanying also a statement signed by the Contractor in the form stated in para (4) below and in such other form as the Project Manager may from time to time prescribe showing the amounts to which the Contractor may consider himself to be entitled in respect of:
 - 1) The permanent work executed
 - 2) Payment of account of lumpsum item in the Price Schedule not included under head (1) above
- (c) The Applications for Certificate of Payment for supply of Goods (Schedule 1 and 2) shall be submitted on the delivery of any Goods and shall be also accompanied by the following documents:
 - 1) Shipping Documents comprising of:
 - (i) Payment / Commercial Invoice
 - (ii) Clean on-board Bill of Lading or airway bill issued by the freight forwarder (for imported Goods only)
 - (iii) Delivery Note / Acknowledgement by Employer or its representative, of the material receipt at site or at PIU-SSEIP, SELD designated Warehouse in case of Spare Parts.
 - (iv) Packing list
 - (v) Certificate or Policy of Freight Insurance from Ex-factory to the Project Site or to PIU-SSEIP, SELD designated Warehouse in case of Spare Parts, of the portion of the Goods for which Certificate of Payment is requested
 - 2) Certificate that the Goods complies with the Specification
 - 3) Certificate of origin, issued by the Contractor
 - 4) Warranty Certificate
 - 5) Pre-shipment inspection report / inspection report or letter of waiver, issued by the Employer (where required)
 - 6) Notice to deliver issued by Project Manager.
 - 7) Any other document as considered by the Employer
- (d) The Application for Certificate of Payment shall state the amount claimed and shall set forth in detail, in the order of the Price Schedule, particulars of the Work executed up to the date named in the Application and subsequent to the period covered by the last preceding certificate, if any.

2. Issue of Certificate of Payment for Schedules 1, 2, 3, 4, and 5

The Employer, within the time stated, after receiving an Application for Certificate of Payment from the Contractor, shall either approve or amend it as he consider reasonable and proper in respect thereof subject to the deductions of any sums which may have become due and payable by the Contractor to PIU-SSEIP, SELD and issue a Certificate of Payment accordingly to PIU-SSEIP, SELD showing the amount due to the Contractor, with a copy to the Contractor, or, advise the Contractor in writing as to the reasons for which it is being withheld.

3. Reduction in Payment

If any Work is not being carried out in accordance with the Contract to the satisfaction of the Employer, the Employer shall have authority to omit or reduce the value of such Work in any Certificate of Payment.

4. Withhold any Payments

If the Work or any parts thereof are not being carried out in accordance with the Contract to the satisfaction of the Employer, the Employer shall have power to withhold any Payments and in order to protect PIU-SSEIP, SELD from loss on account of:

- (a) defective Work not rectified
- (b) claims filed against the Contractor as per the provisions of the contract
- (c) failure of Contractor to make payments due for the Goods and material procured or labour employed by him
- (d) damage to any other Contractor or Contractors employed by PIU-SSEIP, SELD
- (e) Contractor's non-compliance with the Contract
- (f) any Government dues recoverable from the Contractor if notified by the Government
- (g) Any other reason as deemed necessary by the Employer, for substantiation of the invoice.

The Employer shall notify the Contractor regarding this withholding giving reasons/grounds.

5. Certification of Payable Amount

- 1) A Certificate of Payment shall not be withheld on account of any part of the payment applied for being disputed. In such case, a Certificate of Payment for the undisputed amount shall be issued.
- 2) Employer shall make the final payment of 5% of the contract price including any price variations arising following modification to the scope (GCC 39) within 45 days of submission of invoice along with the Operational Acceptance Certificate (GCC 25)

6. Corrections to Certificate of Payment

The Employer may by any Certificate of Payment make any correction or modifications in any previous Certificate of Payment which shall have been issued by him.

7. Release of Payments Withheld

When the reasons / grounds for withholding the payment are removed by the Contractor, the Employer shall after examination, and upon being satisfied to that effect that there are no reasons to "withhold" any of Payments, shall release all such payments due to the contractor without mark-up and penalty.

8. Time for Approval of Certificate of Payment

The amount due to the Contractor under any Certificate of Payment shall be approved by PIU-SSEIP, SELD for payment within the time stated.

9. Payment by Measurement

Actual quantities of Works shall be finalized upon completion of final layout/orientation, and approval.

Work to be measured

The Employer / Project Manager, shall, except as otherwise stated, ascertain and determine by measurement the value of the work done in accordance with the Contract and the Contractor shall

be paid that value in accordance with this Clause. The Employer / Project Manager shall, when he requires any part of the Work to be measured, give reasonable notice to the Contractor's authorized representative, who shall:

- (a) forthwith attend or send a qualified representative to assist the Employer / Project Manager in making such measurement, and
- (b) supply all particulars required by the Employer/ Project Manager

Should the Contractor not attend, or neglect or omit to send such representative, then the measurement made by the Employer/ Project Manager or approved by him shall be taken to be the correct measurement of such part of the Work. For the purpose of measuring such Permanent Work as are to be measured by records and drawings, the Employer/ Project Manager shall prepare records and drawings as the work proceeds and the Contractor, as and when called upon to do so in writing, shall, within fourteen (14) days, attend to examine and agree such records and drawings with the Employer/ Project Manager and shall sign the same when so agreed. If the Contractor does not attend to examine and agree such records and drawings, they shall be taken to be correct. If, after examination of such records and drawings, the Contractor does not agree the same or does not sign the same as agreed, they shall nevertheless be taken to be correct, unless the Contractor, within fourteen (14) days of such examination, lodges with the Employer/ Project Manager notice of the respect in which such records and drawings are claimed by him to be incorrect. On receipt of such notice, the Employer/ Project Manager shall review the records and drawings and either confirm or vary them.

Method of Measurement

The Work shall be measured net, notwithstanding any general or local custom, except where otherwise provided for the Contract.

Breakdown of Lump Sum Items

The Contractor shall submit to the Employer/ Project Manager, within twenty-eight (28) days after the receipt of the Notice of Contract Award, a breakdown for each of the lump sum items contained in the Bid. Such breakdowns shall be subject to the approval of the Employer/ Project Manager

10. Payments Due from Contractor for non- compliance

- (a) PIU-SSEIP, SELD may, without prejudice to any other method of recovery, deduct the amount due from any money in his hand due to or which may become due to the Contractor or recover same through the Performance Security as per the provisions of the contract. Such deduction shall not relieve the Contractor from his obligations to complete the Work in accordance with the Contract to the satisfaction of the Employer.
- (b) The charges for establishment of L/C and any subsequent charges for modification and extension shall be borne by the Contractor. An irrevocable L/C shall be opened by the Employer within sixty (60) days from the Effective Date defined in Article 3 of Contract Agreement provided the Contractor submits requisite information to the Employer for establishing the L/C e.g. name of Advising Bank, name, address and Bank Account Number of Beneficiary etc within a week's time after signing of the Contract Agreement. Unless provided otherwise under State Laws, the L/C opened shall be irrevocable, divisible and transferable for payment to the Contractor or beneficiary assigned by him. Any delay in opening of L/C due to reasons on part of the Contractor shall be to the Contractor's account."

Appendix 2: Price Adjustment

Prices payable to the Contractor, in accordance with the Contract, shall be subject to adjustment during performance of the Contract to reflect changes in the cost of labor and material components, in accordance with the following formula:

$$P_1 = P_0 \times \left(a + b \frac{L_1}{L_0} + c \frac{M_1}{M_0} \right) - P_0$$

in which:

P_1 = adjustment amount payable to the Contractor

P_0 = Contract price (base price)

a = percentage of fixed element in Contract price ($a = \%$)

b = percentage of labor component in Contract price ($b = \%$)

c = percentage of material and equipment component in Contract price ($c = \%$)

L_0, L_1 = labor indexes applicable to the appropriate industry in the country of origin on the base date and the date for adjustment, respectively

M_0, M_1 = material and equipment indexes in the country of origin on the base date and the date for adjustment, respectively

Conditions Applicable to Price Adjustment

The base date shall be the date 28 days prior to the deadline for submission of the Bid.

The date of adjustment shall be the mid-point of the period of manufacture or installation of the component or Plant.

The following conditions shall apply:

- (a) No price increase will be allowed beyond the original delivery date unless covered by an extension of time awarded by the Employer under the terms of the Contract. No price increase will be allowed for periods of delay for which the Contractor is responsible. The Employer will, however, be entitled to any price decrease occurring during such periods of delay.
- (b) If the currency in which the Contract price, P_0 , is expressed is different from the currency of the country of origin of the labor and/or materials indexes, a correction factor will be applied to avoid incorrect adjustments of the Contract price. The correction factor shall correspond to the ratio of exchange rates between the two currencies on the base date and the date for adjustment as defined above.
- (c) No price adjustment shall be payable on the portion of the Contract price paid to the Contractor as an advance payment.

Appendix 3: Insurance Requirements

(A) Types of Insurance to Be Taken Out by the Contractor

In accordance with the provisions of GCC Clause 34, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the types of insurance set forth below in the sums and with the deductibles and other conditions specified. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld.

(a) Cargo Insurance

Covering loss or damage occurring, while in transit from the supplier's or manufacturer's works or stores until arrival at the Site, to the Facilities (including spare parts therefore) and to the construction equipment to be provided by the Contractor or its Subcontractors.

Amount [in currency(ies)]	Deductible limits [in currency(ies)]	Parties insured [names]	From [place]	To [place]
Full replacement value at site	Contractor to indemnify the Employer for amount of deductibles	Jointly in the name of Employer & Contractor	Place of manufacture / origin	Place of Installation / Site

(b) Installation All Risks Insurance

Covering physical loss or damage to the Facilities at the Site, occurring prior to completion of the Facilities, with an extended maintenance coverage for the Contractor's liability in respect of any loss or damage occurring during the defect liability period while the Contractor is on the Site for the purpose of performing its obligations during the defect liability period.

Amount [in currency(ies)]	Deductible limits [in currency(ies)]	Parties insured [names]	From [place]	To [place]
Full replacement value at site	Contractor to indemnify the Employer for amount of deductibles	Jointly in the name of Employer & Contractor	Place of manufacture / origin	Place of Installation / Site

(c) Third Party Liability Insurance

Covering bodily injury or death suffered by third parties (including the Employer's personnel) and loss of or damage to property (including the Employer's property and any parts of the Facilities that have been accepted by the Employer) occurring in connection with the supply and installation of the Facilities.

Amount [in currency(ies)]	Deductible limits [in currency(ies)]	Parties insured [names]	From [place]	To [place]
PKR 4,000,000 per any one accident arising	Contractor to indemnify the	Jointly in the name of Employer & Contractor	Place of manufacture / origin	Place of Installation / Site

out of one occurrence unlimited	Employer for amount of deductibles			
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(d) Automobile Liability Insurance

Covering use of all vehicles used by the Contractor or its Subcontractors (whether owned by them or not) in connection with the supply and installation of the Facilities. Comprehensive insurance in accordance with statutory requirements.

(e) Workers' Compensation

In accordance with the statutory requirements applicable in any country where the Facilities or any part thereof is executed.

(f) Employer's Liability

In accordance with the statutory requirements applicable in any country where the Facilities or any part thereof is executed.

(g) Other Insurance

The Contractor is also required to take out and maintain at its own cost the following types of insurance:

Details:

(g1) Insurance of the Facilities

The risks to be insured are:

- (i) Fire, smokes, explosion, falling objects, earthquake, perils of the sea, tempest, impact by aircraft or land vehicle, aircraft and other aerial devices or articles dropped therefrom, lightning, strike, riot, civil commotion, escape of water, inundation, rain, snow, landslides, flood, act of God, vandalism or malicious damage, windstorm or hailstorm and.
- (ii) Collision, upset, overturn, derailment, stranding or sinking of an automobile or any conveyance of a common carrier by land, water or air in which the Plant or any part thereof is being carried including overland transportation in Pakistan from port of entry to the Site, and
- (iii) Theft, burglary or attempted theft or burglary, and
- (iv) Any loss or damage during pre-erection storage, and
- (v) Faults in construction and erection, lack of skill, lack of experience, negligence, malicious act, and
- (vi) any other sudden and unforeseen event such as loss or damage due to collapse etc. on site, transport of items to be erected, and
- (vii) Actions of the Employer in the operation of Plant and Equipment or part thereof on behalf of the Contractor.

(g2) Cargo Insurance of Plant and Equipment

- (1) The Contractor shall in the joint names of the Contractor and Employer, obtain Cargo All Risks Insurance to cover loss or damage to the Plant or part thereof during transport.
- (2) The insurance for each consignment of Plant or part thereof shall start from the time the Plant or part thereof leave the warehouse or place of storage and terminate after ninety (90) days on its completion of unloading at the Site or until insurance survey whichever occurs first. Upon arrival of each consignment at the Site, the Contractor shall, immediately arrange insurance survey by the insurance company.
- (3) The sum insured for imported Plant or part thereof shall be for its full replacement value at the Site i.e. 100% CIP value at the Site for each consignment of the Plant or part thereof

plus not less than 30% of CIP value at the Site to cover any additional costs resulting from loss or damage thereof.

- (4) The Insurance Policy for imported Plant etc. shall be on "All Risks" basis and shall not be limited to the attachment/endorsement of following clauses:
 - (a) Institute Cargo Clauses (A)
 - (b) Institute War Clauses (Cargo)
 - (c) Institute Strikes Clauses (Cargo)
 - (d) Institute Cargo Clauses (Air) excluding sending by Post
 - (e) Institute War Clauses (Air Cargo) excluding sending by Post.
 - (f) Institute Strikes Clauses (Air Cargo)
 - (g) Special Replacement Clauses (Air)
 - (h) Institute Theft, Pilferage and Non-delivery Clauses

(g3) Installation All Risks Insurance

- (1) The Contractor shall insure the Facilities or part thereof in the joint names of the Contractor and Employer.
 - (a) from the date following the completion of the first unloading at the Site of the Plant or part thereof and other materials (to be used for construction or erection) and from commencement of work at Site until issuance of Operational Acceptance Certificate against any loss or damage caused by any of the Contractor's risks and any other risks specified in para (h) "Insurance of the Facilities" hereof and
 - (b) during the Defects Liability Period against any loss or damage which is caused either:
 - (i) by the Contractor in completing any outstanding work or complying with his obligations under Clause 27 of General Conditions, or
 - (ii) by any of the Contractor's risks and any other risks specified in Sub-Para (h) "Insurance of Facilities" hereof which occurred prior to the Risk Transfer Date.
- (2) The sum insured shall be the full replacement value at the Site, which includes:
 - (a) (i) Free on Board (FOB) value of imported Plant to be erected
 - (ii) Ex-factory value of Indigenous Plant to be erected, if any
 - (b) freight and insurance including local transport
 - (c) customs duties and taxes etc.
 - (d) cost of erection
 - (e) cost of civil engineering work including escalation
 - (f) clearance of debris (@ 5% of total cost of works)
 - (g) amount of Third-Party Liability Insurance

Plus 30% to cover any additional costs resulting from loss or damage thereof.

(g4) General

Should a loss be sustained, the Contractor shall replace or repair any loss or damage at his own cost and complete the Facilities in accordance with the Contract as soon as possible after occurrence of such loss or damages, without waiting for the settlement of the insurance claim.

(h) Contractor to Notify Insurers

- (1) It shall be the duty of the Contractor to notify the insurers of any such insurances referred to above of any matter or event which by the terms of such insurances are required to be so notified. All formalities in connection with insurance survey(s) shall be the sole responsibility of the Contractor. The Contractor shall indemnify and keep indemnified Employer against all loss, claims, demands, proceedings, costs, charges and expenses whatsoever arising out of or resulting from any default by the Contractor in complying with the requirements of this Sub-Clause whether as a result of the avoidance of any such insurance or otherwise.
- (2) In case of any insurance claim, the Contractor shall pursue the insurance claim if any, till such time final settlement of such insurance claims is affected.

(i) Currency of Insurance

All Policies of Insurance under the Contract shall provide for payment of indemnity to be made in such amounts as will allow making good the loss of or damage to the whole or any part of the Facilities, or other requirements under the Contract and in a freely convertible currency.

(j) Procurement of Insurance Policies

The Contractor shall submit to the Project Manager for review, the draft of the insurance policies to be procured under this Contract as soon as possible after receipt of Notification of Award so that terms of the policies may be agreed and approved by the Employer.

(k) Insurance Company

Cargo/marine insurance shall be effected with reputed insurers from any eligible source country acceptable to the Employer. All other insurances shall be effected with National Insurance Company (NIC) of Pakistan or any other insurance company operating in Pakistan and acceptable to the Employer.

(l) Amounts not Recovered

The Contractor shall bear the Excesses/Deductibles and loss not covered by the insurance in accordance with his responsibility under the Contract.

The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC Subclause 34.1, except for the Third-Party Liability, Workers' Compensation, and Employer's Liability Insurance, and the Contractor's Subcontractors shall be named as co-insureds under all insurance policies taken out by the Contractor pursuant to GCC Subclause 34.1, except for the Cargo, Workers' Compensation and Employer's Liability Insurance. All insurer's rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.

(B) Types of Insurance to Be Taken Out by the Employer

The Employer shall at its expense take out and maintain in effect during the performance of the Contract the following insurance policies.

Details:

Amount [in currency(ies)]	Deductible limits [in currency(ies)]	Parties insured [names]	From [place]	To [place]
Not Applicable				

Appendix 4: Time Schedule

1. The Time for Completion of the whole of the Facilities shall be 330 days, tentative 90 days for Design and Tentative 240 days for engineering, procurement of Plant to the location specified as Site (for the purposes of delivery), construction, installation, testing & commissioning at the Site from the Effective Date as described in the Contract Agreement, pursuant to Clause 8.2 of Section 8: Special Conditions of the Contract.
2. Bidder shall provide a programme in a bar-chart/CPM/PERT from showing the sequence of work items by which he proposes to complete the work of the entire Contract. The programme should indicate the sequence of work items and the period of time during which he proposes to complete the Facilities including the activities like designing, schedule of submittal of drawings, ordering and procurement of materials, manufacturing, delivering, construction of civil works, installation, pre-commissioning, testing and commissioning of Facilities to be supplied and executed under the Contract.

After award of Contract, the Contractor shall also update the said schedule every month during the period of execution of the contract and submit the same to the Employer on monthly basis.

Appendix 5: List of Major Items of Plant and Services and List of Approved Subcontractors

A list of major items of plant and services is provided below.

The following Subcontractors and Manufacturers are approved for carrying out the item of the facilities indicated. Where more than one Subcontractor is listed, the Contractor is free to choose between them, but it must notify the Employer of its choice in good time prior to appointing any selected Subcontractor. In accordance with GCC Subclause 19.1, the Contractor is free to submit proposals for Subcontractors for additional items from time to time. No Subcontracts shall be placed with any such Subcontractors for additional items until the Subcontractors have been approved in writing by the Employer and their names have been added to this list of Approved Subcontractors.

Major Items of Plant and Services	Approved Subcontractors and Manufacturers	Nationality

Appendix 6: Scope of Works and Supply by the Employer

The following personnel, facilities, works, and supplies will be provided or supplied by the Employer, and the provisions of GCC Clauses 10, 21, and 24 shall apply as appropriate.

All personnel, facilities, works, and supplies will be provided by the Employer in good time so as not to delay the performance of the Contractor, in accordance with the approved Time Schedule and Program of Performance pursuant to GCC Subclause 18.2.

Unless otherwise indicated, all personnel, facilities, works, and supplies will be provided free of charge to the Contractor.

Personnel	Charge to Contractor (if any)

Facilities	Charge to Contractor (if any)

Works	Charge to Contractor (if any)

Supplies	Charge to Contractor (if any)

Appendix 7: List of Documents for Approval or Review

Pursuant to GCC Subclause 20.3.1, the Contractor shall prepare, or cause its Subcontractor to prepare, and present to the Project Manager in accordance with the requirements of GCC Subclause 18.2 (Program of Performance), the following documents for

(A) Review & Approval

1. Detailed Drawings

Detailed drawings as required herein and in accordance with the schedule to be made by the Contractor and required by Clause 18.2 of General Conditions of the Contract.

All computations, drawings, functional description of the equipment and schemes and other information required to check adequacy of the design shall accompany drawings submitted for approval.

The drawings shall be complete, shall have been reviewed and checked by the Contractor and shall be submitted in due time and in logical order to facilitate proper coordination.

2. Drawings, Data and Instruction Manuals

- (i) All the drawings shall be submitted in accordance with Schedule required by Clause 20 of the Conditions of Contract:
- (ii) Topographic Survey Report
- (iii) Geotechnical / Soil Investigations Report
- (iv) Environmental Studies (REA / IEE) with the ADB guidelines, in consultation with the stakeholders and complying to the local environment regulations: Comprehensive Combined Report for all Schools.
- (v) Social Safeguard, Gender Responsiveness, Community Consultation & HSE management planning (meeting with locals 50% + 50% on gender equity basis, conduct local community consultation all schools two campaigns.
- (vi) Flood resilient & climate resilient design report with the ADB guidelines in consultation with the stakeholders and complying to the local environment regulations: Comprehensive Combined Report for all schools.
- (vii) Complete architectural, structural / LGS, civil, electrical / solar system, plumbing & public health works analysis and design for all the buildings / LGS, rooms/ Mep structures including protection works and compound / boundary walls + Main Gate, hard & soft landscaping, water treatment system complete design and payment of the facilities / works as approved specifications and Technical Provisions on covered area basis.
- (viii) Provision of Catalogues
- (ix) Provision of Installation Manual's
- (x) Provision of Fixture guide.
- (xi) Any other drawing/data/calculation required by the Employer's Representative/Project Manager to demonstrate that all parts of the Plant being furnished / erected conform to the requirements of the Specifications.

Appendix 8: Functional Guarantees

1. General

This Appendix sets out

- (a) the functional guarantees referred to in GCC Clause 28 (Functional Guarantees)
- (b) the preconditions to the validity of the functional guarantees, either in production and/or consumption, set forth below
- (c) the minimum level of the functional guarantees
- (d) the formula for calculating liquidated damages for failure to attain the functional guarantees.

2. Preconditions

The Contractor gives the functional guarantees (specified herein) for the facilities, subject to the following preconditions being fully satisfied:

3. Functional Guarantees

Subject to compliance with the foregoing preconditions, the Contractor guarantees as follows:

3.1 Production Capacity

3.2 Raw Materials and Utilities Consumption

4. Failure in Guarantees and Liquidated Damages

4.1 Failure to Attain Guaranteed Production Capacity

If the production capacity of the facilities attained in the guarantee test, pursuant to GCC Subclause 25.2, is less than the guaranteed figure specified in para. 3.1 above, but the actual production capacity attained in the guarantee test is not less than the minimum level specified in para. 4.3 below, and the Contractor elects to pay liquidated damages to the Employer in lieu of making changes, modifications and/or additions to the Facilities, pursuant to GCC Subclause 28.3, then the Contractor shall pay liquidated damages at the rate of 0.01% for every complete 1% of the deficiency in the production capacity of the Facilities, or at a proportionately reduced rate for any deficiency, or part thereof, of less than a complete 1%.

4.2 Raw Materials and Utilities Consumption in Excess of Guaranteed Level

If the actual measured figure of specified raw materials and utilities consumed per unit (or their average total cost of consumption) exceeds the guaranteed figure specified in para. 3.2 above (or their specified average total cost of consumption), but the actual consumption attained in the guarantee test, pursuant to GCC Subclause 25.2, is not more than the maximum level specified in para. 4.3 below, and the Contractor elects to pay liquidated damages to the Employer in lieu of making changes, modifications and/or additions to the Facilities pursuant to GCC Subclause 28.3, then the Contractor shall pay liquidated damages at the rate of 0.01% for every complete 1% of the excess consumption of the Facilities, or part thereof, of less than a complete 1%.

4.3 Minimum Levels

Notwithstanding the provisions of this paragraph, if as a result of the guarantee test(s), the following minimum levels of performance guarantees (and consumption guarantees) are not attained by the Contractor, the Contractor shall at its own cost make good any deficiencies until the Facilities reach any of such minimum performance levels, pursuant to GCC Subclause 28.2:

- (a) production capacity of the Facilities attained in the guarantee test: 95% of the guaranteed production capacity

and/or

- (b) average total cost of consumption of all the raw materials and utilities of the Facilities: 105% of the guaranteed figures.

4.4 Limitation of Liability

Subject to para. 4.3 above, the Contractor's aggregate liability to pay liquidated damages for failure to attain the functional guarantees shall not exceed **ten percent (10%)** of the Contract price

Performance Security

[Bank's name, and address of issuing branch or office]

Beneficiary:[Name and address of the Employer]

Date:

Performance Guarantee No.:

We have been informed that [name of the contractor] (hereinafter called "the Contractor") has entered into Contract No. [reference number of the contract] dated [date] with you, for the execution of [name of contract and brief description of plant and services] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Contractor, we [name of the bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [name of the currency and amount in words]¹ [amount in figures] such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire no later than the earlier of

- (a) 18 months after our receipt of
 - (i) a copy of the Completion Certificate; or
 - (ii) a registered letter from the Contractor, attaching a copy of the notice to the project manager that the Facilities are ready for commissioning, and stating that 14 days have elapsed from receipt of such notice (or 7 days have elapsed if the notice was a repeated notice) and the project manager has failed to issue a Completion Certificate or inform the Contractor in writing of any defects or deficiencies; or
 - (iii) a registered letter from the Contractor stating that no Completion Certificate has been issued but the Employer is making use of the Facilities; or
- (b) the [date] day of [month], [year]².

Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15 (a) is hereby excluded.

.....
[Signature(s) and seal of bank (where appropriate)]

-- Note to Bidder --

¹ The guarantor shall insert an amount representing the percentage of the accepted contract amount specified in the contract and denominated either in the currency(ies) of the contract or in any freely convertible currency acceptable to the Employer.

² Insert the expected expiration date of the Defect Liability Period. The employer should note that in the event of an extension of the time for completion of the contract, the Employer would need to request an extension of this guarantee from the guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [6 months][1 year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

If the bank issuing performance security is located outside the Employer's country, it shall be counter-guaranteed or encashable by a bank in the Employer's country.

Advance Payment Security

[Bank's name, and address of issuing branch or office]

Beneficiary:[Name and address of the Employer]

Date:

Advance Payment Guarantee No.:

We have been informed that [name of the contractor] (hereinafter called "the Contractor") has entered into Contract No. [reference number of the contract] dated [date] with you, for the execution of [name of contract and brief description of plant and services] (hereinafter called "the Contract").

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum [name of the currency and amount in words]¹ [amount in figures] is to be made against an advance payment guarantee.

At the request of the Contractor, we [name of the bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [name of the currency and amount in words]² [amount in figures] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor:

- (a) used the advance payment for purposes other than the costs of mobilization and cash flow support in respect of the Works; or
- (b) has failed to repay the advance payment when it has become due and payable in accordance with the conditions of the Contract, specifying the amount payable by the Contractor.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on its account number [contractor's account number] at [name and address of the bank].

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates, which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate, indicating that 80% of the Contract Price has been certified for payment, or on the [date] day of [month], [year],³ whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revisions, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.⁴

.....
[Signature(s) and seal of bank (where appropriate)]

¹ The guarantor shall insert an amount representing the amount of the advance payment denominated either in the currency(ies) of the advance payment as specified in the contract, or in any freely convertible currency acceptable to the Employer.

² Footnote 1.

³ Insert the expected expiration date of the time for completion. The Employer should note that in the event of an extension of the time for completion of the contract, the Employer would need to request an extension of this guarantee from the guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [6 months] [1 year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

⁴ Or the Employer may use "Uniform Rules for Demand Guarantees (URDG), ICC Publication No. 458, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded" as appropriate.

-- Note to Bidder --

If the bank issuing advance payment security is located outside the Employer's country, it shall be counter-guaranteed or encashable by a bank in the Employer's country.

SELD/SSEIP-AF/CW-04

**PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS
USING LIGHT GAUGE STEEL FRAME STRUCTURES
WITH SOLAR PANELS INSTALLATION ON DESIGN-
BUILD BASIS IN DISTRICT NAUSHERO FEROZE 102-
LOTSI**

ANNEXURE – A

SCHEDULES OF RATES AND PRICES

SELD/SSEIP-AF/CW-04

**PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS
USING LIGHT GAUGE STEEL FRAME STRUCTURES
WITH SOLAR PANELS INSTALLATION ON DESIGN-
BUILD BASIS IN DISTRICT NAUSHERO FEROZE (02-
LOTSI)**

LOT-1

**LOT-1: RECONSTRUCTION OF 55 SCHOOLS
USING LIGHT GAUGE STEEL FRAME
STRUCTURES WITH SOLAR PANELS
INSTALLATION ON DESIGN-BUILD BASIS IN
TEHSIL MORO, DISTRICT NAUSHERO FEROZE**

SELD/SSEIP-AF/CW-04: PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN DISTRICT NAUSHERO FEROZE [02-LOTS]							
LOT-1: RECONSTRUCTION OF 55 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN TEHSIL MORO, DISTRICT NAUSHERO FEROZE LIST OF SCHOOLS (55)							
SCHEDULES OF RATES AND PRICES							
Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad							
Item	Description	Country of Origin	Quantity	Unit Price ^a		Total Price ^a	Taxes and Duties
				Foreign Currency	CIP	Foreign Currency	Local Currency
1	2	3	4	5	6	7 = 4 x 6	8
	In accordance with the Employer's Requirements						
1	Supply of selected portions of pre - fabricated steel structural and non - structural parts of the building / structures including roofing, cladding, insulation, false ceiling with patent connections and accessories not locally available, as approved, on covered area basis for:						
a	Single Storey Structures Only G.F (Guard Room)		3,960 Sft				
b	Double Storey Structures: G.F + 1		538,561 Sft				
TOTAL Column 7 to be carried forward to Schedule No. 5: Grand Summary							
Name of Bidder _____							
Signature of Bidder _____							
^a Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for foreign currencies if so required.							

SELD/SSEIP-AF/CW-04: PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN DISTRICT NAUSHERO FEROZE [02-LOTS]						
LOT-1: RECONSTRUCTION OF 55 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN TEHSIL MORO, DISTRICT NAUSHERO FEROZE LIST OF SCHOOLS (55)						
SCHEDULES OF RATES AND PRICES						
Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within the Employer's Country						
Item	Description	Quantity	Unit Price ^a		Total EXW Price ^a	Sales and other Taxes
			Local Currency	EXW Price ^b		
1	2	3	4	5	6 = 3 x 5	7
	In accordance with the Employer's Requirements					
1	Supply of pre-fabricated structural and non-structural parts of the building / structure including roofing, cladding, insulation, false ceiling etc, with their connections and accessories, as appoved, on covered area basis for:					
a	Single Storey Structures Only G.F (Guard Room)	3,960 Sft				
b	Double Storey Structures: G.F + 1	538,561 Sft				
TOTAL Column 6 to be carried forward to Schedule No. 5: Grand Summary						
Name of Bidder _____ Signature of Bidder _____						
^a Specify currency in accordance with ITB 19.1 of the BDS. ^b Column 5 EXW Price shall include all customs duties and sales and other taxes already paid or payable on the components and raw materials used in the manufacture or assembly of the item or the customs duties and sales and other taxes already paid on previously imported items.						

LOT-1: RECONSTRUCTION OF 55 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN TEHSIL MORO, DISTRICT NAUSHERO FEROZE
LIST OF SCHOOLS (55)

Schedule No. 3: Design Services

Name of Bidder _____
Signature of Bidder _____

^a ***Specify currency in accordance with ITB 19.1 of the BDS.***

SELD/SSEIP-AF/CW-04: PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN DISTRICT NAUSHERO FEROZE [02-LOTS] LOT-1: RECONSTRUCTION OF 55 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN TEHSIL MORO, DISTRICT NAUSHERO FEROZE LIST OF SCHOOLS (55)							
SCHEDULES OF RATES AND PRICES							
Schedule No. 4 - Installation and Other Services							
Item	Description	Quantity	Unit Price ^a		Total Price ^a		
			Local Currency	Foreign Currency	Local Currency	Foreign Currency	
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5	
1	In accordance with the Employer's Requirements						
	Dismantling of existing damaged sub and superstructures and rubble removal and its disposal at safe locations, clearing and grubbing the site, cutting of trees including removal of stumps and roots, removal of minor rocks from uphill side endangering the structure, dewatering, leveling and dressing, construction and installation/erection of all internal and external architectural, structural, civil, rcc foundations, doors, windows, vents etc, (including water supply, tube well, motor with pump, sanitation and rain water harvesting) and electrical & solar works, i/c all materials, fittings and fixtures except LGS Structures for in these works etc. Complete execution and payment of the facilities / works as approved specifications and Technical Provisions on covered area (plinth area basis) for:						
	a	Single Storey Structures Only G.F	3,960 Sft				
	b	Double Storey Structures: G.F + 1	538,561 Sft				
	2	Boundary Wall & Main Gates: I/C all kind of civil works as approved by the engineer.	25,430 Rft				
	3	Construction of Water Storage Tank (minimum 3000 Gal. Per Unit)	165,000 Gallons				
	4	Construction of Septic Tank / Soak Pit (minimum 3000 Gal. Per Unit)	165,000 Gallons				
	5	Electrical / Solar System (External) for all schools	Lump sum				
	6	Water Supply System (External) for all schools	Lump sum				
	7	Drainage / Sewerage System (External) for all schools	Lump sum				
8	Hard / Soft Landscape / ground development works all schools.	134,640 Sft					
TOTAL Columns 6 and 7 to be carried forward to Schedule No. 5: Grand Summary							
			Name of Bidder _____ Signature of Bidder _____				
^a Specify currency in accordance with ITB 19.1 of the BDS. ^b As described in SCC 22.2.7.							

SELD/SSEIP-AF/CW-04: PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN DISTRICT NAUSHERO FEROZE [02-LOTS] LOT-1: RECONSTRUCTION OF 55 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN TEHSIL MORO, DISTRICT NAUSHERO FEROZE LIST OF SCHOOLS (55)			
SCHEDULES OF RATES AND PRICES			
Schedule No. 5: Grand Summary			
Schedule No.	Title	Total Price ^a	
		Foreign	Local
1	Plant and Mandatory Spare Parts Supplied from Abroad ^a		
2	Plant and Mandatory Spare Parts Supplied from Within the Employer's Country ^b		
3	Design Services		
4	Installation and Other Services		
Grand Total to be carried forward to Letter of Price Bid			
Name of Bidder _____ Signature of Bidder _____ ^a Specify currency in accordance with ITB 19.1 of the BDS. Create additional columns for foreign currencies if so required. ^b Taxes and/or duties from Schedules 1 and 2 may be added to the contract price in accordance with GCC 14 (Taxes and Duties) but excluded from bid evaluation in accordance with ITB 39.2.			

LOT-1: RECONSTRUCTION OF 55 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN TEHSIL MORO, DISTRICT NAUSHERO FEROZE
LIST OF SCHOOLS (55)

Schedule No. 6: Recommended Spare Parts

Name of Bidder

Signature of Bidder

Tables of Adjustment Data

SELD/SSEIP-AF/CW-04

**PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS
USING LIGHT GAUGE STEEL FRAME STRUCTURES
WITH SOLAR PANELS INSTALLATION ON DESIGN-
BUILD BASIS IN DISTRICT NAUSHERO FEROZE (02-
LOTSI)**

LOT-2

**LOT-2: RECONSTRUCTION OF 46 SCHOOLS
USING LIGHT GAUGE STEEL FRAME
STRUCTURES WITH SOLAR PANELS
INSTALLATION ON DESIGN-BUILD BASIS IN
TEHSIL NAUSHERO FEROZE
DISTRICT NAUSHERO FEROZE**

SELD/SSEIP-AF/CW-04: PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN DISTRICT NAUSHERO FEROZE [02-LOTS]							
LOT-2: RECONSTRUCTION OF 46 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN TEHSIL NAUSHERO FEROZE, DISTRICT NAUSHERO FEROZE							
LIST OF SCHOOLS (46)							
SCHEDULES OF RATES AND PRICES							
Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad							
Item	Description	Country of Origin	Quantity	Unit Price ^a		Total Price ^a	Taxes and Duties
				Foreign Currency	CIP	Foreign Currency	Local Currency
1	2	3	4	5	6	7 = 4 x 6	8
	In accordance with the Employer's Requirements						
1	Supply of selected portions of pre - fabricated steel structural and non - structural parts of the building / structures including roofing, cladding, insulation, false ceiling with patent connections and accessories not locally available, as approved, on covered area basis for:						
a	Single Storey Structures Only G.F (Guard Room)		3,312 Sft				
b	Double Storey Structures: G.F + 1		414,181 Sft				
TOTAL Column 7 to be carried forward to Schedule No. 5: Grand Summary							
Name of Bidder _____							
Signature of Bidder _____							
^a Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for foreign currencies if so required.							

SELD/SSEIP-AF/CW-04: PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS
INSTALLATION ON DESIGN-BUILD BASIS IN DISTRICT NAUSHERO FEROZE [02-LOTS]

LOT-2: RECONSTRUCTION OF 46 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD
BASIS IN TEHSIL NAUSHERO FEROZE, DISTRICT NAUSHERO FEROZE

LIST OF SCHOOLS (46)

SCHEDULES OF RATES AND PRICES

Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within the Employer’s Country

Item	Description	Quantity	Unit Price ^a		Total EXW Price ^a	Sales and other Taxes
			Local Currency	EXW Price ^b		
1	2	3	4	5	6 = 3 x 5	7
In accordance with the Employer's Requirements						
1	Supply of pre-fabricated structural and non-structural parts of the building / structure including roofing, cladding, insulation, false ceiling etc, with their connections and accessories, as appoved, on covered area basis for:					
a	Single Storey Structures Only G.F (Guard Room)	3,312 Sft				
b	Double Storey Structures: G.F + 1	414,181 Sft				
TOTAL Column 6 to be carried forward to Schedule No. 5: Grand Summary						

Name of Bidder

Signature of Bidder

^a Specify currency in accordance with ITB 19.1 of the BDS.

^b Column 5 EXW Price shall include all customs duties and sales and other taxes already paid or payable on the components and raw materials used in the manufacture or assembly of the item or the customs duties and sales and other taxes already paid on previously imported items

LOT-2: RECONSTRUCTION OF 46 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN TEHSIL NAUSHERO FEROZE, DISTRICT NAUSHERO FEROZE

SCHEDULES OF RATES AND PRICES

Item	Description	Quantity	Unit Price ^a		Total Price ^a	
			Local Currency Portion	Foreign Currency Portion	Local Currency Portion	Foreign Currency Portion
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
	In accordance with the Employer's Requirements					
1	Topographic Survey Report	46 Sites				
2	Geotechnical / Soil Investigations Report	46 Sites				
3	Environmental Studies (REA / IEE) with the ADB guidelines, in consultation with the stakeholders and complying to the local environment regulations: Comprehensive Combined Report for all Schools.	1 Documented Report				
4	Social Safeguard, Gender Responsiveness, Community Consultation & HSE management planning (meeting with locals 50% + 50% on gender equity basis, conduct local community consultation all schools two campaigns	01 Reports				
5	Flood resilient & climate resilient design report with the ADB guidelines in consultation with the stakeholders and complying to the local environment regulations: Comprehensive Combined Report for all schools.	1 Documented Report				
6	Complete architectural, structural / LGS, civil, electrical / solar system, plumbing & public health works analysis and design for all the buildings / LGS, rooms/ mep structures including protection works and compound / boundary walls + Main Gate, hard & soft landscaping, water treatment system complete design and payment of the facilities / works as approved specifications and Technical Provisions on covered area basis for:	414,181 Sft				
TOTAL Columns 6 and 7 to be carried forward to Schedule No. 5: Grand Summary						

^a ***Specify currency in accordance with ITB 19.1 of the BDS.***

SELD/SSEIP-AF/CW-04: PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN DISTRICT NAUSHERO FEROZE [02-LOTS] LOT-2: RECONSTRUCTION OF 46 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN TEHSIL NAUSHERO FEROZE, DISTRICT NAUSHERO FEROZE LIST OF SCHOOLS (46)						
SCHEDULES OF RATES AND PRICES						
Schedule No. 4 - Installation and Other Services						
Item	Description	Quantity	Unit Price ^a		Total Price ^a	
			Local Currency Portion	Foreign Currency Portion	Local Currency Portion	Foreign Currency Portion
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
1	In accordance with the Employer's Requirements					
	Dismantling of existing damaged sub and superstructures and rubble removal and its disposal at safe locations, clearing and grubbing the site, cutting of trees including removal of stumps and roots, removal of minor rocks from uphill side endangering the structure, dewatering, leveling and dressing, construction and installation/erection of all internal and external architectural, structural, civil, rcc foundations, doors, windows, vents etc, (including water supply, tube well, motor with pump, sanitation and rain water harvesting) and electrical & solar works, i/c all materials, fittings and fixtures except LGS Structures for in these works etc. Complete execution and payment of the facilities / works as approved specifications and Technical Provisions on covered area (plinth area basis) for:					
a	Single Storey Structures Only G.F	3,312 Sft				
b	Double Storey Structures: G.F + 1	414,181 Sft				
2	Boundary Wall & Main Gates: I/C all kind of civil works as approved by the engineer.	17,491Rft				
3	Construction of Water Storage Tank (minimum 3000 Gal. Per Unit)	138,000 Gallons				
4	Construction of Septic Tank / Soak Pit (minimum 3000 Gal. Per Unit)	138,000 Gallons				
5	Electrical / Solar System (External) for all schools	Lump sum				
6	Water Supply System (External) for all schools	Lump sum				
7	Drainage / Sewerage System (External) for all schools	Lump sum				
8	Hard / Soft Landscape / ground development works all schools.	103,545 Sft				
TOTAL Columns 6 and 7 to be carried forward to Schedule No. 5: Grand Summary						
			Name of Bidder _____			
			Signature of Bidder _____			
^a Specify currency in accordance with ITB 19.1 of the BDS.						
^b As described in SCC 22.2.7.						

SELD/SSEIP-AF/CW-04: PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS
INSTALLATION ON DESIGN-BUILD BASIS IN DISTRICT NAUSHERO FEROZE [02-LOTS]

LOT-2: RECONSTRUCTION OF 46 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD
BASIS IN TEHSIL NAUSHERO FEROZE, DISTRICT NAUSHERO FEROZE

LIST OF SCHOOLS (46)

SCHEDULES OF RATES AND PRICES

Schedule No. 5: Grand Summary

Schedule No.	Title	Total Price ^a	
		Foreign	Local
1	Plant and Mandatory Spare Parts Supplied from Abroad ^b		
2	Plant and Mandatory Spare Parts Supplied from Within the Employer's Country ^b		
3	Design Services		
4	Installation and Other Services		
Grand Total to be carried forward to Letter of Price Bid			

Name of Bidder

Signature of Bidder

^aSpecify currency in accordance with ITB 19.1 of the BDS. Create additional columns for foreign currencies if so required.

^bTaxes and/or duties from Schedules 1 and 2 may be added to the contract price in accordance with GCC 14 (Taxes and Duties) but excluded from bid evaluation in accordance with ITB 39.2.

LOT-2: RECONSTRUCTION OF 46 SCHOOLS USING LIGHT GAUGE STEEL FRAME STRUCTURES WITH SOLAR PANELS INSTALLATION ON DESIGN-BUILD BASIS IN TEHSIL NAUSHERO FEROZE, DISTRICT NAUSHERO FEROZE

SCHEDULES OF RATES AND PRICES

Item	Description	Quantity	Unit Price ^a		Total Price ^a	
			EXW	CIP	Local Currency Portion	Foreign Currency Portion
			Local Parts	Imported Parts		
			Local Currency	Foreign Currency		
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
TOTAL						

Signature of Bidder

SELD/SSEIP-AF/CW-04

**PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS
USING LIGHT GAUGE STEEL FRAME STRUCTURES
WITH SOLAR PANELS INSTALLATION ON DESIGN-
BUILD BASIS IN DISTRICT NAUSHERO FEROZE (02-
LOTSI)**

ANNEXURE – B

LIST OF SCHOOLS

SELD/SSEIP-AF/CW-04

**PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS
USING LIGHT GAUGE STEEL FRAME STRUCTURES
WITH SOLAR PANELS INSTALLATION ON DESIGN-
BUILD BASIS IN DISTRICT NAUSHERO FEROZE (02-
LOTSI)**

LOT-1

**LOT-1: RECONSTRUCTION OF 55 SCHOOLS
USING LIGHT GAUGE STEEL FRAME
STRUCTURES WITH SOLAR PANELS
INSTALLATION ON DESIGN-BUILD BASIS IN
TEHSIL MORO, DISTRICT NAUSHERO FEROZE**

PACKAGE-4, LOT-1
LIST OF SCHOOLS (55)

[illegible]

PACKAGE-4, LOT-1
LIST OF SCHOOLS (55)

[illegible]

PACKAGE-4, LOT-1
LIST OF SCHOOLS (55)

[illegible]

PACKAGE-4, LOT-1
LIST OF SCHOOLS (55)

[illegible]

SELD/SSEIP-AF/CW-04

**PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS
USING LIGHT GAUGE STEEL FRAME STRUCTURES
WITH SOLAR PANELS INSTALLATION ON DESIGN-
BUILD BASIS IN DISTRICT NAUSHERO FEROZE (02-
LOTSI)**

LOT-2

**LOT-2: RECONSTRUCTION OF 46 SCHOOLS
USING LIGHT GAUGE STEEL FRAME
STRUCTURES WITH SOLAR PANELS
INSTALLATION ON DESIGN-BUILD BASIS IN
TEHSIL NAUSHERO FEROZE
DISTRICT NAUSHERO FEROZE**

PACKAGE-4, LOT-2
LIST OF SCHOOLS (46)

[illegible]

PACKAGE-4, LOT-2
LIST OF SCHOOLS (46)

S. No	District	Taluka	SEMIS Code	School Name	Existing Level	Proposed Level	Existing Enrol	School Site Area (Sft)	Applicable Module	Module Covered Area (Sft)	External Development Works Required								
											Gate & Boundary Wall	Water Treatment system	Septic Tank / Soak Pit	Water Storage Tank	Guard Room	Water Supply	Sewrage System	Electrical / Solar System	Hard / Soft Landscape
16	Naushero Feroze	Naushero Feroze	416040364	GBPS - ENGINEER RIAZ MEMON	Primary	Only Construction	162	2500	PS-03	3,096.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
17	Naushero Feroze	Naushero Feroze	416040414	GGPS - THAT GO RAHO	Primary	Upgrade Ele & Construction	202	7225	EMS-01	7,997.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
18	Naushero Feroze	Naushero Feroze	416040489	GBPS - WASSAN	Primary	Upgrade Ele & Construction	250	10000	EMS-01	7,997.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
19	Naushero Feroze	Naushero Feroze	416040102	GBPS - MIAN HASSANULLAH QURESHI ABJI	Primary	Upgrade Ele & Construction	290	6000	EMS-02	8,177.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
20	Naushero Feroze	Naushero Feroze	416040142	GBPS - GHULAM MUSTAFA MALAH	Primary	Upgrade Ele & Construction	376	7656	EMS-01+(EMS-01a(G)	9,883.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
21	Naushero Feroze	Naushero Feroze	416040589	GBELS - CHOUDARY JALA	Elementary	Only Construction	164	6560	EMS-02	8,177.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
22	Naushero Feroze	Naushero Feroze	416040107	GBPS - ABDUL HAKIM KHOKHAR	Primary	Upgrade Ele & Construction	150	6000	EMS-01	7,997.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
23	Naushero Feroze	Naushero Feroze	416040583	GBELS - MUHAMMAD HAYAT DAKHAN	Elementary	Upgrade Sec & Construction	167	8550	SS-02	14,366.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
24	Naushero Feroze	Naushero Feroze	416040240	GBPS - BHURAND	Primary	Upgrade Sec & Construction	226	10000	SS-02	14,366.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
25	Naushero Feroze	Naushero Feroze	416040220	GBPS - NANGO SHAH	Primary	Upgrade Ele & Construction	200	6800	EMS-02	8,177.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
26	Naushero Feroze	Naushero Feroze	416040194	GBPS - CHUNGLE DAHRI	Primary	Upgrade Ele & Construction	138	4900	EMS-02	8,177.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
27	Naushero Feroze	Naushero Feroze	416040169	GBPS - LOCO SHED PADIDAN	Primary	Only Construction	126	2490	PS-03	3,096.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
28	Naushero Feroze	Naushero Feroze	416040153	GBPS - MUREED WAGAN	Primary	Upgrade Ele & Construction	220	7656	EMS-01	7,997.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
29	Naushero Feroze	Naushero Feroze	416040047	GBPS - BARRAN MARI	Primary	Only Construction	170	2500	PS-03	3,096.00	YES	YES	YES	YES	YES	YES	YES	YES	YES
30	Naushero Feroze	Naushero Feroze	416040028	GBPS - NIAZ HUSSAIN LAGHARI	Primary	Upgrade Ele & Construction	190	8550	EMS-01	7,997.00	YES	YES	YES	YES	YES	YES	YES	YES	YES

PACKAGE-4, LOT-2
LIST OF SCHOOLS (46)

[illegible]

PACKAGE-4, LOT-2
LIST OF SCHOOLS (46)

[illegible]

SELD/SSEIP-AF/CW-04

**PACKAGE-4: RECONSTRUCTION OF 101 SCHOOLS
USING LIGHT GAUGE STEEL FRAME STRUCTURES
WITH SOLAR PANELS INSTALLATION ON DESIGN-
BUILD BASIS IN DISTRICT NAUSHERO FEROZE 102-
LOTSI**

ANNEXURE – C

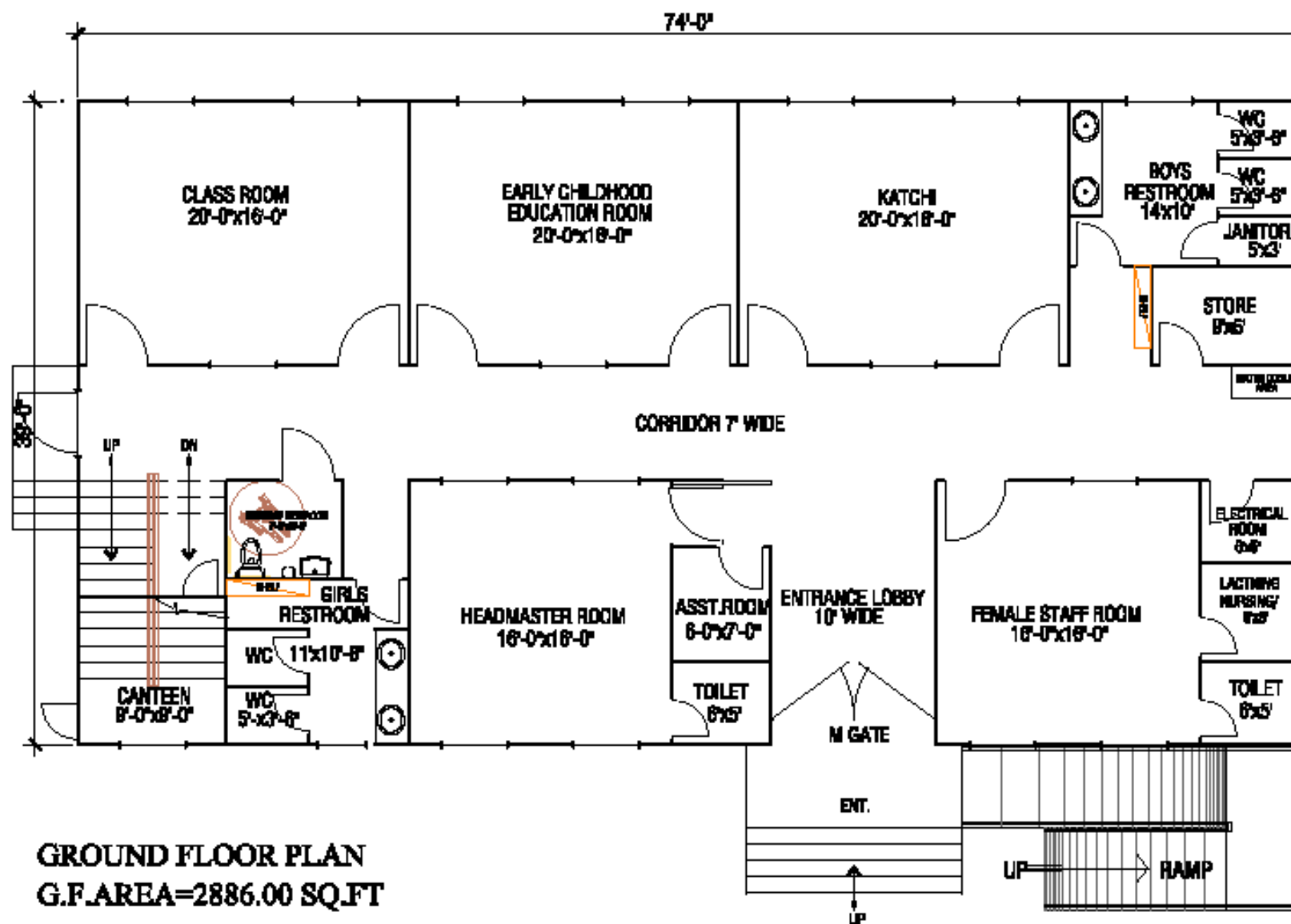
MODULE LAYOUT

&

**LIGHT GAUG STEEL (LGS)
DRAWINGS**

PRIMARY SCHOOL MODULES

MODULE PS-01



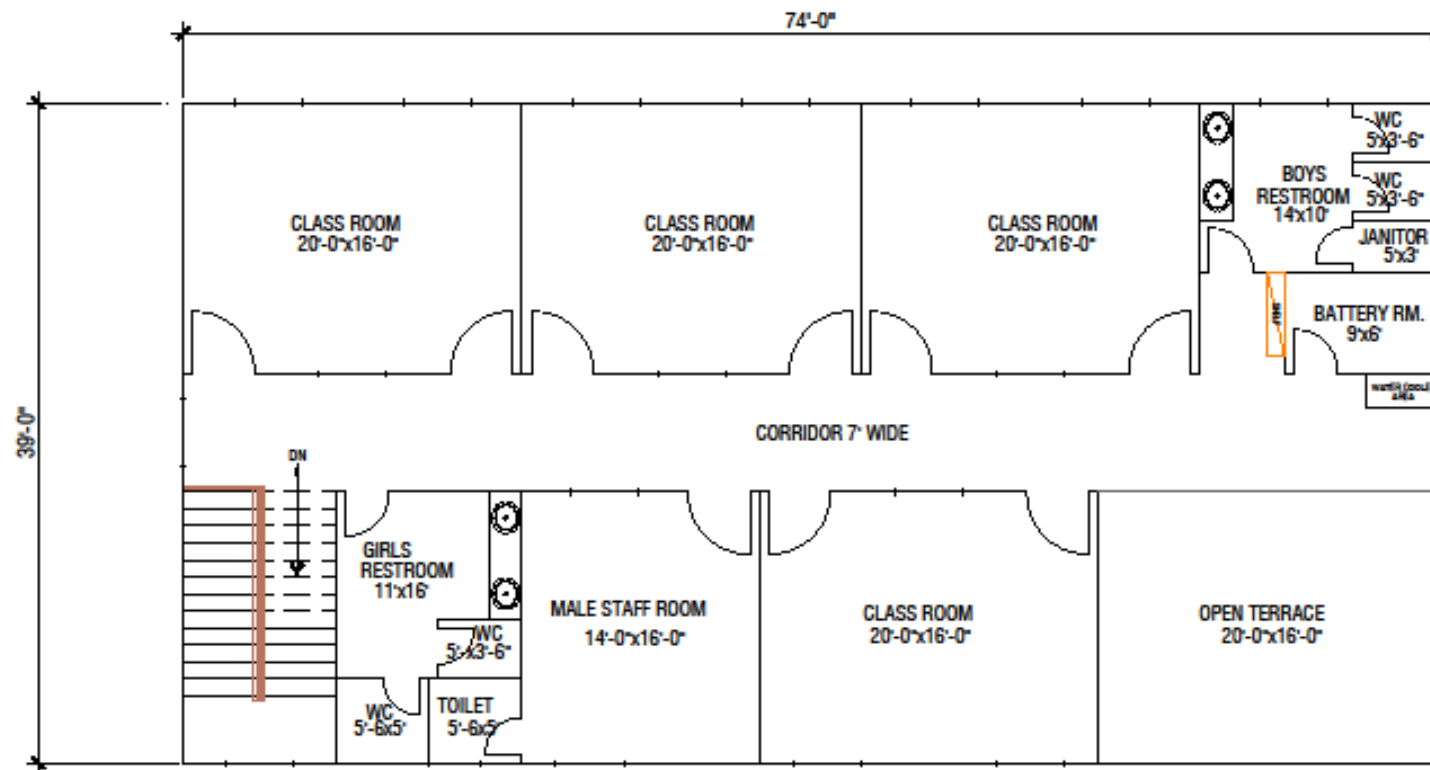
GROUND FLOOR PLAN
G.F.AREA=2886.00 SQ.FT
F.F.AREA=2566.00 SQ.FT
T.C.AREA=5452.00 SQ.FT

NOTES.

KEY PLAN.

ISSUE STATUS

CLIENT	PROJECT	CONSULTANTS	TITLE	REVISION	DRAWING CHECK BY	DESIGNED BY	STATUS	PRIMARY DESIGN
 PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT (PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	 ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. H-10/1, Islamabad	PRIMARY SCHOOL MODULE MODULE PS-01 GROUND FLOOR PLAN	NO. DATE 1 10/10/24 2 10/10/24 3 10/10/24 4 10/10/24	DRAWING CHECK BY DESIGNED CHECK BY SCALE: 3/16"=1'-0"	DESIGNED BY DRAWN BY DATE: SEP, 2024	JOB NO. 1254 AR-01 COMPUTER 2022 CCL GRAPHICS	PRIMARY DESIGN 10/10/24 10/10/24 10/10/24 10/10/24



FIRST FLOOR PLAN

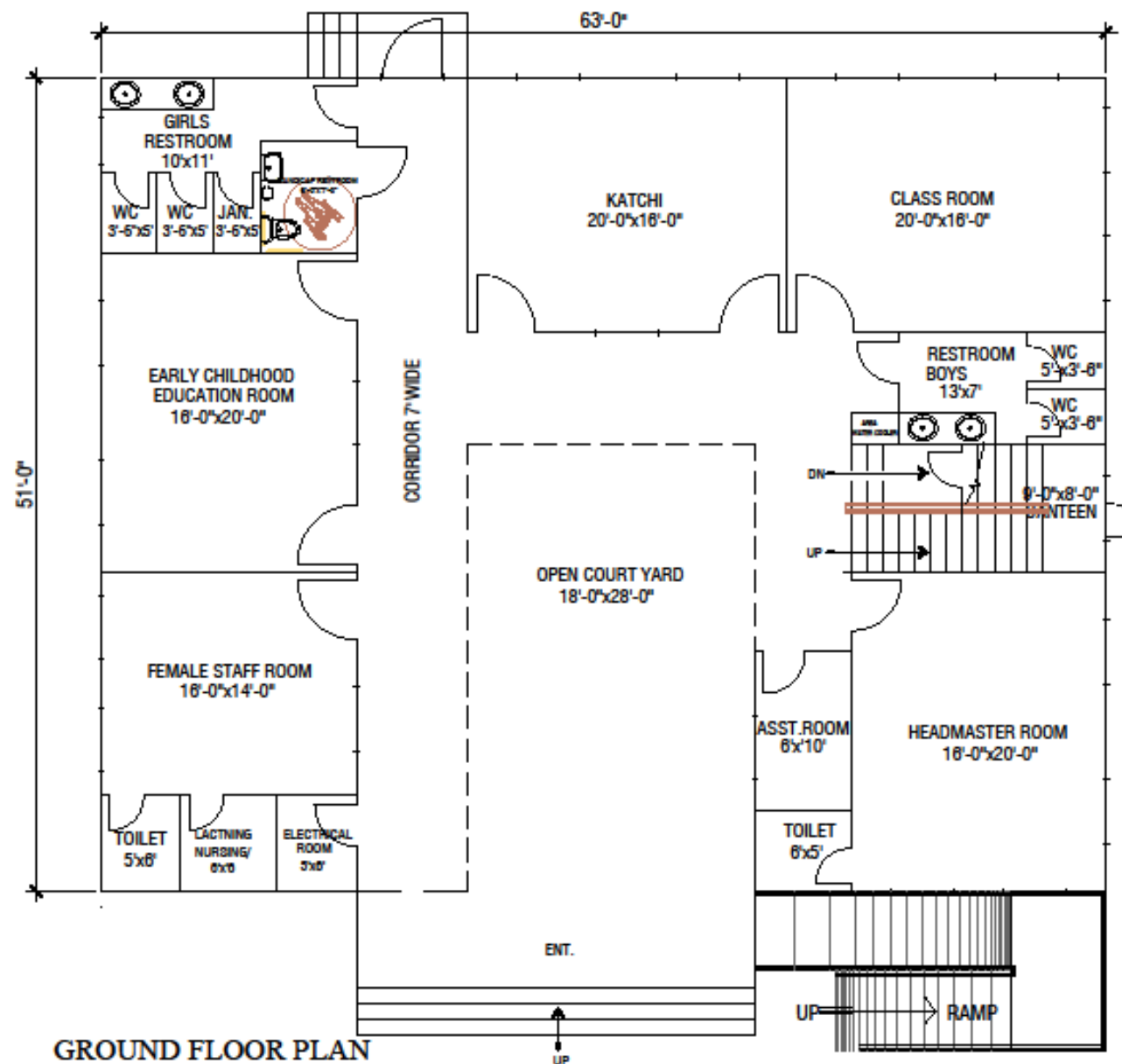
NOTES.

KEY PLAN.

ISSUE STATUS

	CLIENT PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT (PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	 ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. http://www.ecil.com	CONSULTANT PRIMARY SCHOOL MODULE MODULE PS-01 FIRST FLOOR PLAN	REVISION		DRAWING CHECK BY	DESIGNED BY	STATUS	PRIMARY DESIGN
					NO	DATE				

MODULE PS-02



GROUND FLOOR PLAN
G.F.AREA=2709.00 SQ.FT
F.F.AREA=2709.00 SQ.FT
T.C.AREA=5418.00 SQ.FT

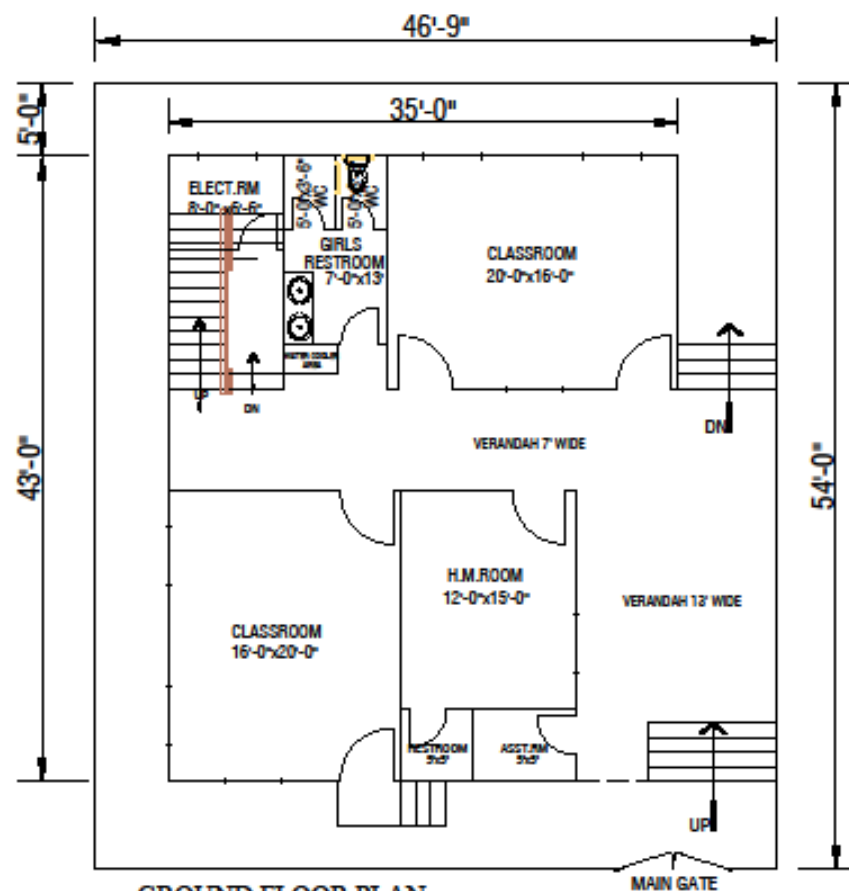
NOTES.

KEY PLAN.

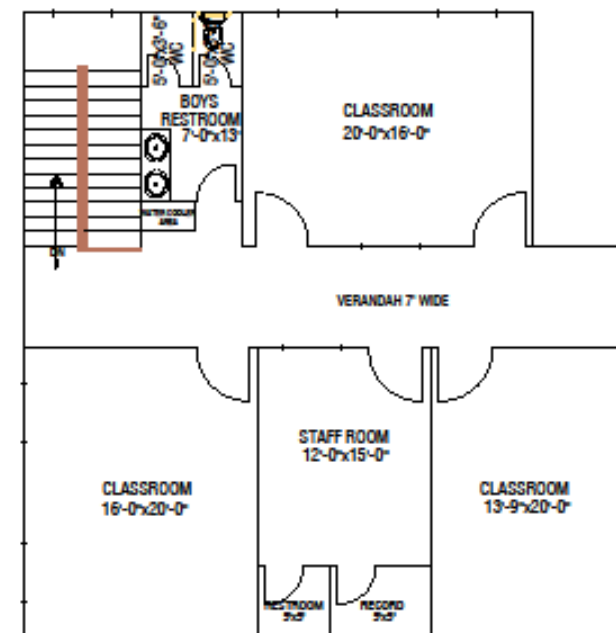
ISSUE STATUS

	PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT(PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT: SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISOR CONSULTANTS - DSC	 ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. http://www.ecil.com	CONSULTANT APPROVAL	TITLE PRIMARY SCHOOL MODULE MODULE PS-02 GROUND FLOOR PLAN	REVISION		DRAWING CHECK BY	DESIGNED BY	STATUS	PRIMARY DESIGN	
						NO.	DATE				DESIGNED	DATE
											1254	AR-01

MODULE PS-03



GROUND FLOOR PLAN
G.F AREA=1409.33 SQ.FT
F.F AREA=1687.25 SQ.FT
T.C AREA=3096.58 SQ.FT



FIRST FLOOR PLAN

5 CLASS ROOMS
TYPICAL MOUDLE FOR 2000 SQ.FT.

NOTES.

SCHOOL LOCATION COORDINATES

27.5763N 68.0081E

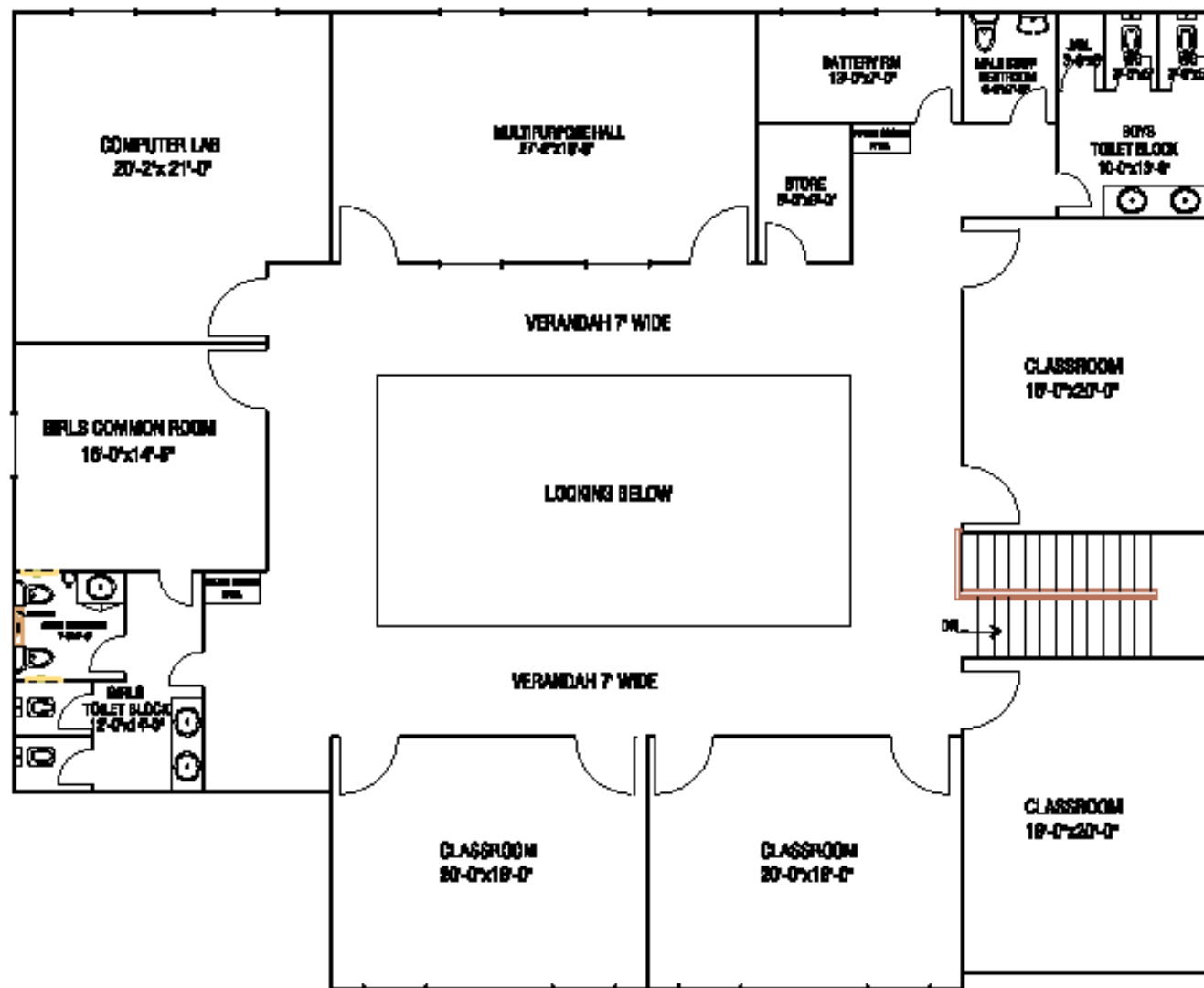
KEY PLAN.

ISSUE STATUS

	PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT(PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	CONSULTANT  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD.	TITLE MODULE -PS-03 GROUND & FIRST FLOOR PLAN	REVISION		DRAWING CHECK BY DESIGNED CHECK BY SCALE 1/8"=1'-0"	DESIGNED BY DRAWN BY DATE SEP, 2024	STATUS PRIMARY DESIGN		
					NO	DATE			2024	AR-01	1264
					1	DATE			2024	AR-01	1264
					2	DATE			2024	AR-01	1264

ELEMENTARY SCHOOL MODULE

MODULE EMS-01



FIRST FLOOR PLAN

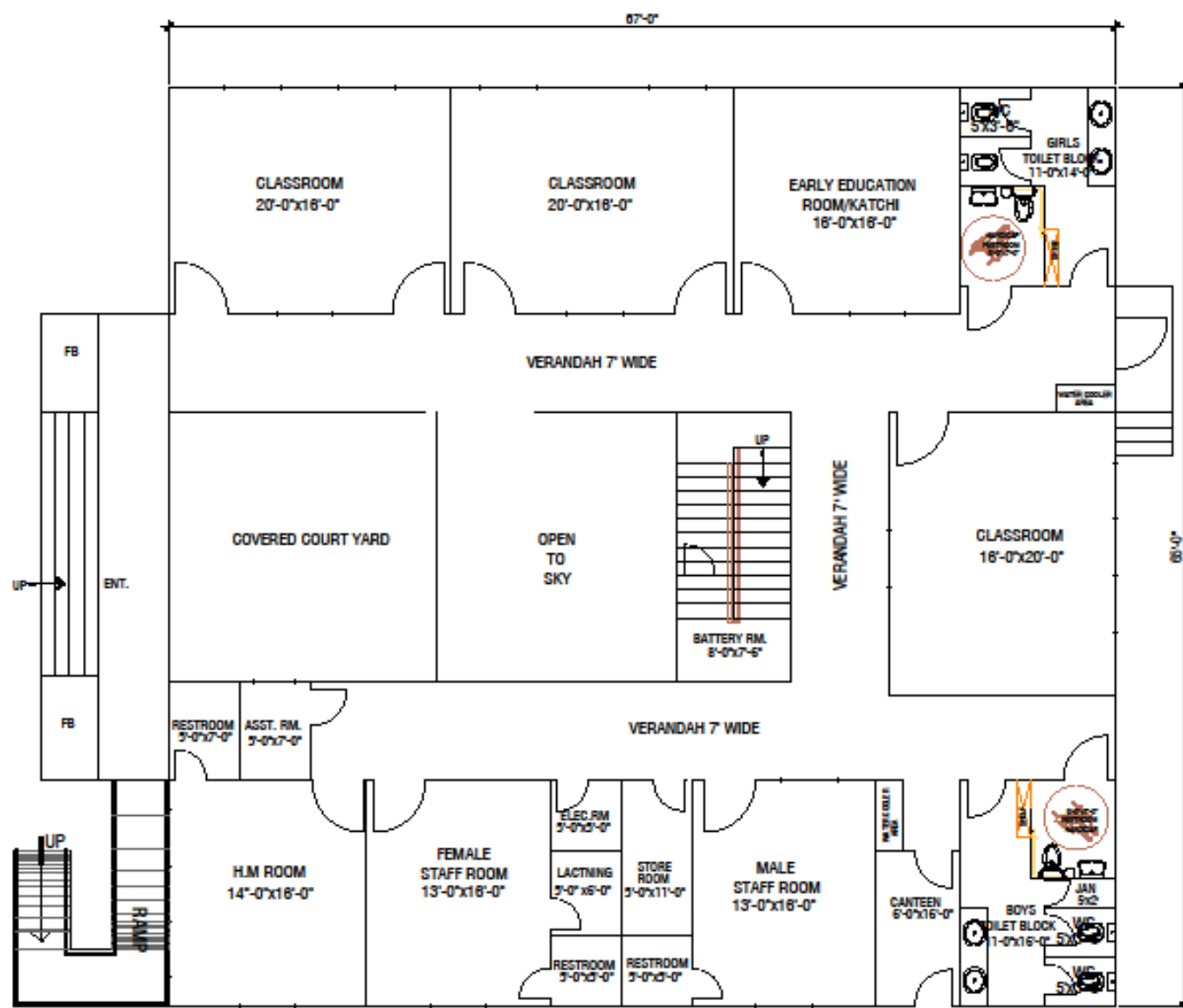
NOTES.

KEY PLAN.

ISSUE STATUS

CLIENT.  PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT(PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT. SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISOR CONSULTANTS - DSC	CONSULTANTS.  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. http://www.ecil.com	TITLE. ELEMENTARY/MIDDLE SCHOOL MODULE MODULE EMS-01 FIRST FLOOR PLAN	REVISION		DRAWING CHECK BY DESIGNED CHECK BY SCALE. NTS	DESIGNED BY DRAWN BY DATE. AUG, 2024	STATUS 1264 AR-02 COMPUTER 0000 ECIL GRAPHICS	PRELIMINARY DESIGN	
				NO	DATE					

MODULE EMS-02



GROUND FLOOR PLAN
G.F. AREA= 4086.00 SQ.FT
F.F. AREA= 4086.00 SQ.FT
TOTAL COVERED AREA= 8172.00 SQ.FT.

NOTES.

KEY PLAN.

ISSUE STATUS

	PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT (PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	CONSULTANT  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD.	TITLE ELEMENTARY/MIDDLE SCHOOL MODULE MODULE EMS-02 GROUND FLOOR PLAN	REVISION		DRAWING CHECK BY DESIGNED CHECK BY SCALE NTS	DESIGNED BY DRAWN BY DATE SEP, 2024	STATUS PRELIMINARY DESIGN		
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					2						

MODULE EMS-03

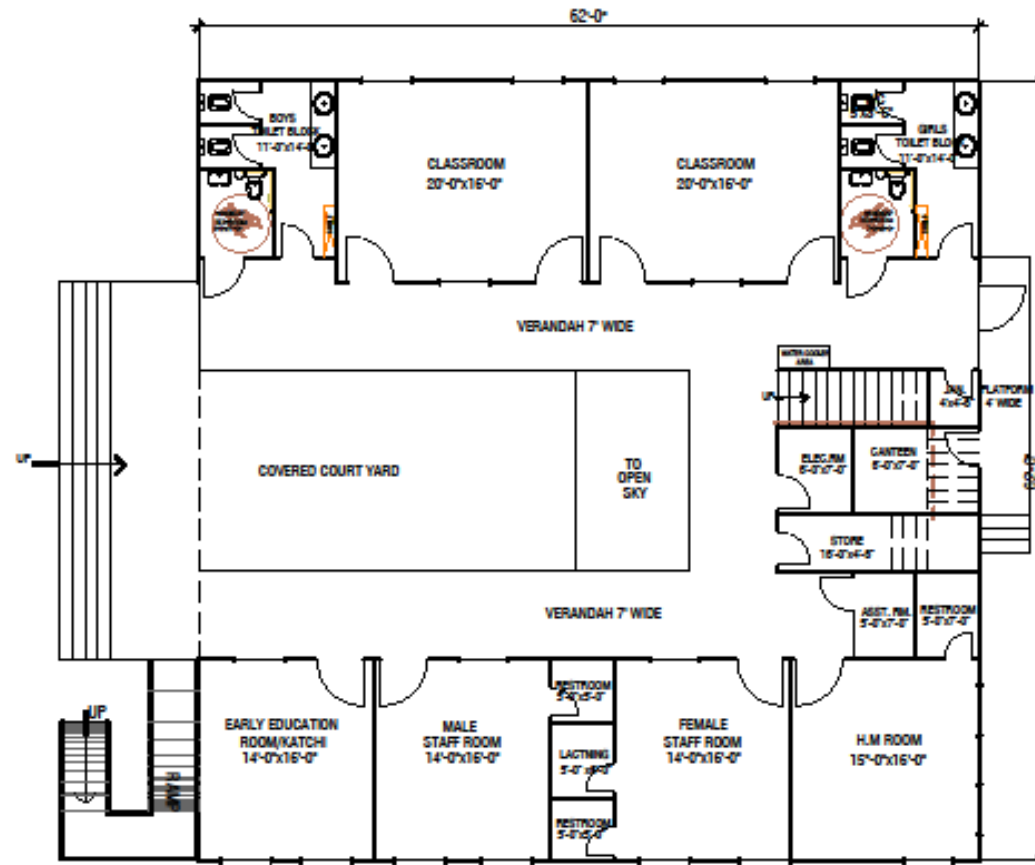
NOTES.

SCHOOL LOCATION COORDINATES

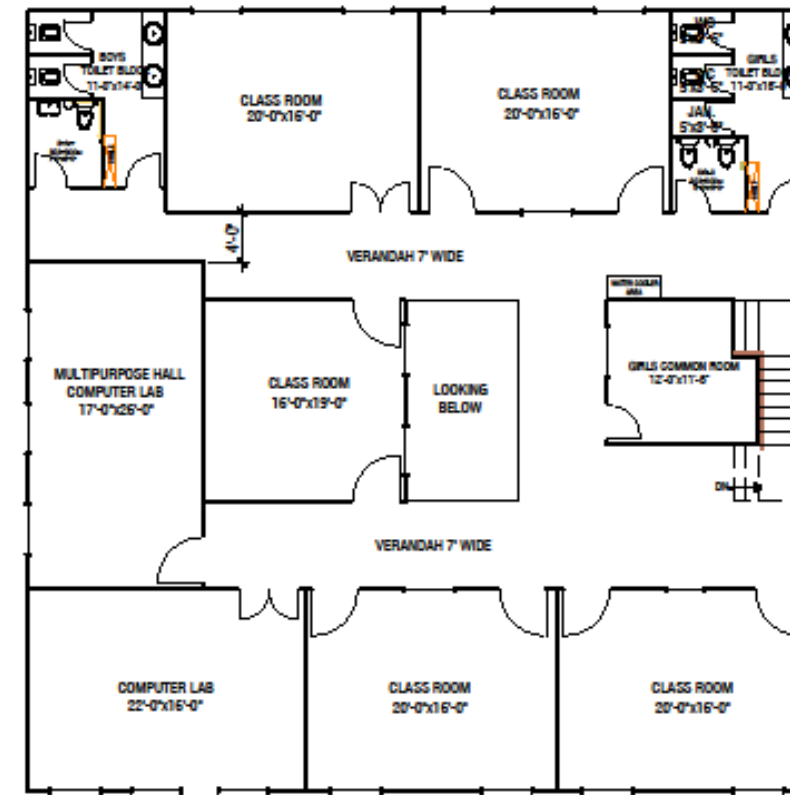
27.5763N 68.0081E

KEY PLAN.

ISSUE STATUS



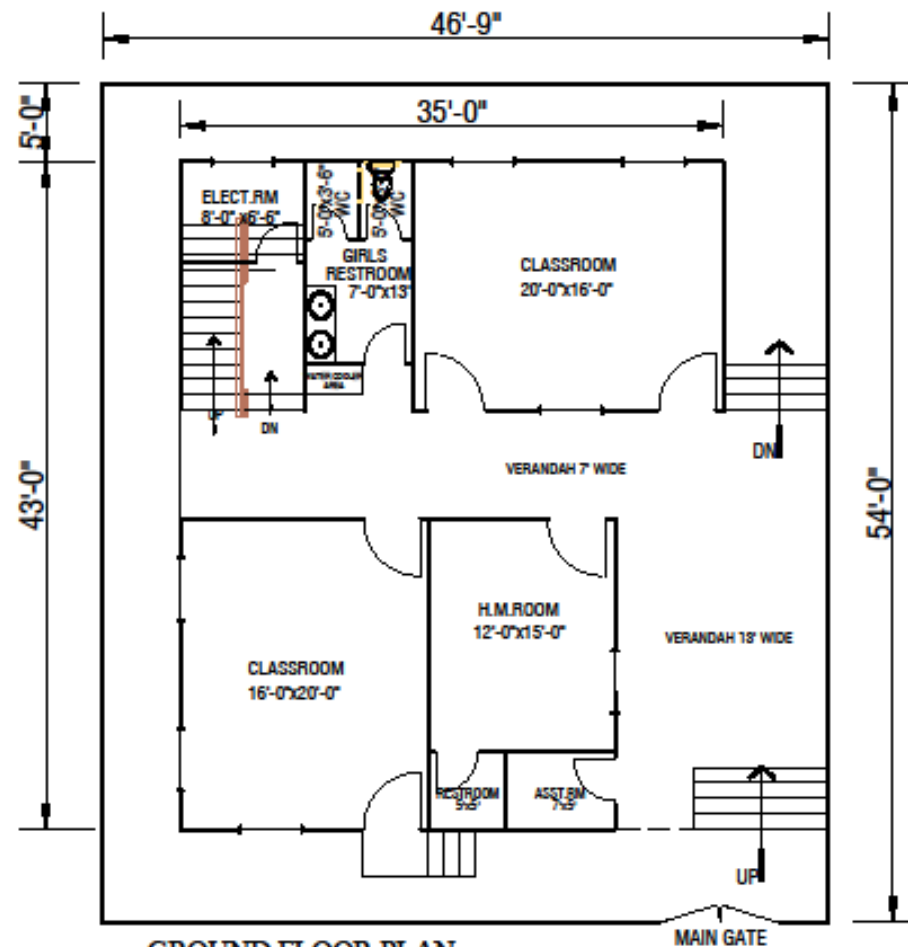
GROUND FLOOR PLAN
G.F.AREA=3700.00 SQ.FT
F.F.AREA=3700.00 SQ.FT
T.C.AREA=7400.00 SQ.FT



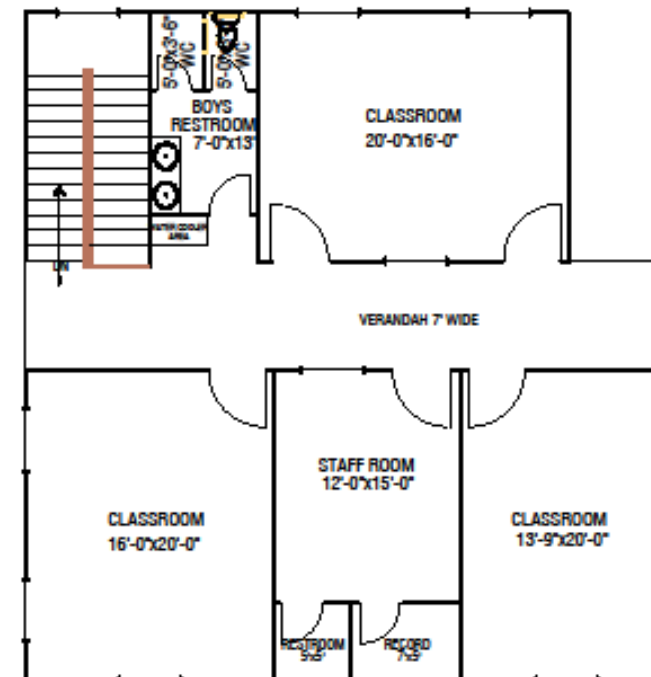
FIRST FLOOR PLAN

	PROJECT DIRECTOR	PROJECT:	 ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. https://www.ecil.com	TITLE: ELEMENTARY/MIDDLE SCHOOL MODULE EMS-03 GROUND & FIRST FLOOR PLAN	REVISION		DRAWING CHECK BY	DESIGNED BY	STATUS	PRIMARY DESIGN			
	PROJECT IMPLEMENTATION UNIT (PIU),	SINDH SECONDARY EDUCATION			NO	DATE				FORMER	JOB NO.	ARC NO.	REVISION
	SINDH SECONDARY EDUCATION	IMPROVEMENT PROJECT (SSEIP)											
	IMPROVEMENT PROJECT	ARCHITECTURAL DESIGN & CONSTRUCTION											
	SCHOOL EDUCATION AND LITERACY DEPT.	SUPERVISION CONSULTANTS - DSC											
	(SELD), GOVERNMENT OF SINDH												
							SCALE:	DATE:	COMPUTER CODE	ECIL GRAPHICS			
							1/8"=1'-0"	SEP, 2024					

MODULE EMS-04



GROUND FLOOR PLAN
G.F.AREA=1409.33 SQ.FT
F.F.AREA=1687.25 SQ.FT
T.C.AREA=3096.58 SQ.FT



FIRST FLOOR PLAN

5 CLASS ROOMS
TYPICAL MOUDLE FOR 2000 SQ.FT.

NOTES.

SCHOOL LOCATION COORDINATES
 27.5763N 68.0081E

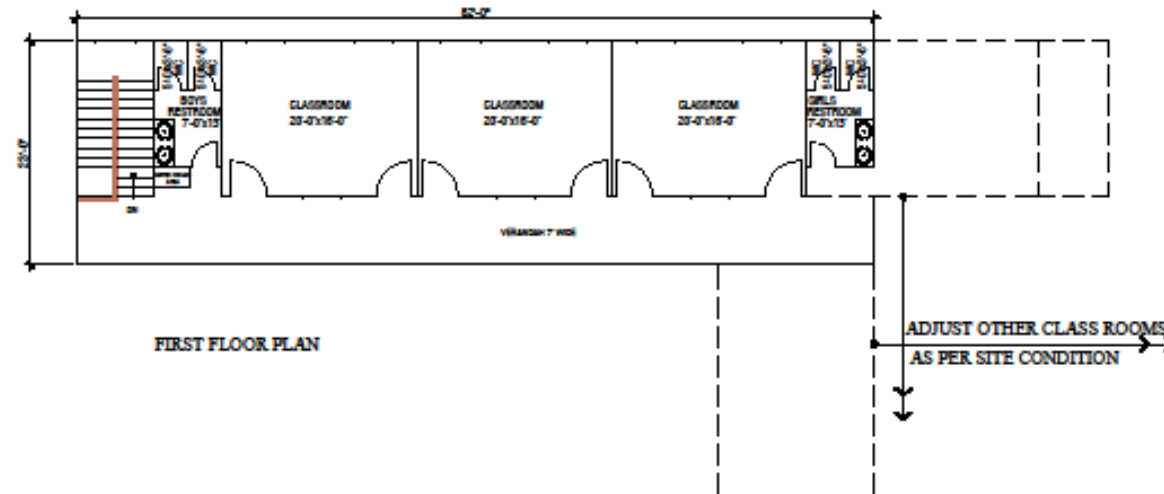
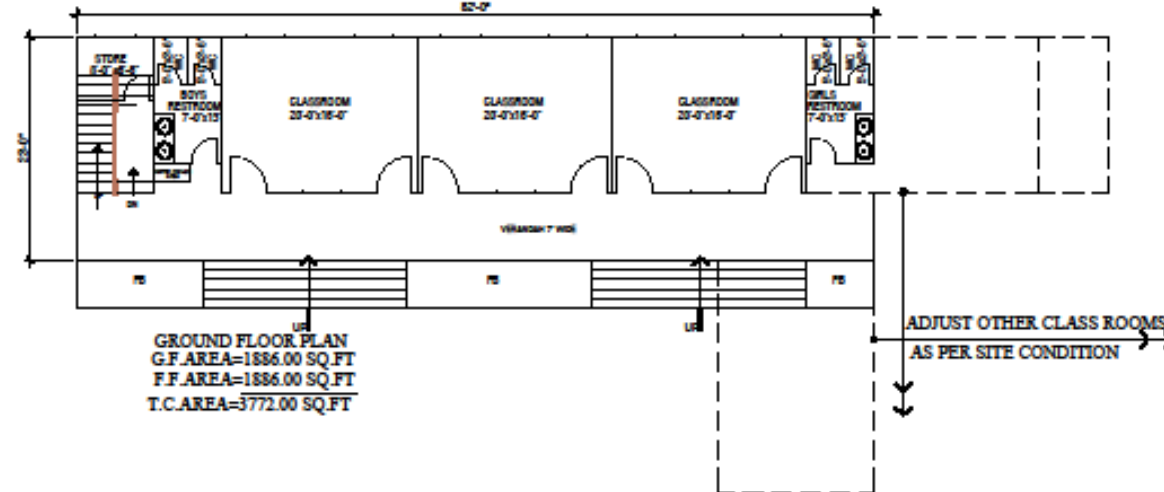
KEY PLAN.

ISSUE STATUS

	CLIENT. PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT(PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT. SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	 CONSULTANTS. ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. http://www.ecil.com	TITLE. MODULE EMS-04 GROUND & FIRST FLOOR PLAN	REVISIONS		DRAWING CHECKS BY	DESIGNED BY	STATUS	PRIMARY DESIGN	
					NO.	DATE					REVISIONS
											</

MODULE EMS-01A

MODULE EMS-01a



NOTES.

SCHOOL LOCATION COORDINATES

27.5783N 68.0081E

KEY PLAN.

ISSUE STATUS

CLIENT



PROJECT DIRECTOR
PROJECT IMPLEMENTATION UNIT (PIU),
SINDH SECONDARY EDUCATION
IMPROVEMENT PROJECT
SCHOOL EDUCATION AND LITERACY DEPT.
(SELD), GOVERNMENT OF SINDH

PROJECT

SINDH SECONDARY EDUCATION
IMPROVEMENT PROJECT (SSEIP)
ARCHITECTURAL DESIGN & CONSTRUCTION
SUPERVISION CONSULTANTS - DSC

CONSULTANT

ECIL
ENGINEERING CONSULTANTS
INTERNATIONAL (PVT.) LTD.
www.ecil.com

TITLE

MODULE EMS-01a
GROUND & FIRST FLOOR PLAN

REVISION

NO	DATE	REVISION
1		
2		
3		
4		

DRAWING CHECK BY

DESIGNED CHECK BY

SCALE 1/8"=1'-0"

DESIGNED BY

DRAWN BY

DATE SEP, 2024

STATUS

1264

AR-01

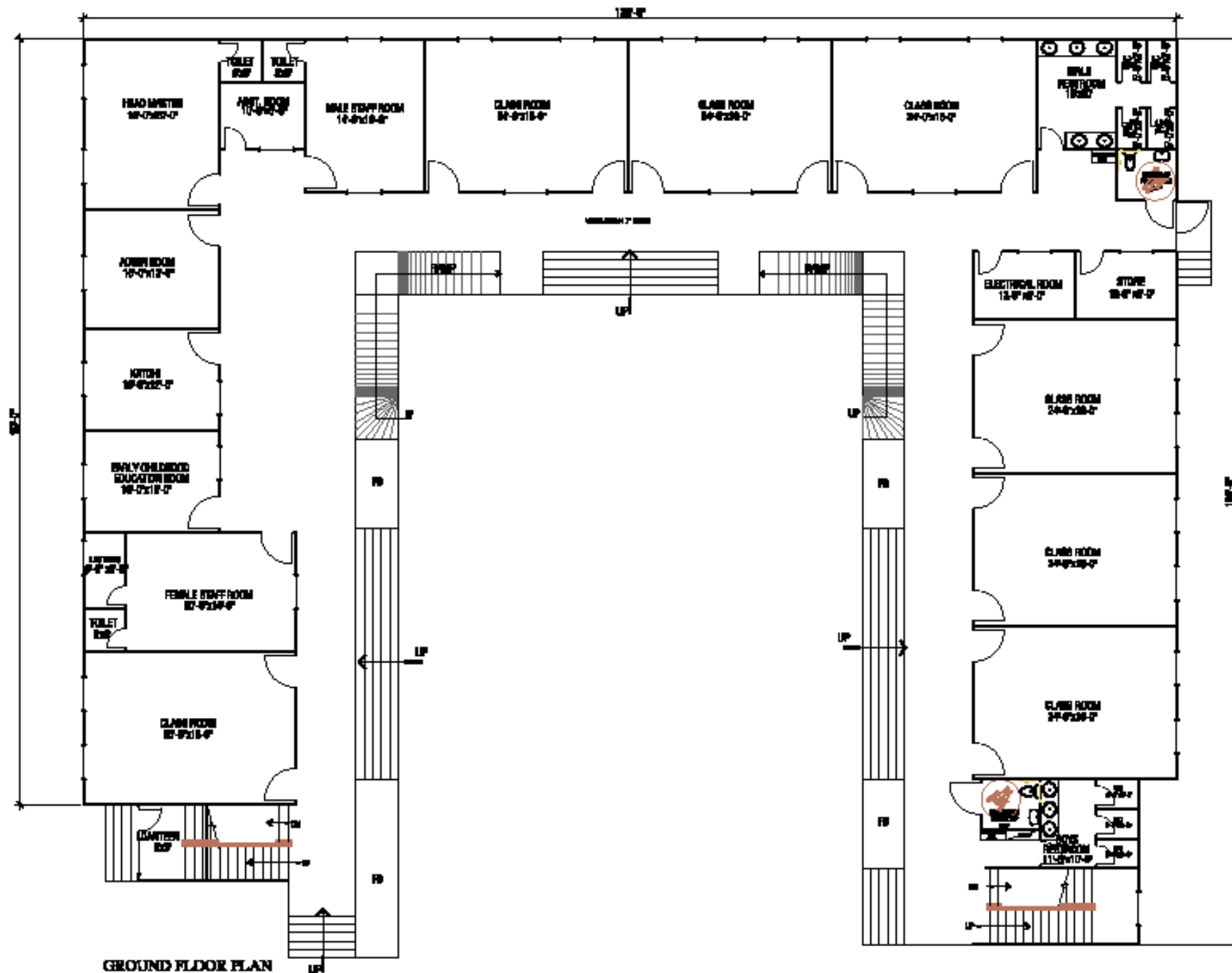
PRIMARY DESIGN

DATE

COMPUTER GRAPH

SECONDARY SCHOOL MODULES

MODULE SS-01



GROUND FLOOR PLAN
G.F.AREA=8042.00 SQ.FT
F.F.AREA=8042.00 SQ.FT
T.C.AREA=16084.00 SQ.FT

NOTES.

KEY PLAN.

ISSUE STATUS

CLIENT: PROJECT DIRECTOR
PROJECT IMPLEMENTATION UNIT (PIU),
SINDH SECONDARY EDUCATION
IMPROVEMENT PROJECT
SCHOOL EDUCATION AND LITERACY DEPT.
(SELD), GOVERNMENT OF SINDH

PROJECT: SINDH SECONDARY EDUCATION
IMPROVEMENT PROJECT (SSEIP)
ARCHITECTURAL DESIGN & CONSTRUCTION
SUPERVISOR CONSULTANTS - DSC

CONSULTANTS:
ECIL
ENGINEERING CONSULTANTS
INTERNATIONAL (PVT.) LTD.
<http://www.ecil.com>

TITLE:
SECONDARY SCHOOL MODULE
MODULE SS-01
GROUND FLOOR PLAN

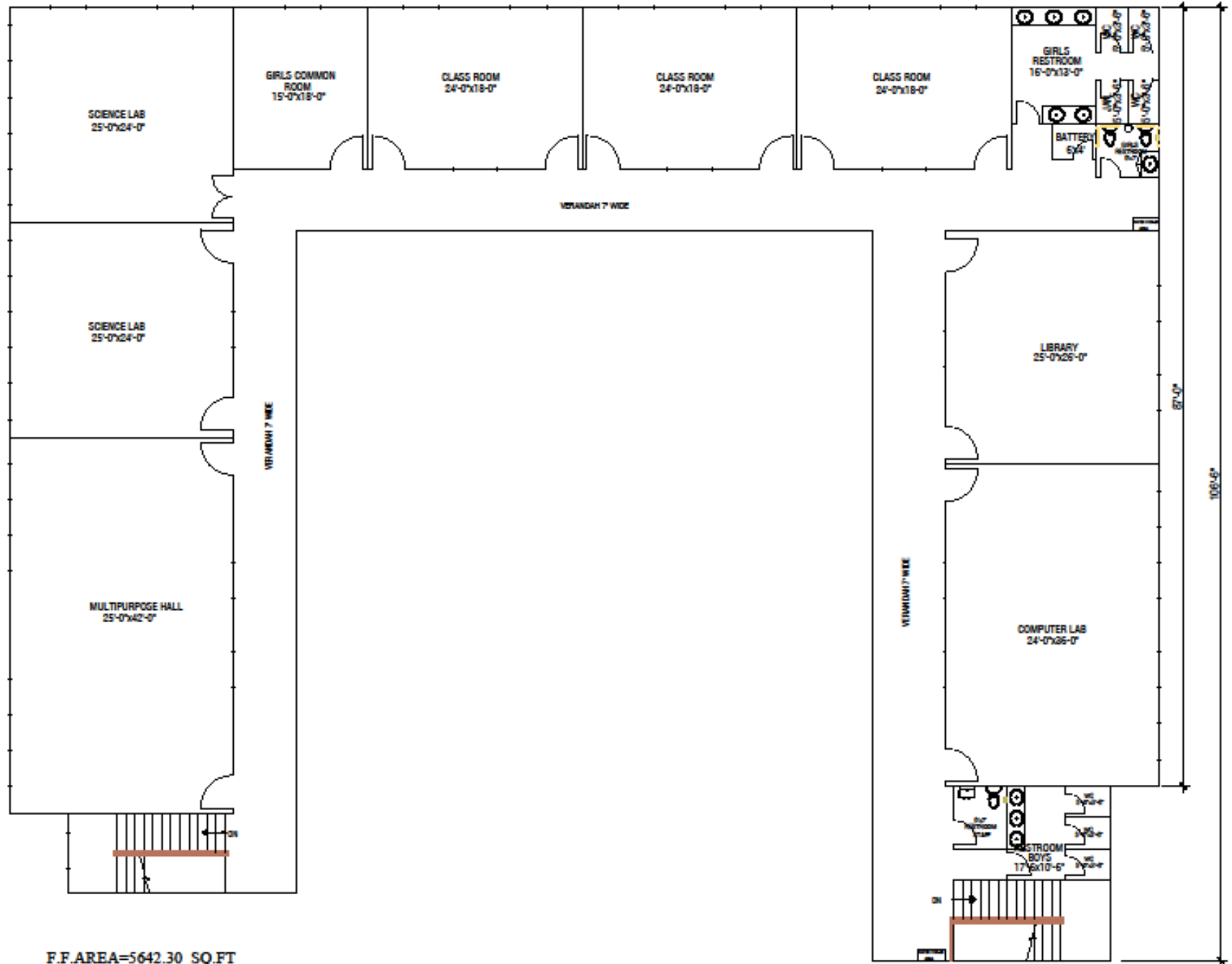
REVISIONS		
NO	DATE	REMARKS
1		
2		
3		
4		

DRAWING CHECK BY
DESIGNED CHECK BY
SCALE: 1/8"=1'-0"

DESIGNED BY
DRAWN BY
DATE: SEP, 2024

STATUS		PRIMARY DESIGN	
SUB NO.	REV	DATE	BY
1254	AR-01		
COMPUTER CODE		ECIL GRAPHICS	

NOTES.



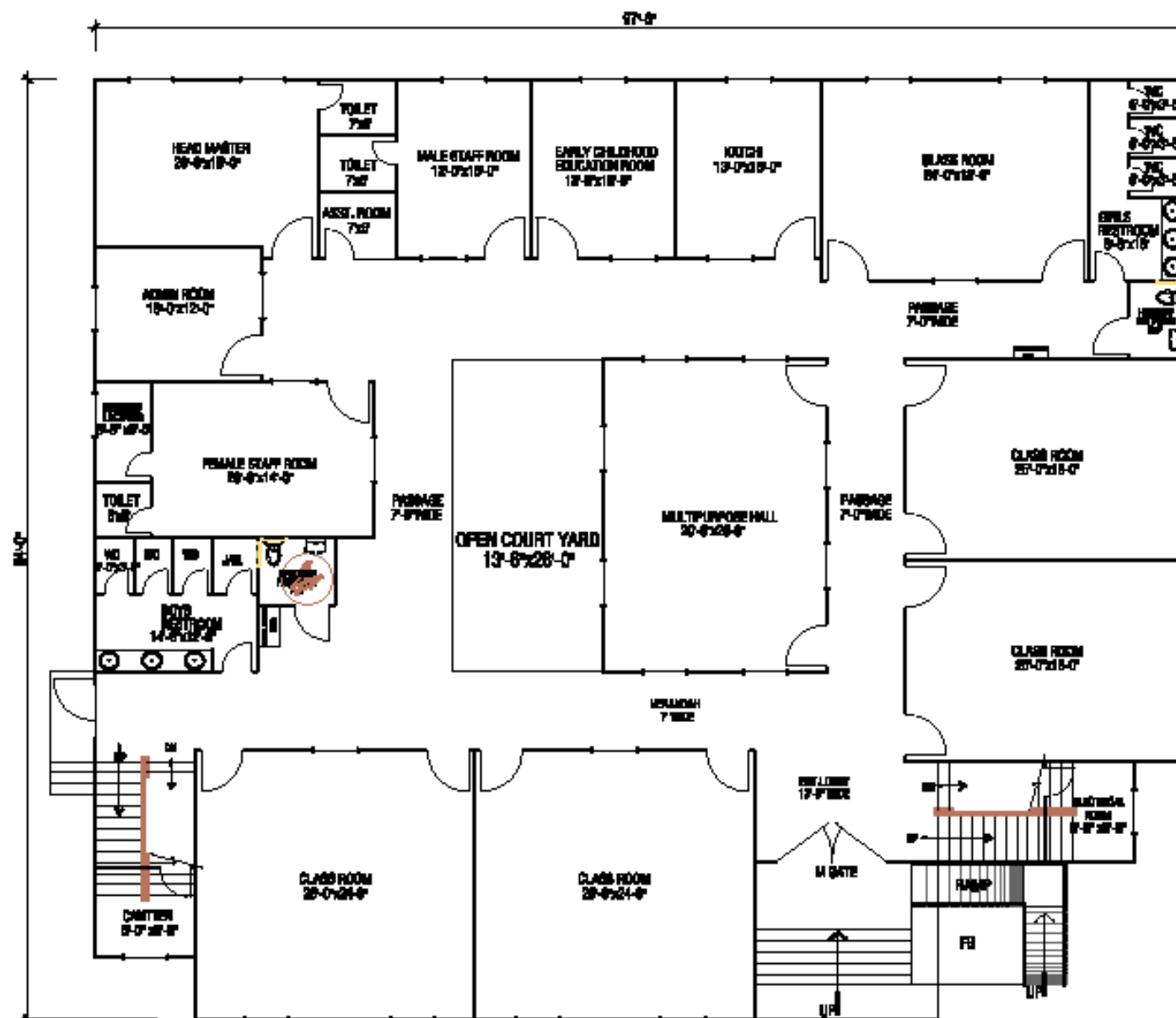
F.F.AREA=5642.30 SQ.FT

KEY PLAN.

ISSUE STATUS

	PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT(PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	 ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. http://www.ecil.com	CONSULTANT SECONDARY SCHOOL MODULE MODULE SS-01 FIRST FLOOR PLAN	REV. ISSUED		DRAWING CHECK BY	DESIGNED BY	STATUS	PRIMARY DESIGN									
					NO.	DATE				NO.	DATE	DATE							
					1					1254	AR-02	SEP 2024							
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											1/8"=1'-0"		SEP, 2024		ECIL GRAPHICS				

MODULE SS-02

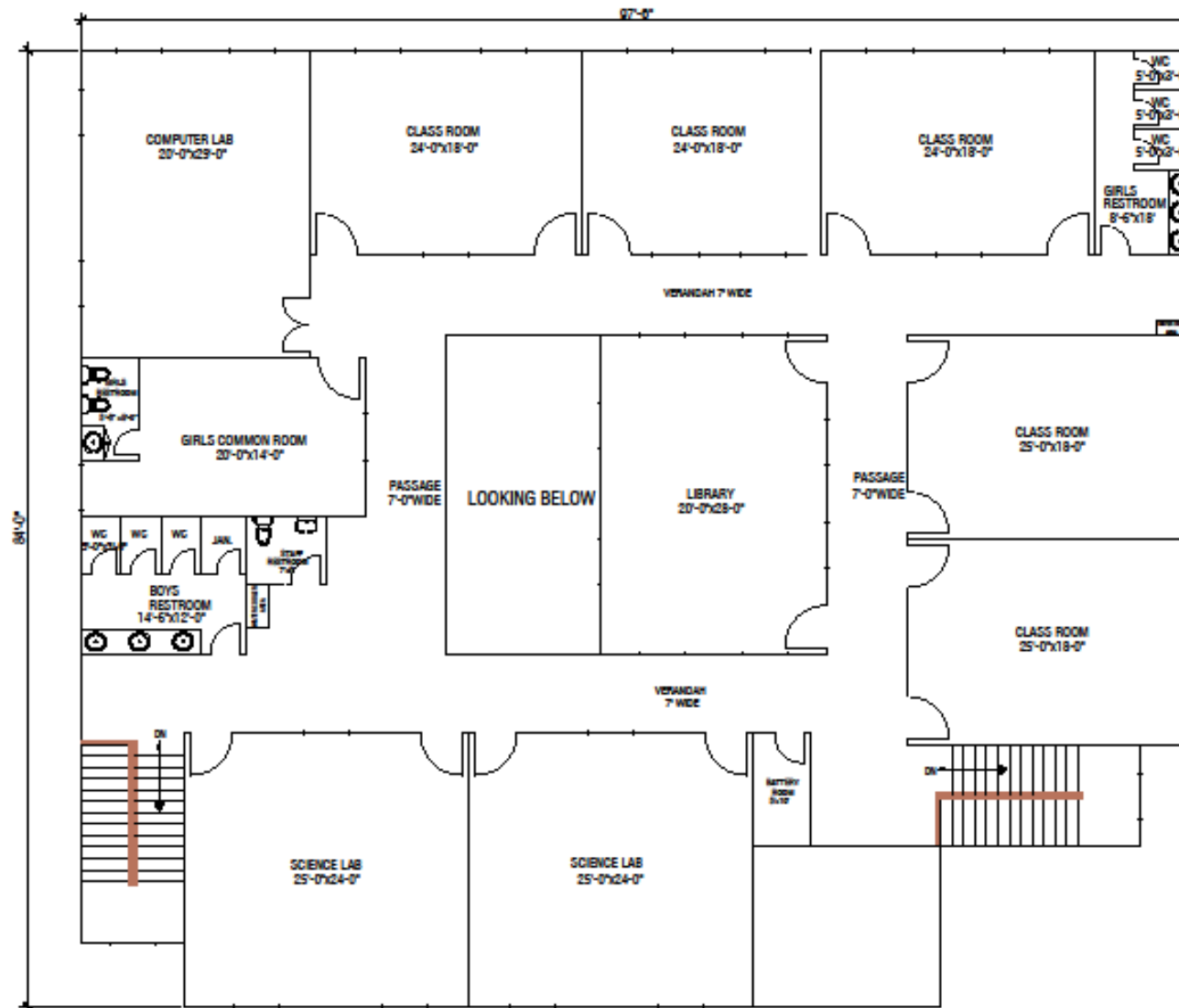


NOTES.

REV PLAN

ISSUE STATUS

	CLIENT. PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT(PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT. SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	CONSULTANTS.  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. H-8/2, KARACHI	TITLE. SECONDARY SCHOOL MODULE MODULE SS-02 GROUND FLOOR PLAN	REVISION		DRAWING CHECK BY DESIGNED BY DESIGNED CHECK BY SCALE. 1/8" = 1'-0"	DATE. SEP, 2024	STATUS			PRIMILLARY DESIGN		
					NO	DATE			REMARKS	DATE	NO	DATE	NO	DATE
CONTRACTOR'S COPY											ECIL GRAPHICS			



FIRST FLOOR PLAN

NOTES.

KEY PLAN

ISSUE STATUS

CLIENT  PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT (PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	CONSULTANT  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. http://www.ecil.com	TITLE SECONDARY SCHOOL MODULE MODULE SS-02 FIRST FLOOR PLAN	REVISION <table><thead><tr><th>NO</th><th>DATE</th><th>REMARKS</th></tr></thead><tbody><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></tbody></table>		NO	DATE	REMARKS													DRAWING CHECK BY	DESIGNED BY	STATUS PRIMARY DESIGN
				NO	DATE	REMARKS																	
				DESIGNED CHECK BY	DRAWN BY	1264	AR-02	DATE SEP, 2024															
				SCALE 1/8"=1'-0"	COMPUTER CODE ECL GRAPHICS																		

MODULE SS-03



REV PLAN.

ISSUE STATUS

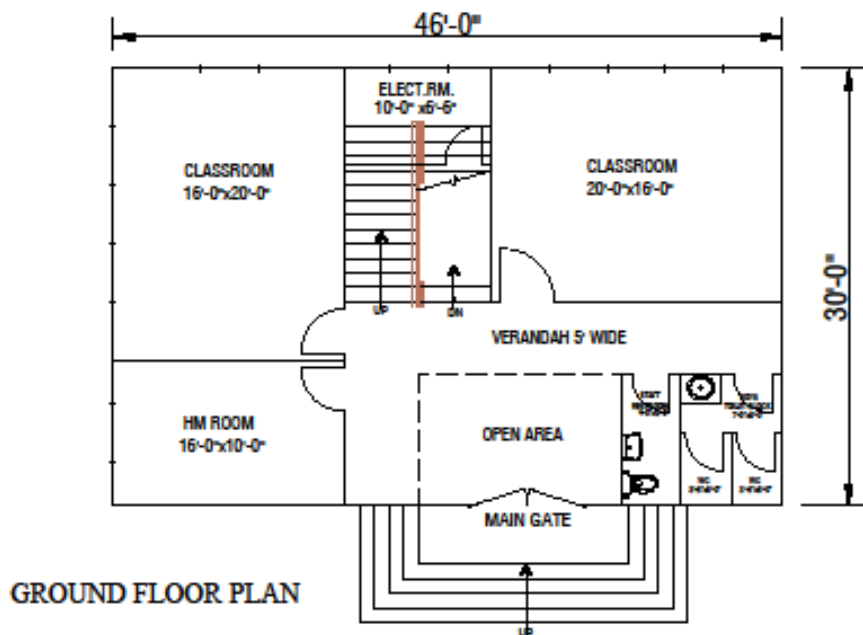
	CLIENT. PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT (PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (S.E.D), GOVERNMENT OF SINDH	PROJECT. SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	CONSULTANTS.  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. 1007, www.ecil.com	TITLE. SECONDARY SCHOOL MODULE MODULE SS-03 FIRST FLOOR PLAN	REVISION				DRAWING CHECK BY DESIGNED BY DESIGNED CHECK BY SCALE. 1/8" = 1'-0"	DATE. SEP, 2024	STATUS JOB NO. 1254 AR-02 12/11/24	PRIMILLARY DESIGN 12/11/24
					NO	DATE	REMARKS					
COMPUTER & GDS												

MODULE SS-01A

CUSTOMIZE MODULES

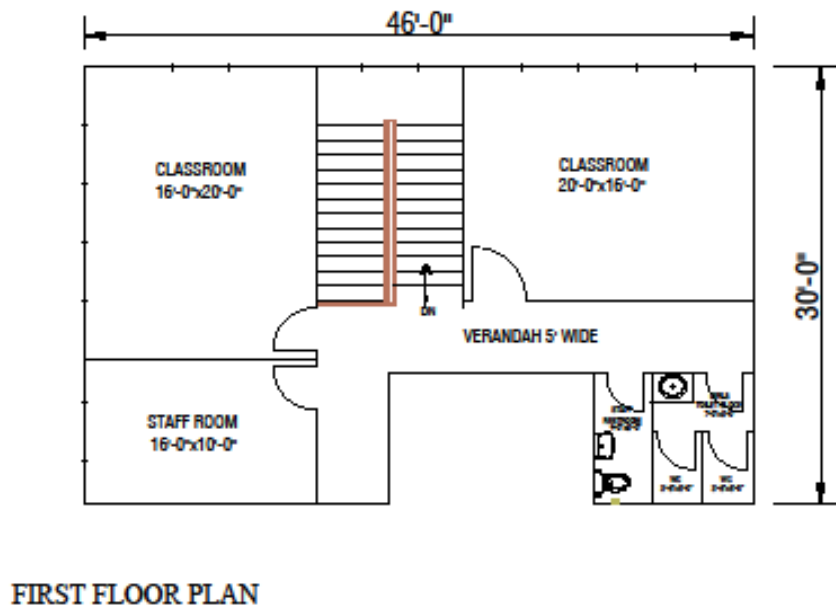
GGPS-OLD KARLI

NOTES.	
SCHOOL LOCATION COORDINATES	
27.5783N 68.0081E	
KEY PLAN.	
ISSUE STATUS	



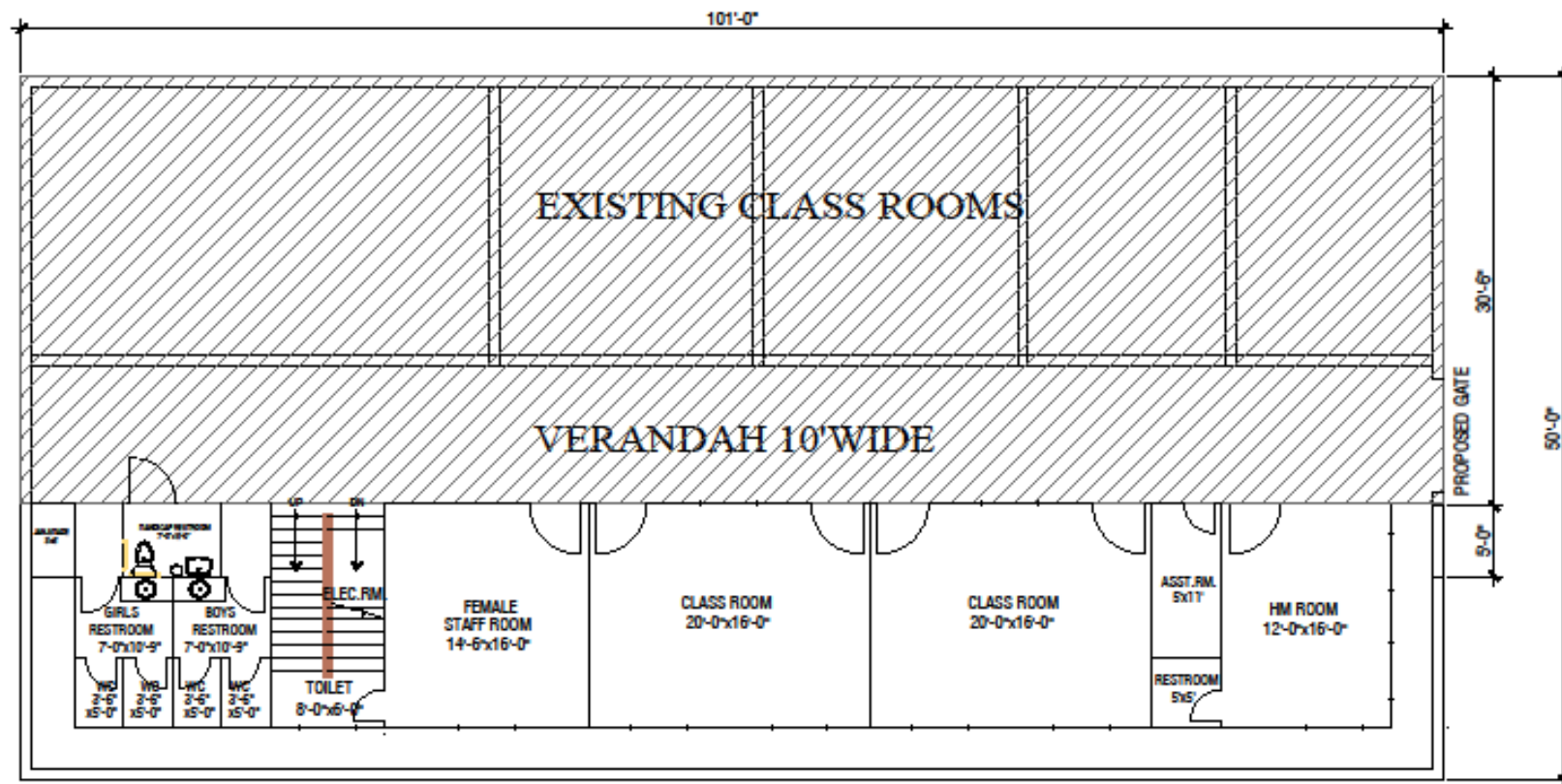
GROUND FLOOR PLAN

G.F.AREA=1254.00 SQ.FT
F.F.AREA=1254.00 SQ.FT
T.C.AREA=2508.00 SQ.FT



FIRST FLOOR PLAN

	PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT(PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	CONSULTANTS  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD.	TITLE GGPS-OLD KARLI GROUND & FIRST FLOOR PLAN	REVISION		DRAWING CHECK BY DESIGNED CHECK BY SCALE 1/4"=1'-0"	DESIGNED BY DRAWN BY DATE SEP, 2024	STATUS PRIMARY DESIGN		
					NO	DATE			JOB NO.	DWG. NO.	DATE
									1264	AR-01	
									COMPUTER CODE ECL GRAPHICS		



GROUND FLOOR PLAN
G.F. AREA=2127.125 SQ.FT
F.F. AREA=2127.125 SQ.FT
T.C. AREA=4254.25 SQ.FT

NOTES.

SCHOOL LOCATION COORDINATES

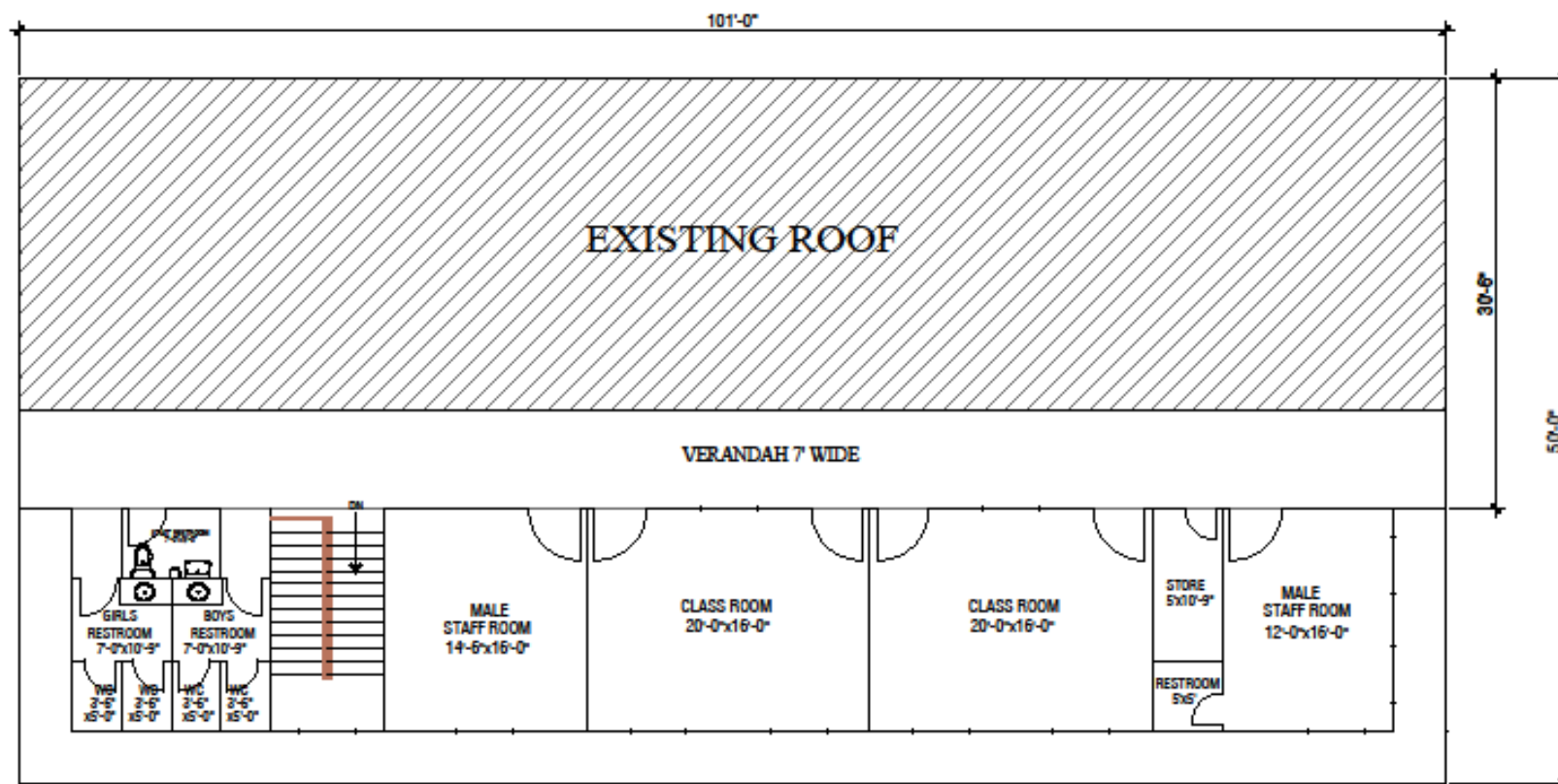
26.6614928N 67.9963762E

KEY PLAN

ISSUE STATUS

CC/EMP 	PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT(PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	CONSULTANT  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. http://www.ecil.com	TYPE LAYOUT PLAN GBPS-MORO URDU (41.6030313) TEHSIL: MORO DISTRICT: NAUSHERO FEROZE	REVISION NO. DATE		DRAWING CHECK BY	DESIGNED BY	STATUS		
					DESIGNED CHECK BY	DRAWN BY ZEESHAN ALI	JOB NO. 1264	DRAWING NO. AR-01	DATE SEP, 2024	COMPUTER CADD ECL GRAPHICS	

NOTES.
SCHOOL LOCATION COORDINATES
26.6614928N 67.9963762E

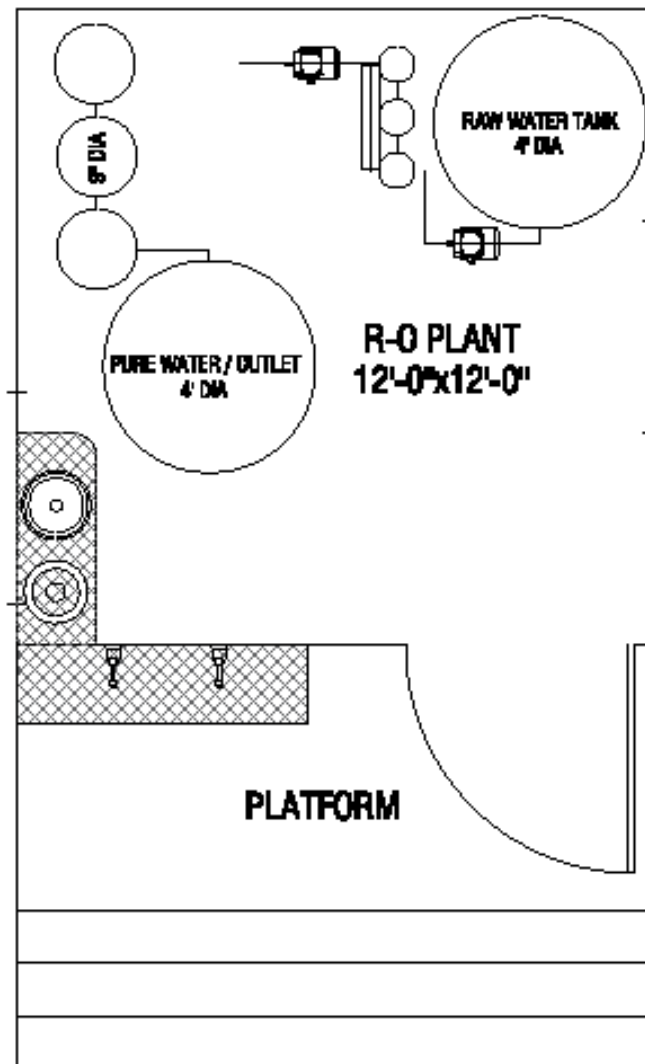


FIRST FLOOR PLAN

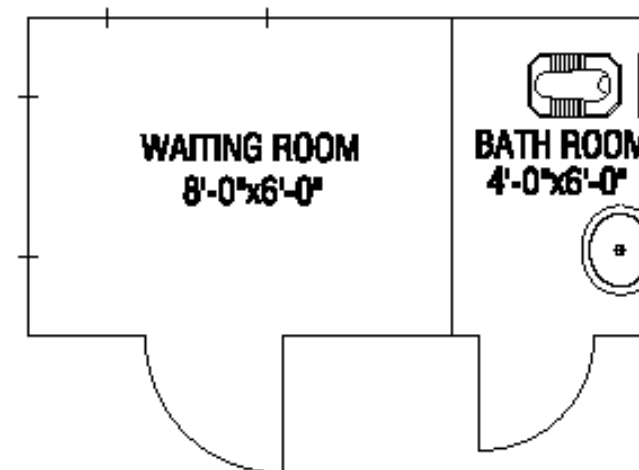
KEY PLAN

ISSUE STATUS

	PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT(PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	CONSULTANT  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD.	TITLE LAYOUT PLAN GBPS-MORO URDU (416030313) TEHSIL: MORO DISTRICT: NAUSHERO FEROZE	REVISION		DRAWING CHECK BY DESIGNED CHECK BY SCALE AS SHOWN	DESIGNED BY ZEESHAN ALI DATE SEP, 2024	STATUS		
					NO	DATE			208 RA	ARC NO	REVISION
					1				1264	AR-02	1
					2				COMPUTER CADD	ECIL GRAPHICS	



PLAN OF RO PLANT
AREA 144.00 SQ.FT.



PLAN OF WAITING ROOM
AREA 72.00 SQ.FT.

NOTES.

KEY PLAN.

ISSUE STATUS

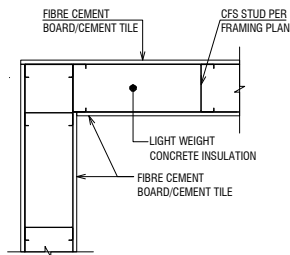
	PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT (PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT (SSEIP) ARCHITECTURAL DESIGN & CONSTRUCTION SUPERVISION CONSULTANTS - DSC	CONSULTANT  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD.	TITLE R.O PLANT & WAITING PLAN	REV ISDUM		DRAWING CHECK BY DESIGNED CHECK BY SCALE NTS	DESIGNED BY DRAWN BY DATE SEP. 2024	STATUS PRIMARY DESIGN JOB NO. 1264 DATE NO. R.O/AR-01 COMPUTER CODE ECL GRAPHICS
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CONCEPTUAL STRUCTURAL DRAWING. (LGS)

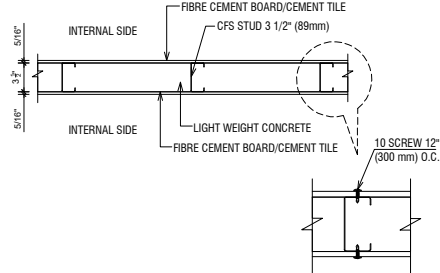
NOTES.

KEY PLAN.

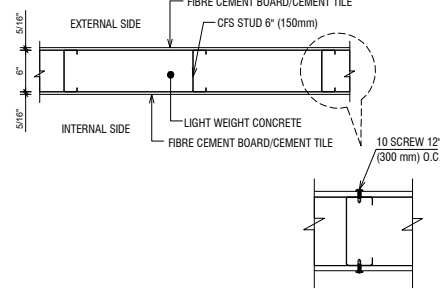
ISSUE STATUS



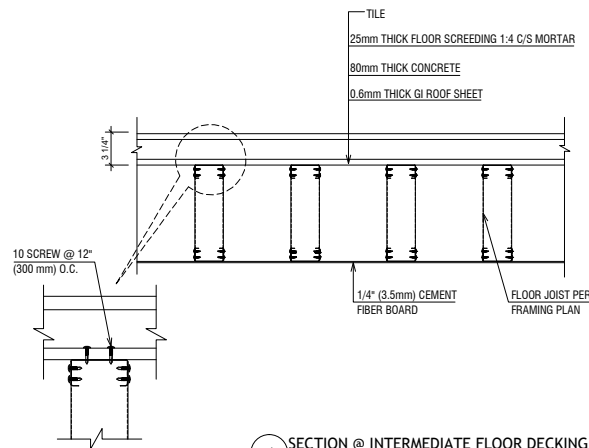
1 TYP. DETAIL WALL CORNER
SCALE: NTS



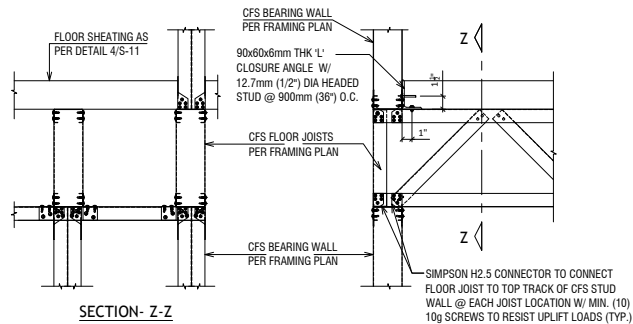
2 INTERNAL / PARTITION WALL SECTION W/ 3 1/2" (89mm)
SCALE: 1/4"=1'-0"



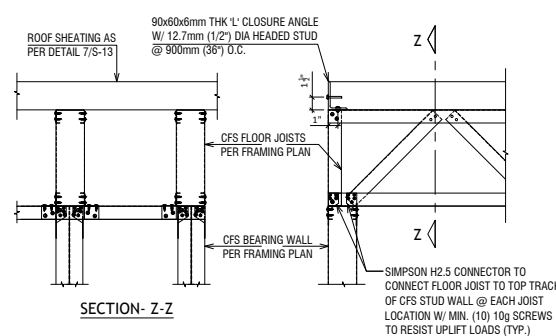
3 EXTERNAL WALL SECTION W/ 6" (150mm)
SCALE: 1/4"=1'-0"



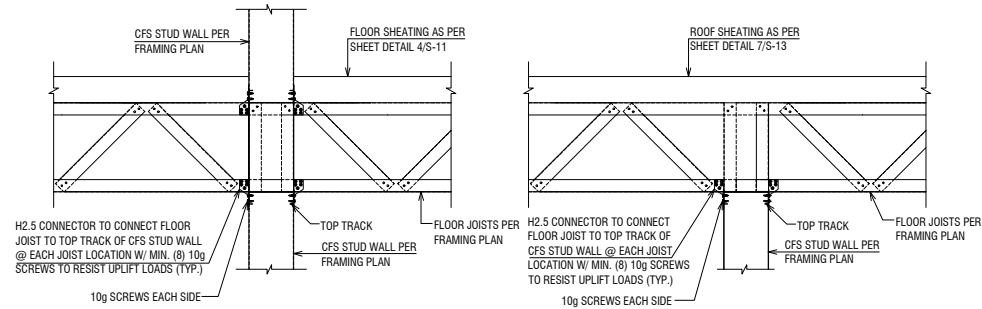
4 SECTION @ INTERMEDIATE FLOOR DECKING
SCALE: NTS



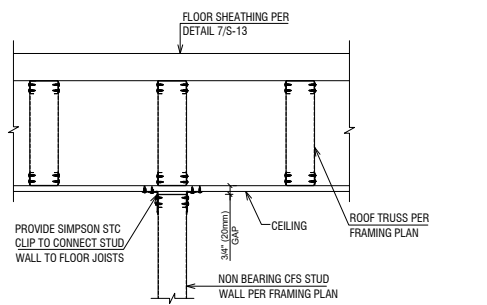
5 FLOOR JOIST ON WALL CONNECTION
SCALE: NTS



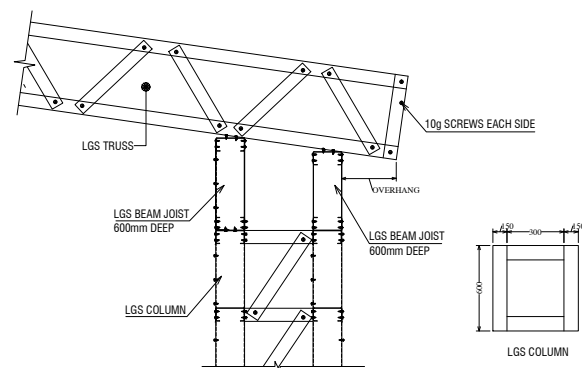
6 ROOF JOIST ON WALL CONNECTION
SCALE: NTS



7 SECTION DETAIL @ INTERNAL BEARING WALL @ W/ CONTINUOUS JOISTS
SCALE: NTS



10 DETAIL @ INTERNAL NON BEARING WALL TO JOIST CONNECTION
SCALE: NTS



11 DETAIL @ JOIST / COLUMNS & TRUSS CONNECTION
SCALE: NTS

CLIENT.
PROJECT DIRECTOR
PROJECT IMPLEMENTATION UNIT (PIU),
SINDH SECONDARY EDUCATION
IMPROVEMENT PROJECT
SCHOOL EDUCATION AND LITERACY DEPT.
(SELD), GOVERNMENT OF SINDH

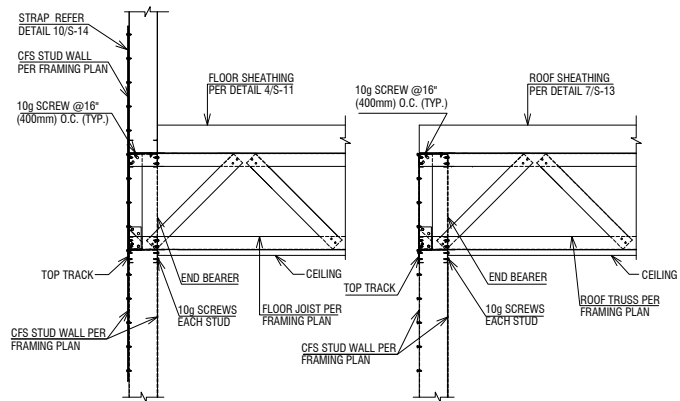
PROJECT.
CONSULTANCY SERVICES FOR PREPARATION
OF FUNCTIONAL SPECIFICATIONS AND
ARCHITECTURAL PLAN
(EMPLOYER'S REQUIREMENTS)

CONSULTANTS.
ECIL
ENGINEERING CONSULTANTS
INTERNATIONAL (PVT.) LTD.
http://www.ecil.com

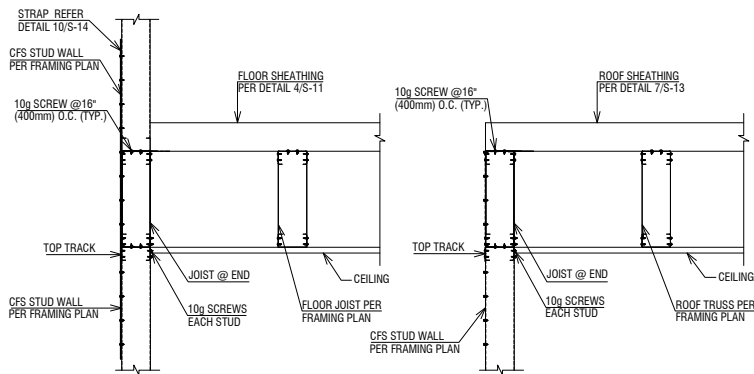
TITLE.
TYPICAL DETAIL

NO	DATE	REMARKS	DRAWING CHECK BY	DESIGNED BY	STATUS		
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2			SCALE.	DATE.	1264	ST-02	1 2 3 4 5 6 7 8 9 10
3			AS SHOWN	AUG, 2024	COMPUTER CODE ECIL GRAPHICS		
4							
5							

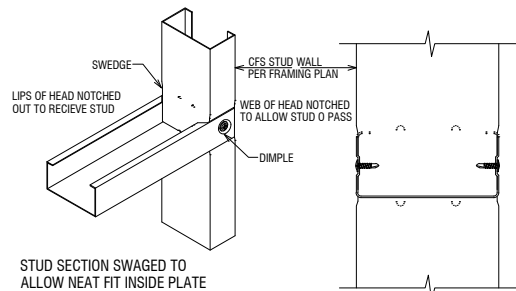
NOTES.



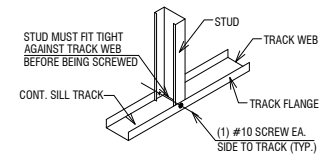
1 SECTION DETAIL @ EXT. WALL (G.F & F.F.)
SCALE: NTS
JOIST PERPENDICULAR TO WALL CONDITION



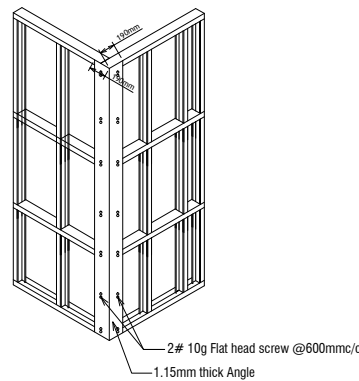
2 SECTION DETAIL @ EXT. WALL (G.F & F.F.)
SCALE: NTS
JOIST PARALLEL TO WALL CONDITION



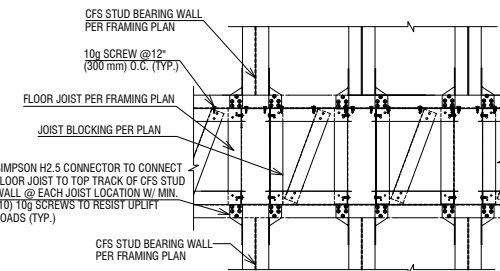
6 TYP. HEAD TO STUD CONNECTION
SCALE: NTS



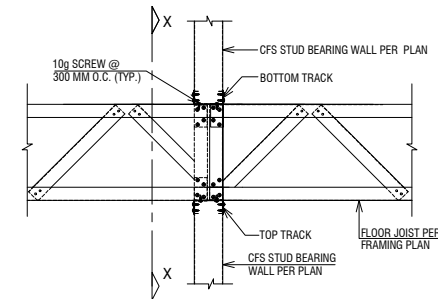
7 DETAIL @ STUD TO SILL TRACK CONNECTION
SCALE: NTS



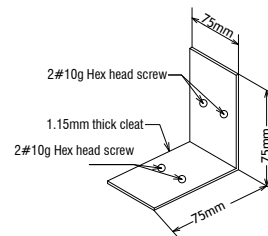
TYP. WALL CORNER DETAIL



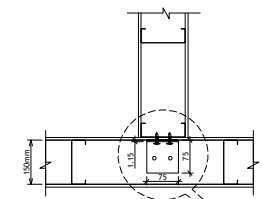
SECTION-X-X



3 DETAIL @ INTERNAL BEARING WALL TO WALL CONNECTION
SCALE: NTS

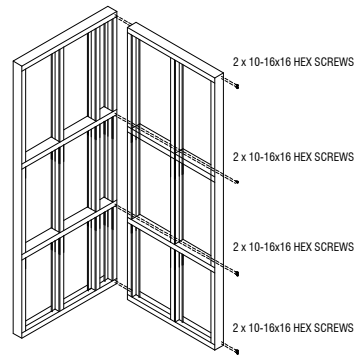


DETAIL-X

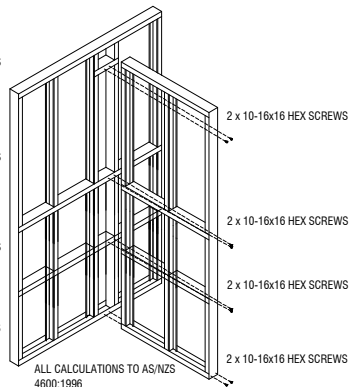


DETAIL-X

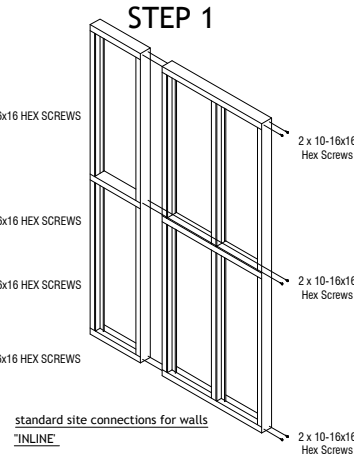
IN ALL CASES SHOWN A MINIMUM
6 x10-16x16 SCREWS REQUIRED PER
CONNECTION UNLESS NOTED OTHERWISE



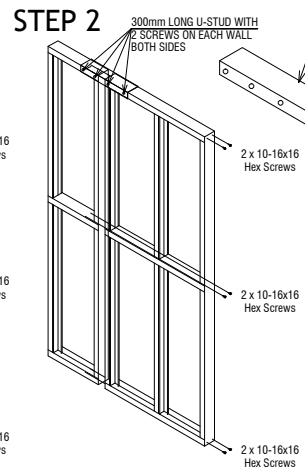
STANDARD SITE CONNECTIONS
'ELL' CORNER



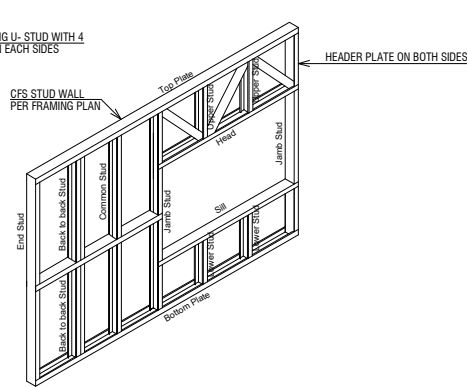
STANDARD SITE CONNECTIONS
'TEE' JUNCTION



standard site connections for walls
'IN LINE'



STEP 1



8 TYP. WINDOW OPENING
SCALE: NTS

8 TYP. CONNECTION DETAIL OF WALL & WALL CONNECTIONS
SCALE: NTS

KEY PLAN.

ISSUE STATUS

CLIENT.
PROJECT DIRECTOR
PROJECT IMPLEMENTATION UNIT (PIU),
SINDH SECONDARY EDUCATION
IMPROVEMENT PROJECT
SCHOOL EDUCATION AND LITERACY DEPT.
(SELD), GOVERNMENT OF SINDH

PROJECT.
CONSULTANCY SERVICES FOR PREPARATION
OF FUNCTIONAL SPECIFICATIONS AND
ARCHITECTURAL PLAN
(EMPLOYER'S REQUIREMENTS)

CONSULTANTS.

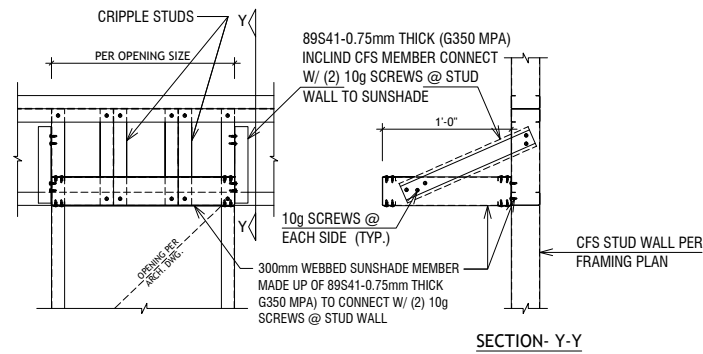
ECIL
ENGINEERING CONSULTANTS
INTERNATIONAL (PVT.) LTD.
http://www.ecil.com

TITLE.

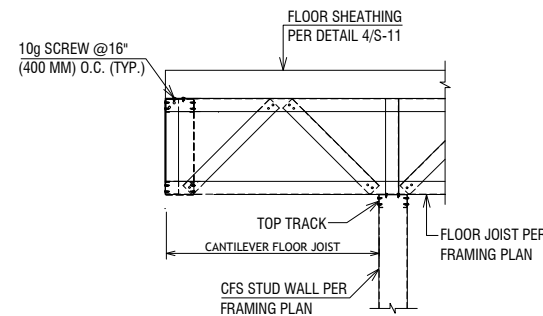
TYPICAL DETAIL

NO	DATE	REMARKS
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2		
3		
4		
5		

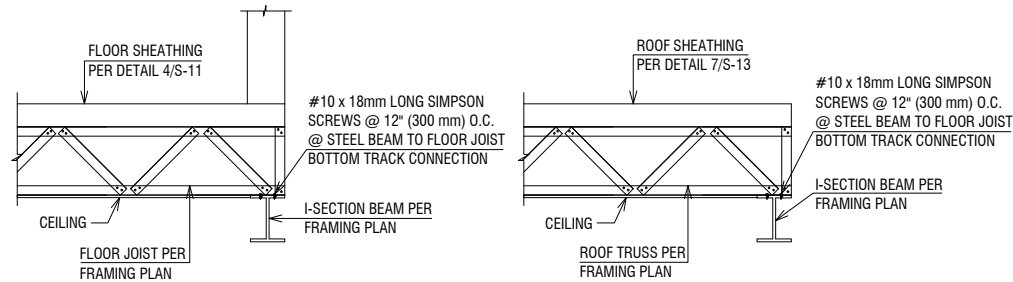
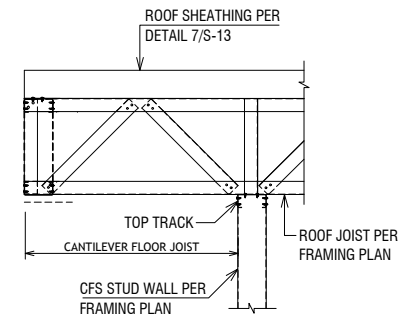
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DESIGNED CHECK BY		DRAWN BY		JOB NO.	DRG. NO.	REVISION
SCALE.		DATE.		1264	ST-03	1 2 3 4 5 6 7 8 9 10
AS SHOWN		AUG, 2024		COMPUTER CODE ECIL GRAPHICS		



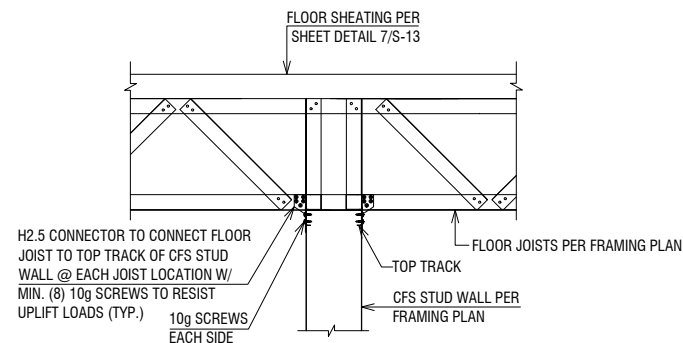
1 TYP. DETAIL @ WALL TO SUNSHADE CONNECTION
SCALE: N.T.S.



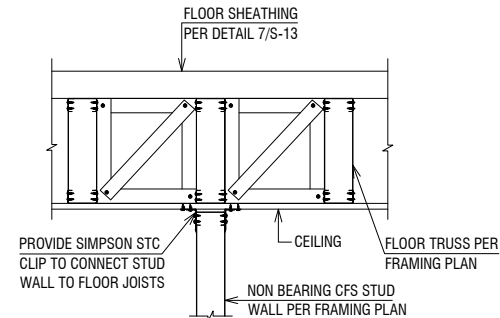
2 DETAIL @ CANTILEVER JOISTS G.F & F.F
SCALE: N.T.S.



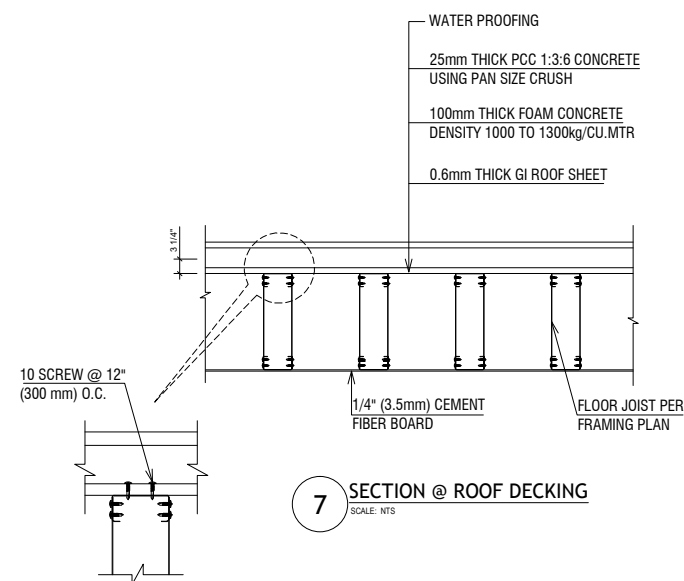
3 FLOOR JOIST ON DROPPED STEEL BEAM CONNECTION (G.F & F.F)
SCALE: N.T.S.



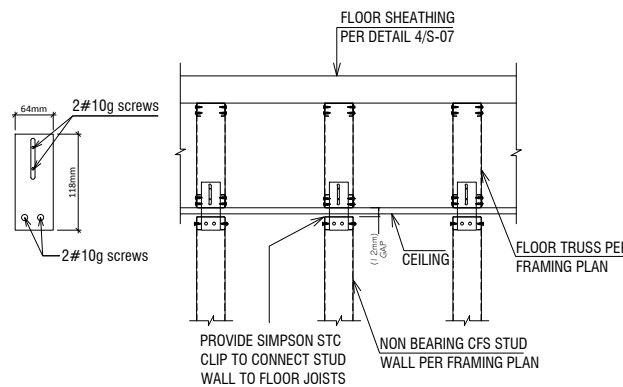
4 SECTION DETAIL @ INTERNAL BEARING WALL @ W/ CONTINUOUS JOISTS
SCALE: N.T.S.



4-A BLOCKING DETAIL
SCALE: N.T.S.



7 SECTION @ ROOF DECKING
SCALE: N.T.S.



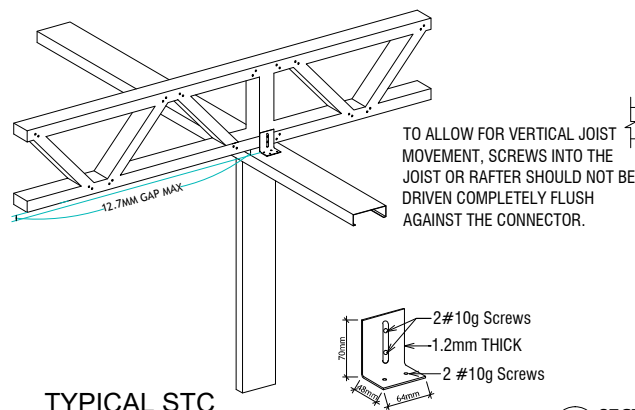
6 DETAIL @ CONNECTION INTERNAL NON LOAD BEARING WALL PARALELL TO JOIST
SCALE: N.T.S.

NOTES.

KEY PLAN.

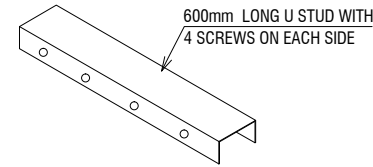
ISSUE STATUS

CLIENT.  PROJECT DIRECTOR PROJECT IMPLEMENTATION UNIT(PIU), SINDH SECONDARY EDUCATION IMPROVEMENT PROJECT SCHOOL EDUCATION AND LITERACY DEPT. (SELD), GOVERNMENT OF SINDH	PROJECT. CONSULTANCY SERVICES FOR PREPARATION OF FUNCTIONAL SPECIFICATIONS AND ARCHITECTURAL PLAN (EMPLOYER'S REQUIREMENTS)	CONSULTANTS.  ENGINEERING CONSULTANTS INTERNATIONAL (PVT.) LTD. http://www.ecil.com	TITLE. TYPICAL DETAIL	<table><tr><td>NO</td><td>DATE</td><td>REMARKS</td></tr><tr><td>1</td><td></td><td></td></tr><tr><td>2</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td></tr><tr><td>4</td><td></td><td></td></tr><tr><td>5</td><td></td><td></td></tr></table>	NO	DATE	REMARKS	1			2			3			4			5			<table><tr><td>DRAWING CHECK BY</td><td>DESIGNED BY</td><td colspan="3">STATUS</td></tr><tr><td></td><td></td><td>JOB NO.</td><td>DRG. NO</td><td>REVISION</td></tr><tr><td>DESIGNED CHECK BY</td><td>DRAWN BY</td><td rowspan="2">1264</td><td rowspan="2">ST-04</td><td>1 2 3 4 5</td></tr><tr><td>SCALE.</td><td>DATE.</td><td>6 7 8 9 10</td></tr><tr><td>AS SHOWN</td><td>AUG, 2024</td><td colspan="3">COMPUTER CODE ECIL GRAPHICS</td></tr></table>	DRAWING CHECK BY	DESIGNED BY	STATUS					JOB NO.	DRG. NO	REVISION	DESIGNED CHECK BY	DRAWN BY	1264	ST-04	1 2 3 4 5	SCALE.	DATE.	6 7 8 9 10	AS SHOWN	AUG, 2024	COMPUTER CODE ECIL GRAPHICS		
				NO	DATE	REMARKS																																								
				1																																										
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4																																														
5																																														
DRAWING CHECK BY	DESIGNED BY	STATUS																																												
		JOB NO.	DRG. NO	REVISION																																										
DESIGNED CHECK BY	DRAWN BY	1264	ST-04	1 2 3 4 5																																										
SCALE.	DATE.			6 7 8 9 10																																										
AS SHOWN	AUG, 2024	COMPUTER CODE ECIL GRAPHICS																																												

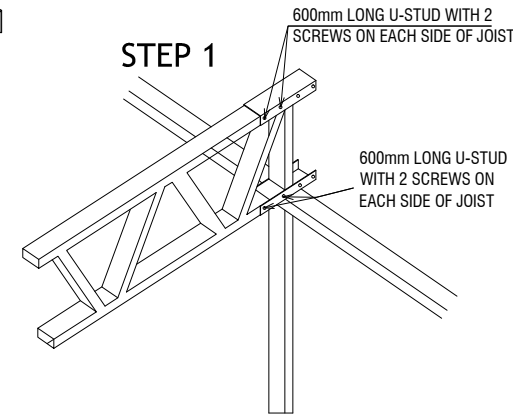


TYPICAL STC
INSTALLATION

1 SECTION DETAIL @ INTERNAL NON LOAD BEARING WALL
(OFFSET TO FLOOR JOIST)

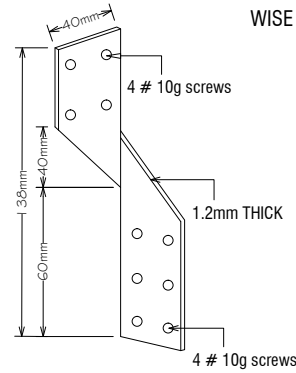
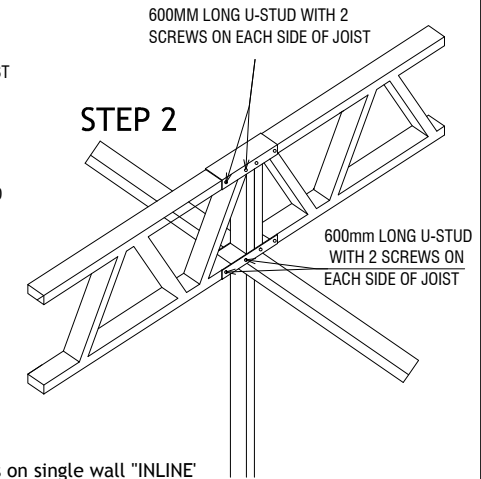


STEP 1



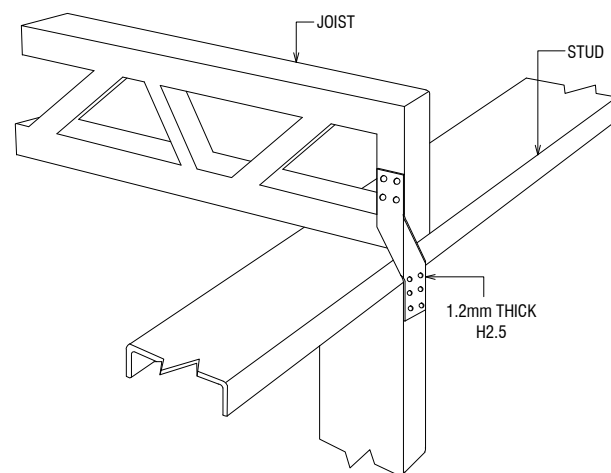
2 standard site connection for joists on single wall "INLINE"

STEP 2

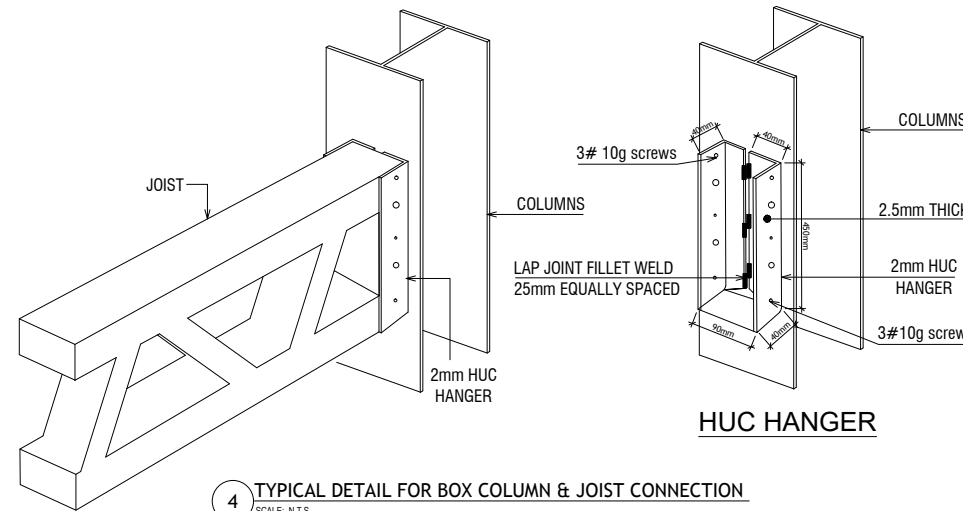


H2.5

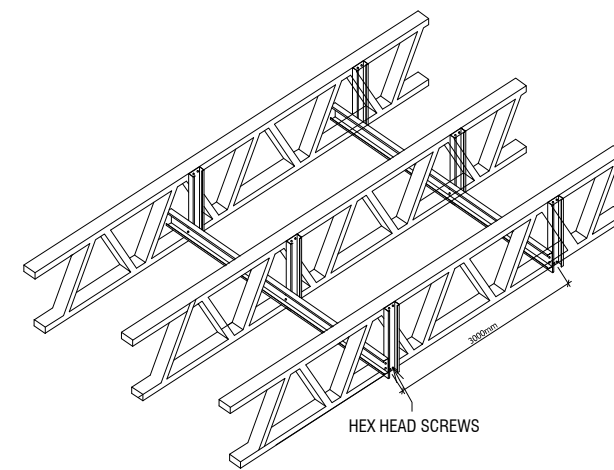
NOTE:-
FLATE HEAD SCREWS TO B PROVIDE
ON H2.5 WALL CLADDING SIDES OTHER
WISE PROVIDE HEX HEAD SCREWS



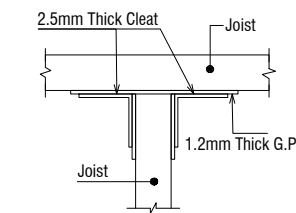
3 TYPICAL CONNECTION OF JOIST TO EXTERNAL LOAD BEARING WALL USING H2.5



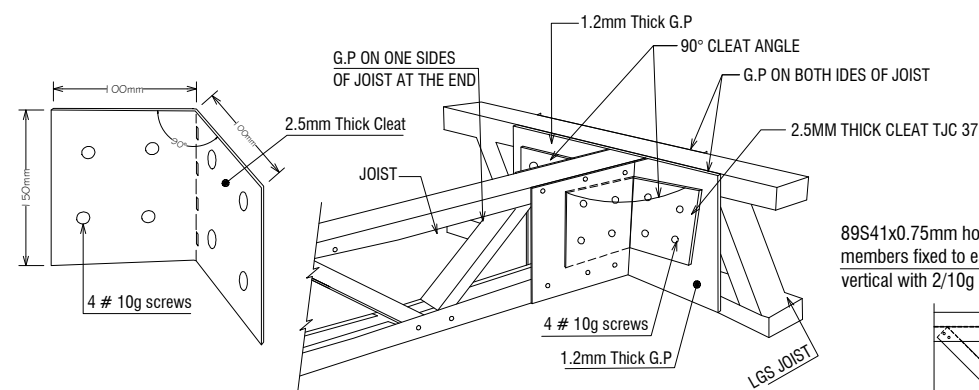
4 TYPICAL DETAIL FOR BOX COLUMN & JOIST CONNECTION



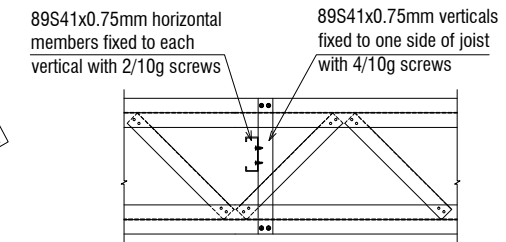
5 TYPICAL FLOOR JOIST BRACING



Top View Installation



6 TYPICAL JOIST TO JOIST CONNECTION

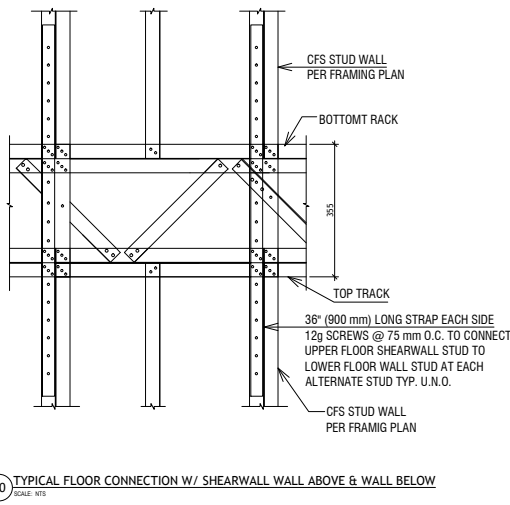
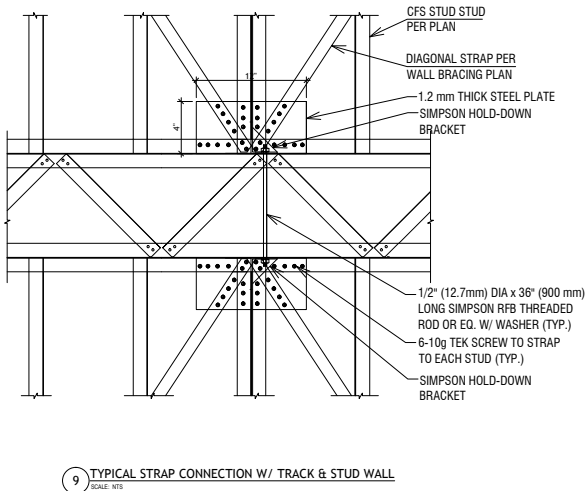
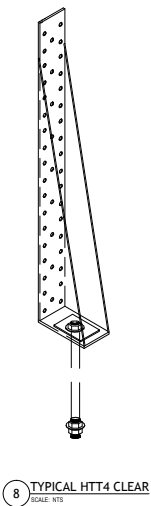
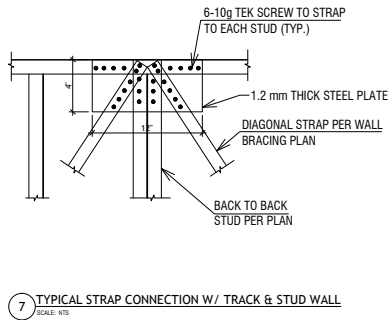
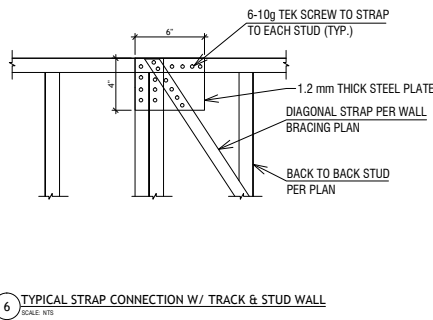
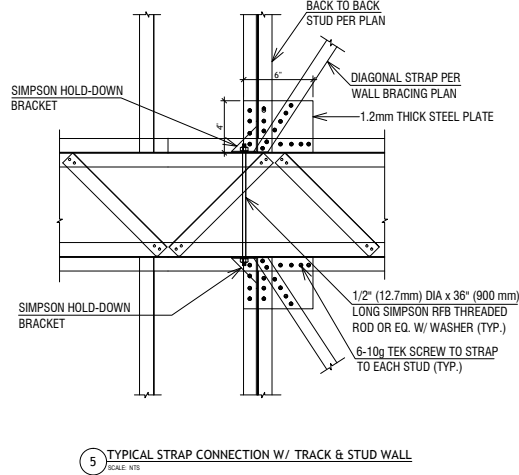
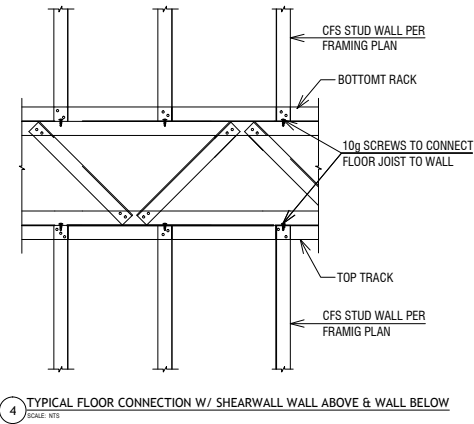
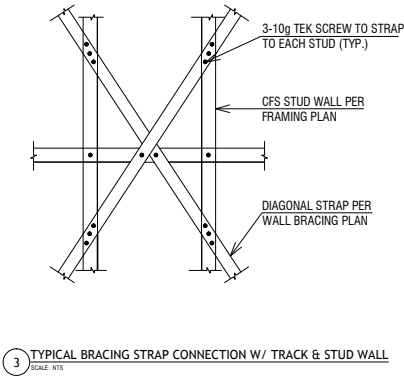
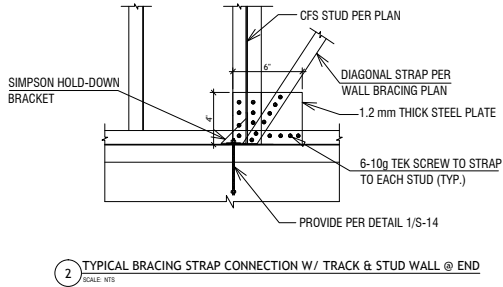
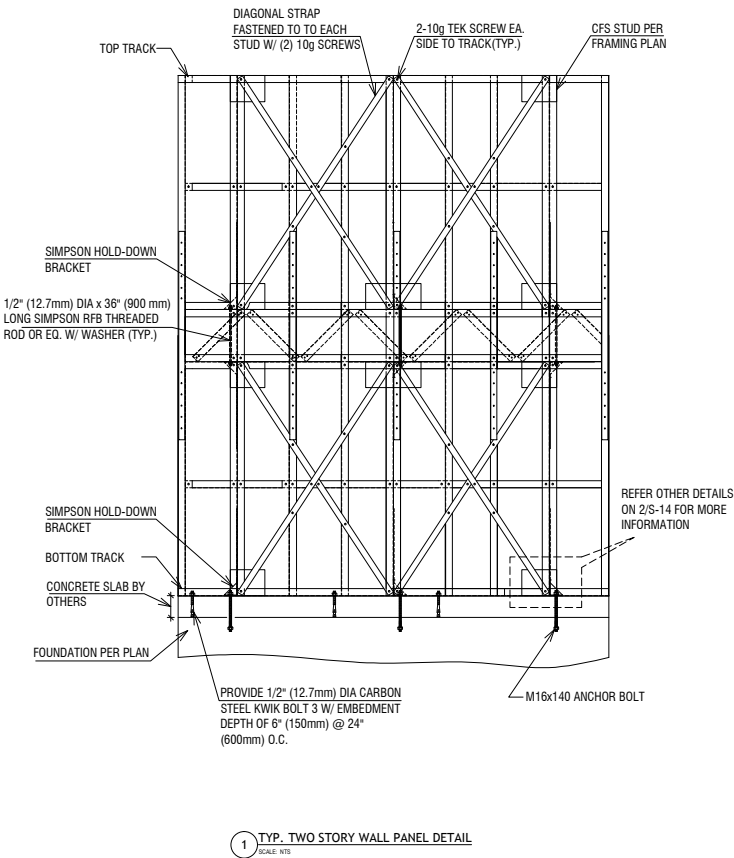


NOTES.

KEY PLAN.

ISSUE STATUS

NOTES.



KEY PLAN.

ISSUE STATUS

CLIENT. PROJECT DIRECTOR
PROJECT IMPLEMENTATION UNIT (PIU),
SINDH SECONDARY EDUCATION
IMPROVEMENT PROJECT
SCHOOL EDUCATION AND LITERACY DEPT.
(SELD), GOVERNMENT OF SINDH

PROJECT. CONSULTANCY SERVICES FOR PREPARATION
OF FUNCTIONAL SPECIFICATIONS AND
ARCHITECTURAL PLAN
(EMPLOYER'S REQUIREMENTS)

CONSULTANTS.
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TITLE.
TYPICAL DETAIL

NO	DATE	REMARKS
1		
2		
3		
4		
5		

DRAWING CHECK BY
DESIGNED CHECK BY
SCALE. AS SHOWN

DESIGNED BY
DRAWN BY
DATE. AUG, 2024

STATUS			REVISION		
JOB NO.	DRG. NO		1	2	3
1264	ST-06		4	5	6
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COMPUTER CODE			ECIL GRAPHICS		

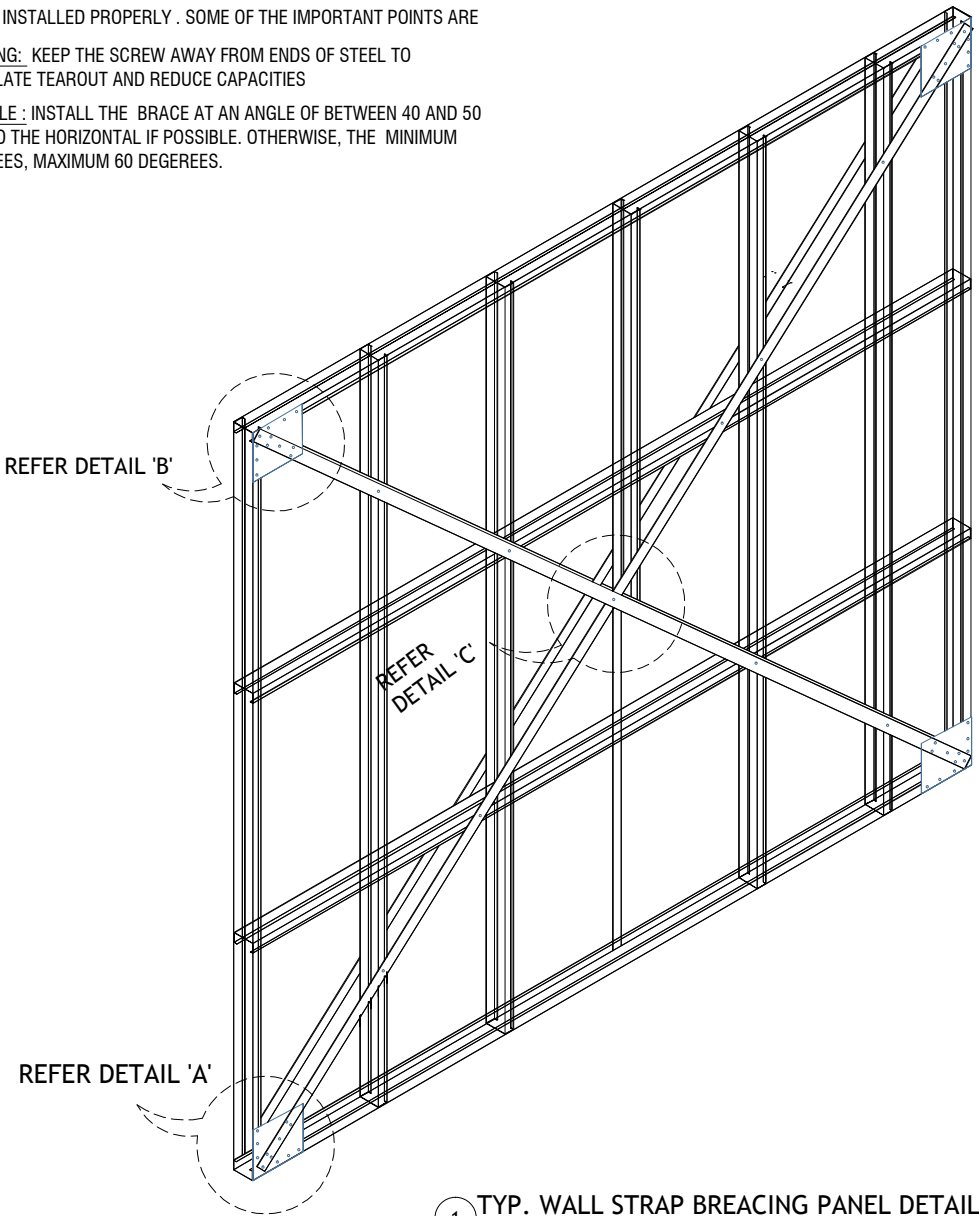
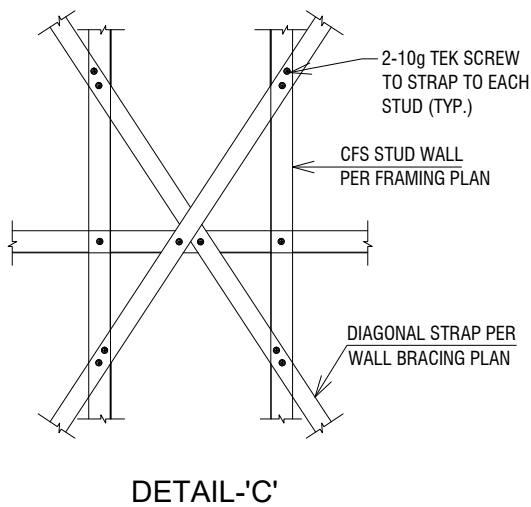
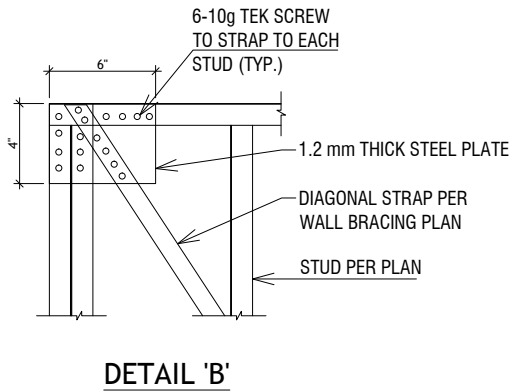
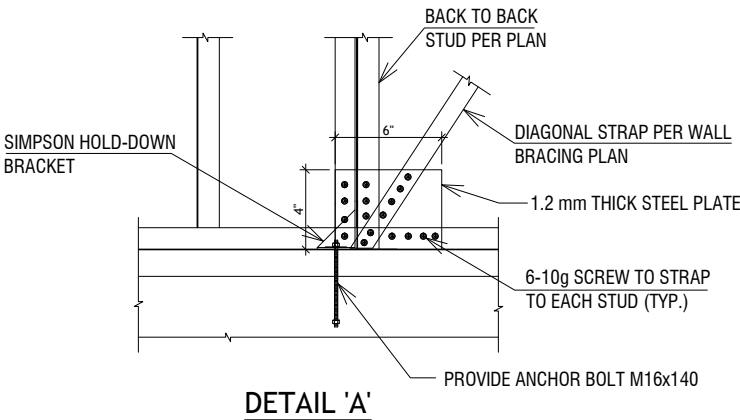
NOTES.

WALL BRACING GUIDE :

FOR EFFECTIVE PERFORMANCE OF WALL BRACING THE STRAP BRACES SHOULD BE INSTALLED PROPERLY . SOME OF THE IMPORTANT POINTS ARE

SEREW FIXING: KEEP THE SCREW AWAY FROM ENDS OF STEEL TO PREVENT PLATE TEAROUT AND REDUCE CAPACITIES

BRACE ANGLE : INSTALL THE BRACE AT AN ANGLE OF BETWEEN 40 AND 50 DEGREES TO THE HORIZONTAL IF POSSIBLE. OTHERWISE, THE MINIMUM IS 30 DEGREES, MAXIMUM 60 DEGREES.



1 TYP. WALL STRAP BREACING PANEL DETAIL
SCALE: NTS

MINIMUM END AND EDGE DISTANCE FOR 10g SCREWS

THE MIN EDGE DISTANCE (e2)	= 7.5mm (1.5df)
THE MIN. END DISTANCE (e1)	
FOR G350 0.8mm WALL FRAMING	= 9.0mm
FOR G350, 1.0mm WALL FRAMING	= 7.5mm
	= 10.0mm
THE MIN. SPACING (P1 OR P2)	= 15.0mm (3df)

KEY PLAN.

ISSUE STATUS

CLIENT.



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(EMPLOYER'S REQUIREMENTS)

CONSULTANTS.

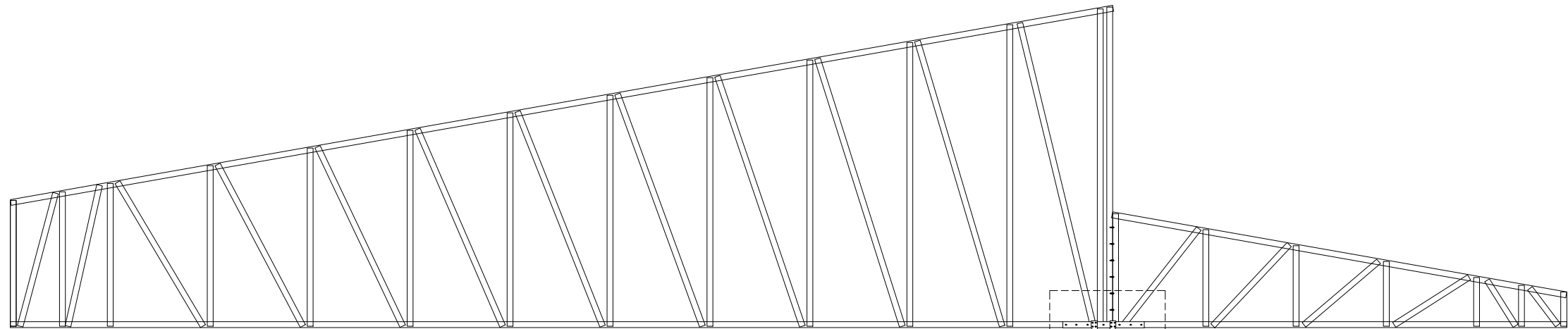
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TITLE.

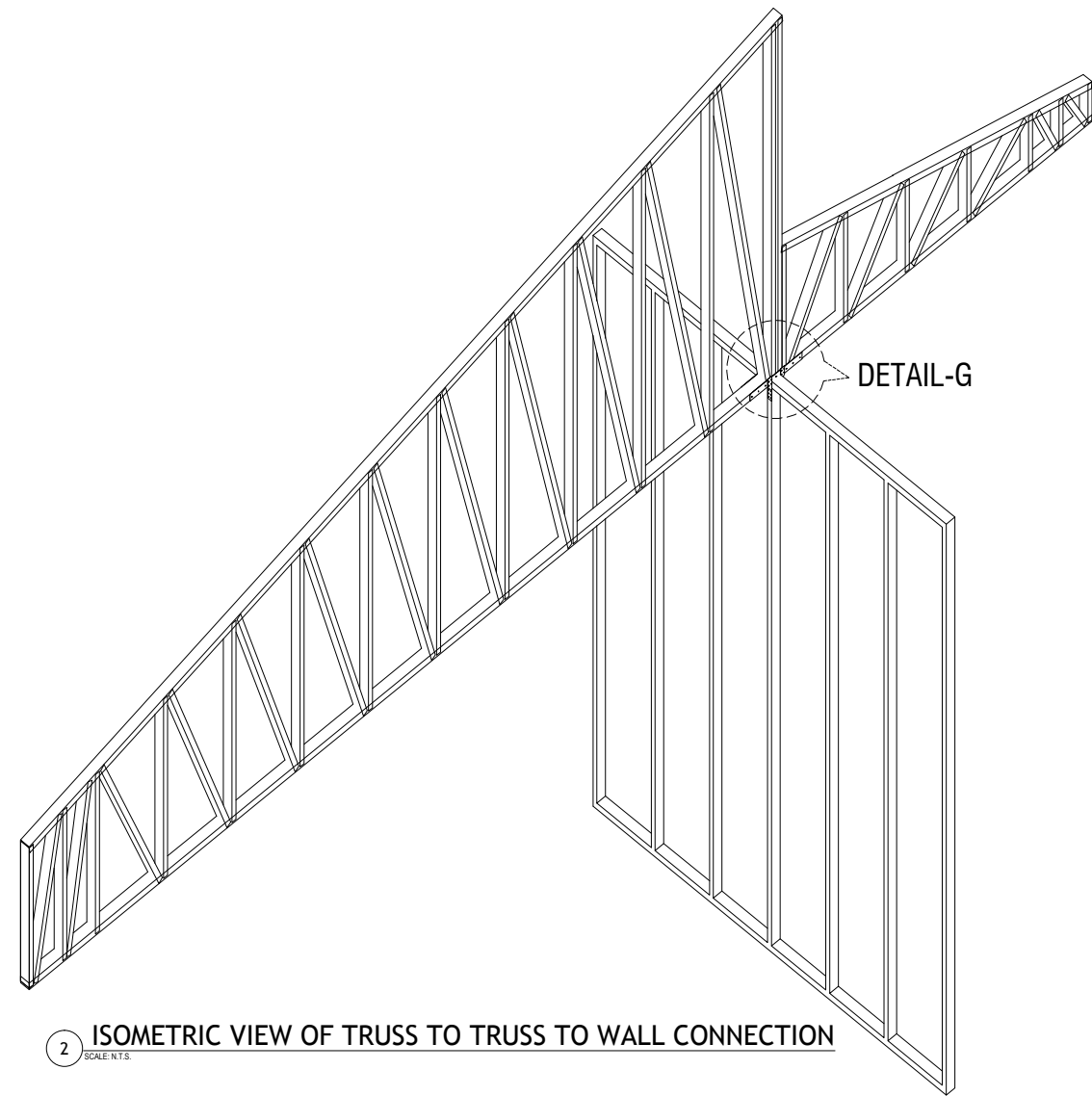
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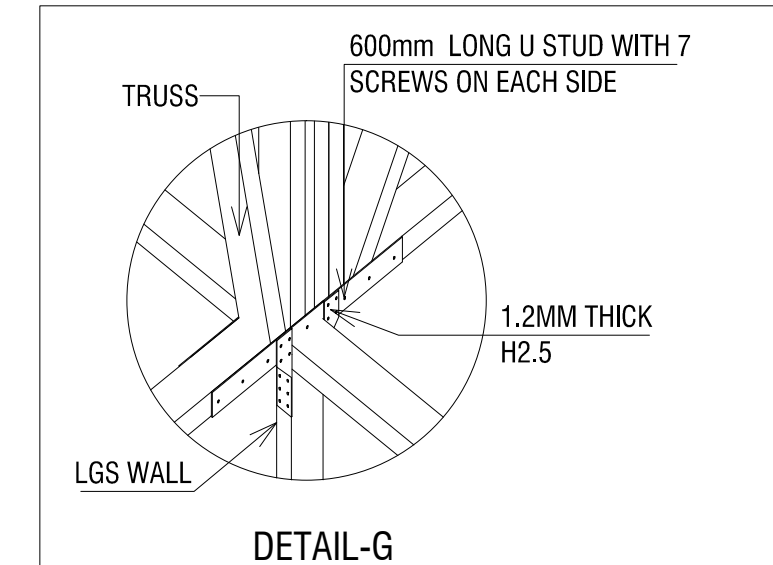
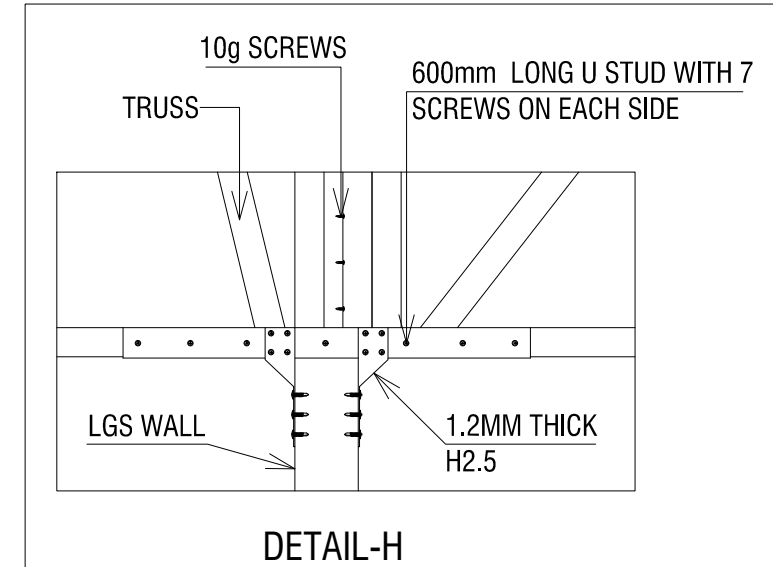


1 FRONT ELEVATION OF TRUSS TO TRUSS TO WALL CONNECTION
SCALE: N.T.S.



2 ISOMETRIC VIEW OF TRUSS TO TRUSS TO WALL CONNECTION
SCALE: N.T.S.

DETAIL-H



DETAIL-H

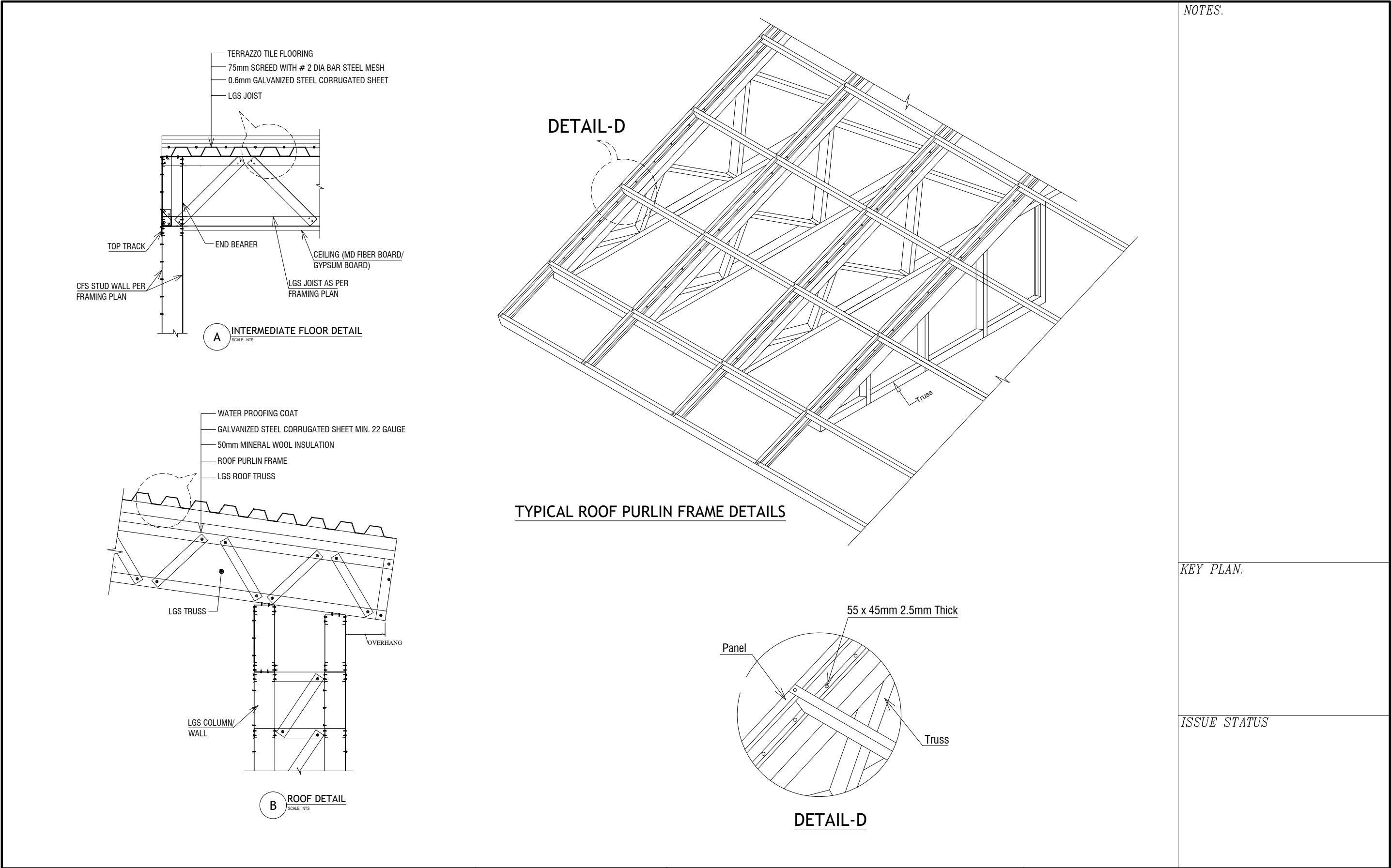
DETAIL-G

NOTES.

KEY PLAN.

ISSUE STATUS

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