



EUROPEAN UNION



FAREI



IRRIGATION AUTHORITY

Open National Bidding for Works

**Supply, Installation, Testing
and Commissioning of**

**Three (3) Greenhouses
with Ancillaries**

Procurement Reference No: *EU-IA/GH-Apr23/04*

**Irrigation Authority
5th, Floor, Fon Sing Building
12, Edith Cavell Street
Port Louis
Tel : +230 2106596
Fax: +230 212 7652
Email: irrig@irrig.org**

SECTION I: INSTRUCTION TO BIDDERS

1. Introduction

The Irrigation Authority also referred as the Employer, invites eligible local contractors to submit their bid for the works described in detail hereunder. Any resulting contract shall be subject to the terms and conditions referred to in this document.

The Works are for the Supply, installation, testing and commissioning of three (3) greenhouses with ancillaries in the Northern part of the island, namely at Solitude.

Participation is limited to citizens of Mauritius or entities incorporated in Mauritius. Joint Ventures should be among entities incorporated in Mauritius

- 1.1 Clarifications, if any, should be addressed to: **Mr G.Seetah, General Manager, Irrigation Authority, 5th Floor, Fon Sing building, 12, Edith Cavell Street, Port Louis.**

The Employer will respond in writing to any request for clarification, provided that such request is received at latest 9 days prior to the deadline for submission of bids.

The Employer shall respond to such request at latest 7 days prior to the deadline set for submission of bids.

- 1.2 Bidders are advised to carefully read the complete Bidding document, including the Particular Conditions of Contract in Section IV, before preparing their bids. The standard forms in this document may be retyped for completion but the Bidder is responsible for their accurate reproduction.

2. Validity of Bids

The bid validity period shall be 90 days from the date of bid submission deadline.

3. Works Completion Period

The Intended Completion period is **12 weeks** from start date of works.

4. Site Visit

Bidders or their designated representatives are invited to attend a pre-bid meeting on **Monday 8 May 2023 at 10.00 hours**. The meeting shall be at the Farmers Service Centre (FSC) at Solitude. The purpose of the pre-bid meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

5. Sealing and Marking of Bids

Bids should be sealed in a single envelope, clearly marked with the Procurement Reference Number, addressed to the Public Body with the Bidder's name at the back of the envelope.

6. Submission of Bids

Bids should be deposited in the Bid Box located at the **Irrigation Authority, 5th Floor, Fon Sing Building, 12, Edith Cavell Street, Port Louis**, not later than **15.00 hours on or before Friday 19 May 2023**. Bids by post or hand delivered should reach the above-mentioned address by the same date and time at latest. Late bids will be rejected. Bids received by e-mail will not be considered.

7. Bid Opening

Bids will be opened by the “Public body” at the Irrigation Authority at **15.30 hours on Friday 19 May, 2023**. Bidders or their representatives may attend the Bid Opening if they choose to do so.

8. Evaluation of Bids

The Public Body shall have the right to request for clarification during evaluation. Offers that are substantially responsive shall be compared on the basis of evaluated cost to determine the lowest evaluated bid.

9. Eligibility Criteria

To be eligible to participate in this bidding exercise, Bidder should:

- (a) have the legal capacity to enter into a contract to execute the works;
- (b) be duly registered with the CIDB under the grade that would allow him to perform the value of works for which he is submitting his bid. (Note 1)
- (c) not be insolvent, in receivership, bankrupt, subject to legal proceedings for any of these circumstances or in the process of being wound up;
- (d) not have had your business activities suspended;
- (e) not be under a declaration of ineligibility by the Government of Mauritius in accordance with applicable laws at the date of the deadline for bid submission or appearing on the ineligibility lists of African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank Group and World Bank Group;
- (f) not have a conflict of interest in relation to this procurement requirement; and
- (g) have a Business Registration Card.
- (h) Should propose goods in accordance with “Rules on Nationality and Origin” as detailed in the Statement of Requirements- Section III, Clause 1.11

Note 1 Sub-contractors undertaking works are also subject to registration with CIDB as applicable to Contractors.

10. Qualification and Experience Criteria

Bidders should have the following minimum qualifications and experience:

- (a) valid registration with the CIDB under the grade that will enable the contractor to perform the works quoted for, under the following class(es): Building Construction Works or Civil Engineering Construction Works or Mechanical, Electrical and Plumbing Works (MEP Works).
- (b) experience in One work of similar nature over the last 10 years, of value not less than MUR 0.4 Million that has been successfully and substantially completed;

- (c) one Contract Manager having as minimum qualification: A minimum of 5 years experience in Civil Engineering Works or Building Construction Works or Mechanical Works. The Contract Manager shall be the main line of communication, responsible for planning and monitoring progress and quality of works and shall attend all visits and meetings including contractual meetings with Project Manager and/or the Employer;
- (d) Site – Agent - A minimum of two (2) years experience in Works related to the construction of greenhouses;
- (e) Technician – A minimum of two (2) years experience in Plumbing Works
- (f) Minimum amount of liquid assets and/or credit facilities net of other contractual commitments of Bidder of **MUR 400,000**.

11. Contents of bid

The Bid shall comprise the following:

- (a) duly filled Bid Submission Form;
- (b) duly filled Priced Bill of Quantities
- (c) duly filled Qualification Information Form and attachments required
- (d) report on the financial standing of the Bidder for the last three years, such ascertified copies of Financial Statements or Audited Accounts as filed at the Registrar of Companies before the deadline set for submission of bids
- (e) Valid Registration certificate with the CIDB, as applicable
- (f) Signed C.V of Contract Manager;
- (g) Documentary evidence of liquid assets and/or credit facilities (Note 1);
- (h) Proposed Programme of Work
- (i) Any other documents deemed necessary as per the requirements of this bidding document

Note 1

Bidders to demonstrate access to, or availability of, financial resources such as liquid assets, lines of credit, and other financial means, other than any contractual advance payments to meet the overall cash flow requirements for the contract and its current commitments. Documentary evidence may comprise but not limited to Bank certificate, Certificate from Auditors, Certificate from a Professional Accountant registered with MIPA, Certificate from Insurance companies.

12. Joint Venture

Bids submitted by a joint venture of two or more firms as partners shall comply with the following requirements:

- (i) the Bid shall include all the information required as per the Qualification Information form for each joint venture partner;
- (ii) the Bid shall be signed so as to be legally binding on all partners;
- (iii) the Bid shall include a copy of the agreement entered into by the joint venture partners defining the division of assignments to each partner and establishing that all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms; **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;
- (iv) one of the partners shall be nominated as being in charge, authorized to incur liabilities, and receive instructions for and on behalf of any and all partners of the joint venture; and
- (v) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.

13. Prices and Currency of Payment

Bidders should quote for the whole works. Prices for the execution of works shall be quoted and fixed in Mauritian Rupees. Items for which no rate or price is entered by Bidders, shall not be paid for by the Public Body when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities.

Bids shall cover all costs of labour, materials, equipment, overheads, profits and all associated costs for performing the works, and shall include all duties. The whole cost of performing the works shall be included in the items stated, and the cost of any incidental works shall be deemed to be included in the prices quoted. Bidders are required to submit their bid prices **exclusive of VAT**.

14. Bid Securing Declaration

Bidders are required to subscribe to a Bid Securing Declaration in the Bid Submission Form.

15. Margin of Preference

Margin of Preference shall not apply.

16. Award of Contract

The Bidder having submitted the lowest evaluated responsive bid and qualified to perform the works shall be selected for award of contract. Award of contract shall be

by issue of a Letter of Acceptance in accordance with terms and conditions contained in Section IV: General Conditions of Contract and Particular Conditions of Contract.

17. Performance Security and signing of contract

Within five (5) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall furnish a Performance Security, in the amount equal to 10% of the Bid price (exclusive of VAT), in accordance with the conditions of contract, using for that purpose the Performance Security Form included in Section V Contract Forms.

The contract agreement shall be signed within 7 days after the successful bidder receives the letter of acceptance unless the parties agree otherwise.

Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the contract within the required time may constitute sufficient grounds for the annulment of the award.

18. Notification of Award and Debriefing

Prior to the expiration of the period of bid validity, the Employer shall, for contract amount above Rs 15 million, notify the selected bidder of the proposed award and accordingly notify unsuccessful bidders. Subject to Challenge and Appeal, the Employer shall notify the selected Bidder, in writing, by a Letter of Acceptance for award of contract. Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

The Public Body shall after award of contract, exceeding Rs 1 million and up to Rs 15 million, promptly inform all unsuccessful bidders in writing of the name and address of the successful bidder and the contract amount.

Furthermore, the Public Body shall attend to all requests for debriefing for contract exceeding Rs 1 million, made in writing within 30 days the unsuccessful bidders are informed of the award.

19. Advance Payment

The Public Body shall provide an Advance Payment on the Contract Price as stipulated in the General Conditions of Contract. The Advance Payment shall be guaranteed by an Advance Payment Security as per the format contained in Section V.

The Advance Payment shall be limited to 10% percent of the Contract Price, less any provisional and contingencies sums.

20. Integrity Clause

The Irrigation Authority commits itself to take all measures necessary to prevent corruption and ensures that none of its staff, personally or through his/her close relatives or through a third party, will in connection with the bid for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

21. Alternative Proposal

The Contractor may submit alternative proposals for the greenhouse structure but shall comply to the requirements of the greenhouses specified in the bid document

22. Rights of Public Body

The Irrigation Authority reserves the right to accept or reject any bid or to cancel the bidding process and reject all bids at any time prior to contract award without incurring any liability to the Public body.

23. Challenge and Appeal

Unsatisfied bidders shall follow procedures prescribed in Regulations 48, 49 and 50 of the Public Procurement Regulations 2008 to challenge procurement proceedings and award of procurement contracts or to file application for review at the Independent Review Panel.

- (a) The address, Tel. & Fax No. & Email address to file Challenges in respect of this procurement is:

The General Manager, Irrigation Authority, 5th Floor, Fon Sing Building, 12, Edith Cavell Street, Port Louis.

Tel : +230 2106596

Fax: +230 212 7652

Email: irrig@irrig.org

- (b) The address to file Application for Review is:

**The Chairperson
Independent Review Panel,
5th Floor,
Belmont House
Intendence Street
Port Louis**

Tel : +230 2602228

Emal : irp@govmu.org

Section II: Bidding Forms

Note: Bidders are required to fill all the forms in this section and submit as part of their bid. Non-submission of any form may lead to rejection of the bid

Bid Submission Form

Date: _____

Procurement Reference No: EU-IA/GH-Apr23/04

To:

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued;
- (b) We offer to execute in conformity with the Bidding Documents the following Works: Supply, Installation, Testing and Commissioning of Three (3) Greenhouses and ancillaries;
- (c) The total price of our Bid excluding VAT is: _____(MUR);
- (d) Our bid shall be valid for a period of 90 days from the date fixed for the bid submission deadline in accordance with the Bidding Documents and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (e) We hereby confirm that we have read and understood the content of the Bid Securing Declaration attached hereto and subscribe fully to the terms and conditions contained therein, if required. We understand that non-compliance to the conditions mentioned may lead to disqualification.
- (f) If our bid is accepted, we commit to obtain a Performance Security in accordance with the Bidding Document;
- (g) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 8;
- (h) We are not participating, as a Bidder in more than one bid in this bidding process;
- (i) Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible under the laws of Mauritius;

- (j) We have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption as per the principles described hereunder, during the bidding process and contract execution:
 - i. We shall not, directly or through any other person or firm, offer, promise or give to any of the Public Body’s employees involved in the bidding process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - ii. We shall not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
 - iii. We shall not use falsified documents, erroneous data or deliberately not disclose requested facts to obtain a benefit in a procurement proceeding.
We understand that transgression of the above is a serious offence and appropriate actions will be taken against such bidders.

- (k) We understand that this bid, together with your written acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;

- (l) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive; and

- (m) If awarded the contract, the person named below shall act as Contractor’s Representative:

Name: _____

In the capacity of: _____

Signed: _____

Duly authorized to
sign the Bid for and
on behalf of: _____

Date: _____

Seal of Company _____

BID SECURING DECLARATION

By subscribing to the undertaking in the Bid Submission Form:

I/We accept that I/we may be disqualified from bidding for any contract with any Public Body for the period of time that may be determined by the Procurement Policy Office under section 35 of the Public Procurement Act, if I am/we are in breach of any obligation under the Bid conditions, because I/we:

- (a) have modified or withdrawn my/our bid after the deadline for submission of bids during the period of bid validity specified by the Bidder in the Bid Submission Form; or
- (b) have refused to accept a correction of an error appearing on the face of the bid; or
- (c) having been notified of the acceptance of our bid during the period of bid validity, (i) have failed or refused to execute the Contract, if required, or (ii) have failed or refused to furnish the Performance Security, in accordance with the Instructions to Quote.

I/We understand this Bid Securing Declaration shall cease to be valid (a) in case I/we am/are the successful bidder, upon our receipt of copies of the contract signed by you and the Performance Security issued to you by me/us ; or (b) if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our bid.

In case of a Joint Venture, all the partners of the Joint Venture shall be jointly and severally liable.

Qualification Information

*[The information to be filled in by **bid**ders in the following pages shall be used for purposes of post-qualification or for verification of prequalification as provided for in ITB Clause 6. This information shall not be incorporated in the Contract. Attach additional pages as necessary. Pertinent sections of attached documents should be translated into English. If used for prequalification verification, the Bidder should fill in updated information only.]*

1. Individual Bidders or Individual Members of Joint Ventures

1.1 Constitution or legal status of Bidder: *[attach copy]*

Place of registration: *[insert]*

Principal place of business: *[insert]*

1.2 Bidder shall provide one (1) of works of a nature and amount similar to the Works performed as Contractor over the last 10 years.

Project/Contract name and country	Name of client and contact person	Type of work performed and year of completion	Value of contract (national currency)
(a)			
(b)			

1.3 Proposed subcontracts and firms involved. Refer to General Conditions of Contract Clause 7.

Sections of the Works	Value of subcontract	Subcontractor (name and address)	Experience in similar work
(a)			
(b)			

[Bidders have to ascertain that sub-contractors executing works are duly registered with the CIDB in accordance with CIDB Act 2008.

1.4 Name, address, and telephone, telex, and facsimile numbers of banks that may provide references if contacted by the Public Body.

2. Additional

2.1 Bidders should provide any additional information Requirements requested in the Bidding Document.

BILL OF QUANTITIES

PREAMBLE

1. INTRODUCTION

1.1 The Bill of Quantities is not and does not purport to be either exhaustive or explanatory of all the obligations and duties of the Contractor who shall be deemed to have satisfied himself as to the correctness and sufficiency of the rates and prices stated in the Bill of Quantities all of which shall cover all his obligations under the Contract (including those in respect of the supply of goods, materials, plant or services or of contingencies for which there is a Provisional Sum) and all matters and things necessary for the proper execution and completion of the Works and the remedying of any defects therein and which may reasonably be inferred to be necessary for the Works shown in the Drawings and described in the Specification whether expressly mentioned therein or not.

1.2 A detailed description of the items and of the conditions under which and the manner in which the work is to be done is not set out in each item of the Bill of Quantities, and reference should be made to this Preamble and all other documents forming the Contract.

1.3 Rates and prices are to cover fixing or finishing the work completely and fixing, laying, jointing, building in or finishing are therefore not usually specifically mentioned in the Bill of Quantities. Rates and prices shall include for all building in of valves, penstocks, pipes, ladders, walkways or similar and for all necessary brackets, gaskets, bolts, nuts, fittings and fixtures whether or not they are mentioned in the Bill of Quantities, and for painting of valves and penstocks as specified.

1.4 The Contractor shall be deemed to have inserted against each item in the Bills such rates and prices as he may deem necessary to cover the requirements of the Contract. Where no rate or price is inserted against any item in the Bills the cost thereof will be deemed to have been included in other items priced by the Contractor.

1.5 All measurements in the Bill of Quantities are taken strictly net. The principle of net measurement shall apply to all Works executed. All quantities measured for payment will be measured by the Project Manager on the basis of actual quantities in place of accepted Works executed according to the principle of net measurement. Items not used shall not be measured or included by the Contractor in his statements.

1.6 The quantities given in the Bill are only approximate. In no sense shall such quantities be considered as limiting or extending the amount of the work to be done by the Contractor and of the materials to be supplied by him.

1.7 Subject to the provisions of the Conditions of Contract the Contractor shall value the Permanent Works executed at the rates in the Bill of Quantities.

1.8 Where the Bill of Quantities does not include separate items for Contractor's Equipment, Temporary Works and the like the Contractor shall be deemed to have covered his obligations in these respects in the rates and prices for Permanent Works.

2. GENERAL

2.1 Permanent reinstatement of trench and surfaces, whether included in another item or separately itemised, shall include, but not by way of limitation, for:

- obtaining a permit to work from the relevant authority;
- temporary reinstatement of asphaltic surfaces in accordance with the Specification;
- permanent reinstatement by the Contractor or by the relevant authority;
- trench widenings for chambers and other ancillary structures;
- the removal and subsequent replacement of all kerb stones, paving stones, street lamps, road signs and safety barriers and other street furniture and all other costs and charges in connection therewith;
- forming and reinstating all openings on the line of a pipeline in fencing, hedging, walling or similar feature;
- breaking and opening trench surfaces, including subsequent restoration and reinstatement in road and elsewhere including the removal of any form of foundation thereto;
- crossing and reinstatement of all lined open drains, culverts, ditches, water-courses and similar items.

The term 'temporary' restoration or reinstatement as applied to surfaces other than roads shall be deemed to include for all works necessary to return the surface to its original or similar condition.

2.2 The rates and prices for excavation, whether included in another item or separately itemised, shall include for all types of ground encountered and for all ground conditions above or below water level. The Contractor must make due allowance that permission will not be granted for the use of explosives for blasting and other operations. All excavation measured by volume shall be measured net to the dimensions specified or as shown on the Drawings. No allowance shall be made for bulking or for any extra transport required due to bulking.

The rates and prices for excavation shall include, but not by way of limitation, for:

- all necessary excavations to formation levels, including refilling, backfilling, ramming and disposal of surplus;
- excavating to the correct depth and preserving the bottoms of excavations in a state suitable for the reception of concrete, pipes or pipe bedding, and for filling over-excavated volumes or disturbed areas to the net dimensions as indicated on the Drawings;
- any additional excavation required for formwork, working space, temporary or permanent shoring, and subsequent refilling and ramming and disposal of surplus;
- provision of storage areas for the temporary storage of any material required for backfilling which cannot be stored alongside the excavation for any reason, together with the cost of transporting, loading and unloading such material and all other charges incurred in this respect;
- trimming the bottoms including bottoming to falls, and trimming to sloping surfaces where required or indicated on the Drawings;

- taking all precautions by supporting faces of excavation to ensure the safety of the workmen and to prevent damage to adjacent walls, buildings and all other structures and services and to prevent damage to road and other surfaces by slip or breaking away of trench sides or other cause, including permanent and/or temporary shoring of trenches;
- dewatering of trench in waterlogged areas.
- keeping the site and trenches and all other excavations free from water from whatever cause arising;
- all temporary and permanent measures required to protect and support all existing pipes, cables and services; including all chambers, culverts, gullies, and foundations thereto, or repair or replace them should they become damaged due to the Contractor's activities;
- all barriers, warning tapes, lighting, warning signs, traffic controls and any other measures necessary to ensure complete safety around the area of the works; and
- soils testing as required by the Specification
- selected fill, screened fill and compact with material not exceeding 10 mm to trenches to depth of 300mm above top of pipe;
- leaving open the pipe sockets till approval of testing
- compacted fill over selected fill layer up to ground level/hump
- reinstatement
- Excavation in rock shall be measured by volume obtained by multiplying the horizontal area of the rock in the excavation by the average thickness of the rock above the required formation level or other excavation level ordered by the Project Manager. The average thickness of the rock mentioned above shall be determined by the Project Manager by taking the arithmetical mean of 5 measurements of depth or such other number of depth measurements as designated by the Project Manager on Site.

The horizontal area of the rock in the excavation shall be the product of the maximum trench width specified and the length over which the rock occurs.

If the Contractor is dissatisfied with the volume of rock measured by the Project Manager, he shall immediately inform the Project Manager of his disagreement and submit details of the rock measurement carried out by him. The disputed rock estimate shall then be remeasured in the presence of the Contractor and the remeasured quantity will become final for the preparation of the Certificates of Payment.

2.3 The quantities for trench excavation shall be measured in successive horizontal bands along the centre line of the pipe. The term 'depth to invert' means depth to the lowest internal surface of the barrel of the pipe, the term 'cover' means the distance from original ground level to the highest external surface of the barrel of the pipe, enlargements of pipes at sockets and the like being disregarded.

For the purposes of measuring excavation in trench and rock excavation by volume the trench width shall be taken as the outside diameter of the pipe plus 400 mm and the depth from ground level to the formation level except where otherwise stated.

2.4 Rates for pipe bedding shall include, but not by way of limitation, for importation of satisfactory materials including any crushed rock and disposal of surplus excavated material.

2.5 Rates for blinding concrete, whether included in another item or separately itemised, shall include for all additional excavation, disposal of surplus and all necessary sawn formwork.

2.6 All concrete measured by volume shall be measured net but holes and box-outs for pipes, mortices and the like shall not be deducted.

The rate and prices for all grades of concrete and reinforced concrete whether included in another item or separately itemised, shall include, but not by way of limitation, for:

- all design of concrete mixes and testing as specified;
- all formwork including stop ends, splays, chamfers, rebates holes, throatings, openings, box-outs, cut-outs, slots mortices and like items. (Formwork shall be 'sawn' finish to all buried external faces of concrete below a line 250mm below ground level and shall be 'wrought' finish to all other faces);
- forming of chamfers (25mm x 25mm) to all exposed external angles of concrete structures whether indicated on the Drawings or not;
- forming expansion, contraction, movement and construction joints and for all waterstops, jointing materials, sealing compounds and formwork necessary for forming such joints;
- the building in of all pipes and fittings, bolts, frames for covers, iron and steelwork etc. and making good;
- the finishing of all concrete surfaces to falls and levels as indicated on the Drawings and the trowelling smooth (steel float finish) of all surfaces exposed to view or in contact with water;

2.7 The rates for reinforcement in reinforced concrete, whether included in another item or separately itemised, shall include, but not by way of limitation for supplying, handling, cutting, bending, distribution, cleaning, fixing and provision of spacers, supports and lacings, etc. and all soft iron tying wire or fixing clips.

2.8 The rates and prices for precast concrete units, whether included in another item or separately itemised, shall include but not by way of limitation for all concrete, reinforcement, ties, formwork, chamfers, recesses and other features as shown on the Drawings.

2.9 Rates for concrete benching and screeding, whether included in another item or separately itemised, shall include for finishings to a steel trowelled finish and to the contours as indicated on the Drawings.

2.10 The quantities for pipelines and pipework shall be measured along the centre line of the pipe through all fittings, chambers etc.

Rates and prices for pipeline construction and pipework shall include, but not by way of limitation for:

- supply, storing, handling, distributing, protecting and maintaining in good condition, cutting, turning, laying at any depth, jointing, protecting, testing and cleansing the pipelines and pipework, together with the installation and incorporation of all joints, bends and tees, branch and in-line valves, air and washout valves, hydrants and all other fittings, except where separate items are included, necessary to produce a complete and continuous pipeline;

- protecting all buried metal pipes, fittings, flange joints and couplings;
- painting exposed valves and fittings as specified;
- temporary and permanent support blocks to pipes;
- supply and placing of warning tapes.

2.11 The rates and prices for all testing, whether included in another item or separately itemised, shall include, but not by way of limitation, for providing all consumables, water, transport of water, labour and equipment and for furnishing all specified test reports and certificates.

2.12 Rates for thrust and anchor blocks shall include for concrete and all additional excavation, trimming and sawn formwork as necessary. The concrete is to be placed on the full extent of the excavation as detailed in the Drawings but the blocks shall be the minimum size consistent with the Drawings.

2.13 The rates for washout, line valve, air valve, and other chambers on pipelines and pipework shall include but not by way of limitation for all extra excavation, refilling, ramming and disposing of surplus granular fill, concrete and formwork, blockwork, reinforcement, pre-cast units, bolts, testing, making good ground surface and painting pipes, valves, covers and fittings.

2.14 The rates and prices for connecting a pipeline to or into an existing pipeline shall include, but not by way of limitation for:

- any necessary trial holes to locate the existing pipeline;
- all additional excavations;
- Interruption and resumption of water supply.

2.15 Rates for Compacted Crushed Stone, Hardcore, or Compacted Granular Material shall include for compacted material as specified and for disposal of an equivalent volume of surplus excavated material. The rates shall include for blinding with fine material as necessary and finishing to the levels, slopes or falls required.

2.16 Rates for Compacted Selected Excavated Material shall include for compacted material as specified to the levels, slopes or falls required and finishing where exposed with fine topsoil 200mm thick. The rates shall include for material excavated from any part of the works.

2.17 Rates for marker posts shall include but not by way of limitation for all excavation, refilling, ramming, disposing of surplus, concrete, formwork, reinforcement, making good ground surface, plates, numerals, lettering and painting.

2.18 Rates for imported selected fill shall include for compaction as specified and for disposal of an equivalent volume of any surplus excavated material including boulders accumulated as a result of the use of imported selected fill.

2.19 Rates for the filling of the troughs/depressions under the pivot paths with surplus excavated materials obtained from the construction of delivery main, submains, laterals and cutting work shall include handling of stock materials, filling, compacting, levelling and double handling where required.

3. SWABBING AND CLEANING OF PIPES

No separate payment shall be made for complying with the requirements necessary for the swabbing and cleaning of the pipelines. All the costs of these operations shall be incorporated in the rate for laying and testing of the pipelines.

4. SCHEDULES OR SUB-BILLS

Where in the Bill of Quantities there is a Schedule or subsidiary bill setting out the quantities of component materials and work which comprise a unit of work measured under a single item in a Bill, the total price of the Schedule or subsidiary bill shall be the rate for the appropriate items ordered by the Project Manager shall be valued by deducting from or adding to the said total price, amounts in respect of reductions or adding to the said total price, amounts in respect of reductions or increases in quantity valued at the rates set out in the said Schedule or subsidiary bill or in the absence of such appropriate rates at rates fixed in accordance with the provisions of Clause 50 of the General Conditions of Contract.

5. DAYWORKS

5.1 The contract rates to be provided by the Bidders in the Schedule of Rates shall be used for valuation of:

- (a) Work executed on a daywork basis pursuant to Clause 50 of the General Conditions of Contract, and
- (b) Provisional Sum items in the Bill of Quantities which are described as being for work on a daywork basis.

No work shall be carried out as daywork except on the written order of the Project Manager.

5.2 The Schedule of Rates to be used for the Dayworks bill will apply for the duration of the Contract

5.3 The chargeable time shall be the actual time for which the labour or plant is used on the works.

Labour

5.4 The Contract Rates for various classes of labour in the Schedule of Rates shall cover all the Contractor's obligations whatsoever in providing and maintaining such labour at the place of work including wages, payment for conditions and for skill, bonus, travelling and subsistence allowances and expenses, guaranteed time, holidays with pay, insurances of all kinds, pensions, site supervision, watching, administrative and welfare charges, the use and maintenance of stagings, scaffolding, portable electric tools, non-mechanical plant and hand tools of every kind, overheads, profit and all incidental expenses.

5.5 The cost of supervising foremen and working-gangers shall be deemed to be included under site supervision.

5.6 The Contract Rates for labour are for units of man-days and shall be deemed to be a normal working day of 8 hours. Any less time shall be paid for proportionally.

5.7 If overtime on work being carried out by daywork is authorised by the Project Manager, the Contractor shall be paid for such overtime in the same proportion as it is paid to the workmen. Thus, if a man works for ten hours for which he is paid eleven hours, the Contractor shall be paid eleven hours (i.e. 1.375 days) for such a man.

Plant

5.8 The Contract Rates for plant in the Schedule of Rates shall apply to all plant whether belonging to the Contractor or hired by him and shall cover all the Contractor's obligations whatsoever in providing and maintaining such plant at the place of work including all fuel and lubricants, all auxiliary equipment necessary for efficient operation and use of the plant, overheads and profits but excluding operators.

5.9 Payment for plant on daywork shall be limited to items listed in the Schedule of Rates or added thereto by the Contractor when tendering, unless otherwise agreed by the Project Manager.

5.10 The Contract Rates for plant shall apply both to plant which is already available on Site and to plant brought to Site specially for daywork, but in the latter case the Contractor shall be paid for his additional costs in transporting such plant to and from the Site.

5.11 The rates for plant shall be inclusive of all fuels, greases and other consumable stores, and of spare parts etc. but exclusive of operators, drivers, attendants etc., who will be paid for under the item for labour on the instructions of the Project Manager's Representative. Idle time shall not be paid for.

Materials

5.12 Payment for materials executed on daywork basis will be made on the net quantity used.

5.13 The rates shall cover for profit, transport, wastage, all overhead charges, and other on-costs from whatever cause arising.

Bidder is requested to fill the Schedule of Rates at Section B to cover all items of works in this Contract. The Contract Rates to be indicated in the Schedule of Rates shall be used for adjusting extras or omission.

6. PROVISIONAL SUMS

6.1 No item for which a Provisional Sum is inserted shall be purchased by the Contractor until the Project Manager has given written instructions to this effect and it shall be the duty of the Contractor to make an application to the Project Manager sufficiently in advance of the progress of the work for instructions with regard to each such items. The Contractor shall obtain competitive quotations and samples if required and shall submit these to the Project Manager for approval.

6.2 The Contractor shall produce to the Project Manager the receipted accounts for all articles purchased under provisional. No payment to the Contractor shall be made in respect of the items until the said receipts have been presented to the Project Manager.

6.3 The Bidder shall enter the rates of corresponding items described as Provisional Sum.

6.4 Provisional sums inserted in the Bill of Quantities in respect of materials to be specially imported for the Contract by the Contractor shall be deemed to include insurance, freight, dock and all other charges. In the case of imported materials obtained through a manufacturer's agent in Mauritius the sum shall be deemed to include the agent's fees and charges.

6.5 The Bill of Quantities include items in respect of the Provisional Sums for materials and sub-contracts given in the form of a percentage of the sums to be expended to cover the Contractor's profit and overheads, including but not limited to the costs of obtaining quotations for, and the placing of orders or awarding sub-contracts, and all expenses in connection with administering such orders or sub-contract and financing cost for payment of these sums until recovery from Interim Certificates.

6.6 Items described as **Provisional Sum** or **Prov. Sum** or **Provisional** in the column of Description or Unit of the Bill of Quantities shall be subject for approval from the Project Manager prior of executing the items of work. Such items may be used in whole or in part, or not at all as instructed by the Project Manager.

7. METHODS OF PAYMENT

For the purposes of statements submitted, the Contractor shall include in his monthly statement the percentages listed in this section following the completion or stage specified and in the order shown.

(A) COMPLYING WITH GENERAL CONDITIONS OF CONTRACT (Clause 40)

(B) SUPPLIES	Percentage of Unit rate in line item of BOQ
1. BOQ items 1.05, 1.06, 1.07, 1.08, 1.09, 1.10, 1.11	75%
Remaining upon progress of works	25%
2. BOQ items 2.02, 2.07, 2.08, 2.09, 2.10	75%
Remaining upon progress of works	25%

(C) OTHER WORKS as per progress of works

8. SURVEY WORK

All survey work ordered on Site by the Project Manager and carried out in accordance with the Specifications shall be measured under the following categories:

(a) Beacon Bench Marks shall be measured by number. No separate payment shall be made inter alia for transferring levels, check levelling, erection of Bench Marks and preparation of location plans.

(b) Survey of pipeline routes shall be measured by plan length of the pipeline. No separate payment shall be made inter alia for transferring levels from Beacon Bench Marks, providing and establishing chainage markers, check levelling and providing record sheets.

9. SURVEYING EQUIPMENT FOR PROJECT MANAGER'S REPRESENTATIVE

9.1 The rates for the provision of surveying equipment shall be deemed to include for the provision, substitution, replacement, maintenance, testing, calibration, removal, and all other incidental expenses.

10. METHOD RELATED CHARGES

10.1 In order that the Contractor may cover his costs in executing the whole of the Works in conformity with the contract documents, where those costs are not properly attributable to the quantity of permanent works to be executed, he may cover such costs in the Bills of Quantities as method related charges.

10.2 A Bidder may insert in the Bills of Quantities and in the space provided, such items for Method Related Charges as he may decide to cover items of work relating to his intended method of executing the works, the costs of which are not to be considered as proportional to the quantities, rates and prices for the other items.

10.3 Each item for a Method Related Charge inserted by the Bidder shall be fully described so as to define precisely the extent of work covered and to identify the constructional resources (plant, equipment etc.) to be used and the particular items of permanent or temporary works to which the items relate.

ABBREVIATIONS

The following abbreviations are used in the document:

L.S.	Lump Sum
ha	Hectare(s)
Cu.m or m ³	Cubic metre
E.O	Extra Over
P.S	Provisional Sum
lin.m or m	Metre
mm	Millimetre
Tonne	Metric Tonne
Sq.m or m ²	Square Metre
km	Kilometre
%	Percent
R.C.	Reinforced Concrete
Ch.	Chainage
P.V.C	Polyvinyl Chloride
M.S.	Mild Steel
c.c.	Centre to Centre
D.I.	Ductile Iron
C.I.	Cast Iron
P/E	Plain End
F/PE	Flanged and Plain End
D/F	Double Flanged
P.C	Precast Concrete
MAMSL	Metres Above Mean Sea Level
G.I	Galvanised Iron
DN or ND	Nominal Diameter
OD	Outside Diameter
G.S	Galvanised Steel
P.N	Nominal Pressure
Prov.	Provisional
wks	Weeks
No	Number
DN	Nominal Diametre in mm
MUR	Mauritian Rupees
HDPE	High Density Polyethylene

BILL OF QUANTITIES**Procurement Reference No: EU-IA/GH-Apr23/04****Summary of Bill of Quantities**

Item No	Description of Works	Amount (MUR)
1	Bill No 1 Construction of Three Greenhouses	
2	Bill No 2 Plumbing and Electrical Works	
	Sub-total 1	
	Contingencies	500,000.00
	Sub-total 2 – to be transferred to BID SUBMISSION FORM	
	VAT 15 %	
	Total	

Priced Activity Schedule Authorised By:

Name:		Signature:	
Position:		Date:	
Authorised for and on behalf of:	Company		

BILL OF QUANTITIES

Bill No. 1: Construction of Three Greenhouses

Item No	Description of Works	Unit	Quantity	Rate (MUR)	Amount (MUR)
1.01	Site clearance for the setting up of three green-houses	m ²	1000		
1.02	Excavation works for foundation of block works for the bases of the greenhouses. Rate to include to excavation in rocks.	SUM			
1.03	<p><u>Hollow Concrete Blocks to BS 2028 Type A 3.5 N/mm² in cement mortar (1 : 3) as described</u></p> <p>Construct 150 mm thick walls, 300 mm above ground level with concrete block as per drawing. Rate to include for supply, place and compact concrete for 50 mm thick blinding layer (Concrete Grade 150), strip footing 175 mm thick & ring beam 100 mm thick (Concrete grade 25), reinforcement and vertical formwork to side of footing and ring beam.</p>	Lin.m	222		
1.04	Rendering of external and internal block work as specified	SUM			
1.05	Design, supply and fix single span greenhouse structure measuring 9 m (width) x 28 m (Length) and minimum 4.0 m (high) in galvanised steel pipes and spaced for maximum wind speed of 120-125 km/hr for 3 seconds with frame stabilisation	No	3		
	TOTAL Carried Forward				

Item No	Description of Works	Unit	Quantity	Rate (MUR)	Amount (MUR)
	TOTAL Brought forward				
1.06	Supply and fix polyethylene plastic cover of thickness 180 - 200 micron, UV treated, for the greenhouses, complete with rail clips.	No	3		
1.07	Supply and fix UV treated knitted (40% shading) shade cloth above the plastic roof cover for the greenhouses	No	3		
1.08	Supply and fix rolled-up curtain on both longitudinal sides of the greenhouses (2 per greenhouse) with suitable mechanism for each greenhouse	No	6		
1.09	Supply and fix tie down ratchets with UV treated straps, at spacing of 4m, complete with galvanised anchor bolts on both sides of the greenhouses.	No	45		
1.10	Supply and fix double leaf doors for opening of 3.0 m (W) x 2.5 m (H) for each greenhouse inclusive of overlapping anti-insect net	No	3		
1.11	Supply and fix Insectproof cloth (UV treated) on vertical sides of greenhouses as specified.	No.	3		
1.12	Supply and erect sign board as specified	No.	1		
	Total carried to item no.1 of the Summary of Bill of Quantities				

BILL OF QUANTITIES

Bill No. 2: Plumbing and Electrical Works

Item No	Description of Works	Unit	Quantity	Rate (MUR)	Amount (MUR)
2.01	Supply, place and compact one (1) reinforced concrete platform to suit fibreglass water tank of minimum capacity of 9 m ³	Sum			
2.02	Supply and fix a fibreglass water tank of minimum capacity of 9 m ³ complete with ballcock, stop valves, non-return valves and associated fittings in DN63/50.	Sum			
2.03	Supply, install and test OD 63 mm HDPE pipe, PN 6, delivery pipe from existing headwork chamber to the inlet of the water tank inclusive of a main gate valve and a water meter and associated fittings as directed	Prov Sum			50,000
2.04	Supply, install and test OD 50 mm HDPE pipe, PN 6 distribution main pipe from outlet of water tank to the three (3) greenhouses inclusive of associated fittings	Prov Sum			30,000
2.05	Supply and install manifold OD 40 mm, HDPE pipe of length 9 m within each of three greenhouses for the installation of dripper lines inclusive of end caps, tees associated fittings	Prov Sum			120,000
2.06	Install and test dripper lines, at 0.5 m interval and associated fittings in the three (3) greenhouses [Dripper lines 16 mm diameter and fittings shall be supplied by Employer]	Prov Sum			150,000
	TOTAL Carried Forward				

Item No	Description of Works	Unit	Quantity	Rate (MUR)	Amount (MUR)
	TOTAL Brought forward				
2.07	Supply, install and test a centrifugal electric monophasic water pump, of flow 1.8 – 2.0 m ³ /hr and pressure of 25 m, inclusive of all associated fittings. Pump to be connected to tank in item 2.02	Sum			
2.08	Supply, install and test of a 2.5 m ³ /hr fertilizer dosing pump complete with associated valve fittings in the container at item 2.09.	No.	3		
2.09	Supply of one container of 20 ft with one single leaf door and windows to allow proper ventilation and natural light. Same to be supported on concrete anchor blocks.	Sum			
2.10	Supply and fix one wash basin inclusive of pipe works and associated fittings for agro-processing.	Prov Sum			20,000
2.11	Supply and install one distribution board (DB), residual current device (RCD), isolator, circuit breakers, appropriate electric cables, conduits, earthing pole and associated accessories within the premises of the container. All electric cables shall be installed in flexible conduits.	Sum			
	Total carried to item no. 2 the Summary of Bill of Quantities				

SCHEDULE OF DAYWORK RATE 1

PLANT

The rates to be inserted therein are to include all operational maintenance costs including fuel, oil, grease, spare parts, repairs, any extra costs of overtime all superintendence, overheads any profit. The rate shall also include for all travelling time and costs for the plant operators, etc, to, from and about the site. Idle time where due solely to the nature of the day works or the authorised method of procedure will be paid for at ½ (one half) of the rates entered herein. Idle time due to breakdowns, inefficiency or unsuitability or incompleteness of the plant will not be paid.

Item No.	Description	Unit	Rate (MUR)
1	Water bowser	Hr	
2	Compressor	Hr	
3	Tools for Compressor	Hr	
4	Tandem Roller 6 – 8 T	Hr	
5	Pump and Motor 30 mm	Hr	
6	Cutting Equipment	Hr	
7	Generator	Hr	
8	Power Hand Tool	Hr	
9	Tripper Truck (7 tonnes)	Hr	

Signature:

Date:

SCHEDULE OF DAYWORK RATE 2

LABOUR

The rates inserted therein are to include all costs of labour and maintenance of tools and small plants such as scaffolding, trestles, wheelbarrows, picks, shovels, hand pump, etc, any extra costs of overtime, insurances, accommodation, travelling time and expenses to, from and about the site, etc, together with all superintendence, overhead and profits.

Item No.	Description	Unit	Rate (MUR)
1	Unskilled labour	Hr	
2	Skilled labour	Hr	
3	Mason	Hr	
4	Driver	Hr	
5	Plant Operator	Hr	

Signature:

Date:

SCHEDULE OF DAYWORK RATE 3

MATERIALS

The materials are to be all to the qualities and description stated in the specifications. The rate inserted therein are to include all loading, transport, unloading, storage, double-handling, etc, together with all overheads and profit. Payment authorised by the Project Manager for the use on dayworks and not included in the following items shall be at net invoice costs received for supply and delivery to a central store or stockpile area on site. The net quantities and weights actually used and verified by the Project Manager only shall be certified and paid under dayworks.

Item No.	Description	Unit	Rate (MUR)
1	Portland Cement	T	
2	Coarse Aggregate any size	M ³	
3	Sand or Fine Aggregate	M ³	
4	Crusher Run 0/20	M ³	
5	Crusher 0/31.5	M ³	
6	Spalls/ Hardcore	M ³	
7	Stone Pitching	M ³	
8	Concrete Class 15 (20)	M ³	
9	Concrete Class 25 (20)	M ³	

Signature:

Date:

Section III: Statement of Requirements

A. SCOPE OF WORKS, SPECIFICATIONS AND PERFORMANCE REQUIREMENTS

Section III: Statement of Requirements

A. SCOPE OF WORKS, SPECIFICATIONS AND PERFORMANCE REQUIREMENTS

1.01 Background

The Irrigation Authority (IA) received a grant from the European Commission under the Global Climate Change Alliance Plus (GCCA+) flagship initiative to finance the implementation of several actions towards “*Supporting Climate Change Smart Agriculture for Small Holders in the Republic of Mauritius*”. One of the activities under the grant is sheltered farming which forms part of a series of other actions which will help to increase resilience of the agricultural sector. IA intends to use part of the grant for construction of three (3) single span greenhouses with the objective to implement sheltered farming, agro-processing and fertigation at the locations proposed by the Water Users Cooperative Society (WUCS) under the above-mentioned project to be operated and maintained by the WUCS.

The location of the project is shown in drawing No EU-IA/GH-Apr23/01

The works shall consist, among others, of the supply, installation, testing and commissioning of three (3) single span greenhouses inclusive of earth works. The locations of the three (3) single span greenhouses may change within the Solitude I and II project areas subject to the approval of the Water Users Cooperative Societies.

1.02 Scope of Works

The works shall consist of, inter alia:

Design, supply, installation, testing and commissioning of three (3) single span greenhouse of approximate surface area of 252 m² each (9 m x 28 m)

Works in site

1. Clearing of site from all debris and shrubs.
2. Excavation for foundation of base of greenhouse .
3. Block work of concrete block size 150mm wide and 300 mm minimum high (inclusive of 100mm plinth) above ground as base of the greenhouse together with strip footing and plinth beams. Both external and internal surfaces of the concrete block shall be rendered.
4. Design, supply, fix and test three single span greenhouse structures in hot dipped galvanised steel pipes to withstand a maximum cyclonic wind speed of 120 - 125 km/h (3 seconds gusts).

5. Supply, fix and install polyethylene plastic cover material of thickness **180 - 200 micron**, UV treated.
6. Supply, fix and install UV treated knitted (**40 % shading**) shade cloth above the plastic roof cover.
7. Installation of drip irrigation system together with main/submain, pump and other controlling devices inclusive of dripper lines, start connectors, flush-end caps for submain.
8. Supply, fix and install roll up curtain on both longitudinal sides with a suitable mechanism.
9. Supply and fix tie down ratchets and UV treated straps (15 units per greenhouse).
10. Supply, fix and install double leaf door for opening of minimum size 3.0 m (W) x 2.5m (H) for each greenhouse. All doors have to be covered with overlapping anti-insect net to ensure insect-free zone.
11. Design and construct one (1) reinforced concrete platform for the fibreglass water tank of capacity 9 m³.
12. Supply and install a fibreglass water tank of 9 m³ minimum capacity for the single span greenhouse. The water tank shall be equipped with ballcock, stop valves, and associated fittings.
13. Supply, install and test water supply pipes from water tank inlet up to the greenhouses as directed by Project Manager.
14. Supply and fix one (1) container of twenty 20 feet size to house the water pump and controlling devices, a fertigation system and washing basin for agro processing. The container shall be provided with one (1) single leaf door and windows to allow proper ventilation and natural light.
15. Supply and install one distribution board (DB), residual current device (RCD), isolator, circuit breakers, appropriate electric cables, conduits, earthing pole and associated accessories. DB shall be protected from electric shocks. DB shall be labelled and circuit schematic to be submitted upon completion. All electrical cables shall be passed through PVC or flexible conduits as required to be supplied and installed.
16. Schematic drawings of electrical work duly certified by a Registered Electrical Engineer shall be submitted by Contractor prior to the start of the work. Earth test certificate shall be submitted.
17. Supply and install earthing system for the whole facility with principle ground bar, bare/insulated copper wires, clamps, test point, earth rods and plates.
18. Testing and commissioning: after completion of the installation works, the bidder shall carry out all the necessary testing (continuity, insulation and earth) to ascertain that works have been executed to the satisfaction of the Employer.

1.03 List and order of materials

Prior to order for local manufacture or shipment, the Contractor shall prepare and submit to the Project Manager for approval the lists of all hot dipped galvanised steel pipes, fittings, jointing materials, filters, greenhouse components etc. required for the construction of each component of the Works from the information given in the Employer's Requirement and through site investigation.

The Contractor is strongly recommended to confirm dimensions and quantities of items through site investigation and to notify the Project Manager in writing if there are any discrepancies in the Employer's Requirements of the bidding document and site survey prior to ordering.

The Contractor shall satisfy himself that the various methods of connections, i.e. flexiblecouplings, flanges, joints, threading etc. match with one another and he shall notify the Project Manager in writing of any discrepancy he may have discovered.

The aforesaid notifications shall be made at latest two days before work is scheduled to start and an absence of notification within the prescribed period shall be deemed to be an absence of deficiencies or discrepancies in the Contractual Documents.

1.04 Drawings

Drawings included in the Bid documents are guidelines for the Contractor to prepare the construction/shop drawings .

Before commencing fabrication of the Greenhouse Arch steel structure, the Contractor shall submit the construction/shop drawings and design duly approved and signed by his Registered Civil Engineer together with the certificates to indicate materials have the specified properties.

The Contractor shall submit to the Project Manager for approval within 2 days of the order to commence the Works detailed drawings of the structures and a general arrangement of a typical installation, including critical dimensions for associated civil works. They are to be accompanied, if required, by calculations and explanations to show that they comply with all requirements of these Specifications.

Alteration to approved drawings shall only be made with the written consent of the Project Manager.

1.05 Details of existing pipelines, CEB lines and other infrastructures

The Contractor shall verify the presence of underground services prior to execution of works within immediate surroundings to the site and execute works without disturbing and damaging any of these features. Any disturbance caused to such infrastructures shall be immediately notified to the Project Manager.

Prior to excavations, the Contractor shall dig out the number of trial pits he judges necessary for exact identification of location and depth of the existing buried pipes. He shall submit to the Project Manager for approval of a methodology for excavation so as not to disturb or damage the existing components, prior to execute work.

1.06 Programme of the Works

- a. The whole of the works shall be completed within twelve weeks from start date.
- b. The Contractor shall submit a Programme of Works to the Project Manager for approval within two (2) days from the date of issue of the Letter of Acceptance.
- c. The Contractor shall during execution of the contract, revise the programme of works every fortnight and in addition as and when requested and directed by the Project Manager.
- d. The works shall be carried out according to the programme submitted by the Contractor and approved by the Project Manager. The Contractor shall take the following into consideration while preparing the Programme of Works:
 - Main pipeline will be closed for a maximum of 2 days on a particular site to allow for tapping connection.
 - The Contractor shall ensure that existing track roads are not obstructed and shall remain accessible to planters and irrigation workers
 - The Programme of Works shall show all resources (labour, plant and equipment and cash flow) necessary to plan the weekly and monthly progress between the commencement and completion dates. Additionally, it shall show the timing, order of procedure and general method for carrying out the works, with timing for mobilisation of plant and equipment and for the purchase/ordering of goods for different stages of works.
 - The critical path with all activities involved therein shall clearly be shown.
 - The Programme of Works shall also take due regards of the time required for drawings' approval, testing and inspection at the works, freight and delivery of materials to the site of works.

1.07 Quality of Materials

All materials to be supplied under this contract (hot dipped galvanised steel pipes, filters, jointing materials, nuts, bolts & other fittings) shall be suitable for greenhouse purposes. The quality of materials and goods shall be of structural grade and best quality. All goods supply shall be new, unused, free from any defects and conforming to BS, EN, ISO or other equivalent standards and shall be approved by the Project Manager. Inferior or low-grade supplies shall be rejected by the Project Manager.

Bidder shall submit a compliance certificate/test certificate for hot dipped galvanised steel pipes/circular hollow section as specified prior to the fabrication of the steel structure. The Bidder shall be specific as to the country of origin and manufacturing firm of the items intended to supply under this Procurement.

1.08 Greenhouse Structure and greenhouse coverings (refer also to drawings)

S/N	ITEM	DESCRIPTION
(A)	ARCH/GALVANISED STEEL FRAMES & ACCESSORIES	
	Structural Parameter	
1	Type of tunnel	<ul style="list-style-type: none"> Arches with straight sides of height 3.0 m from top level of concrete block wall.
2	Dimension	Length: 28.0m x Width: 9.0m
3	Arches and bracings of arches	Arch frames with shoulder/eave height of 3.0 m to both straight sides and top height of minimum 4.0 m to the apex. The respective dimensions are from the top level of concrete blockwall. To be made of hot dipped galvanised pipes of minimum diameter 1¼”x 2.5 mm thick.
4	Purlins	To be made of hot dipped galvanised pipes minimum diameter 1” (2.5 mm thick) spaced at 1m longitudinally.
5	Front and Rear vertical poles	To be made of hot dipped galvanised pipes of minimum diameter 1½” (to be assembled to arches and foundation tubes with bolts & nuts as required) (2.5 mm thick).
6	Foundation tubes	To be made of hot dipped galvanised pipes minimum diameter 1½”(2.5 mm thick) and to be anchored in concrete to a minimum depth of 0.6 m. Two pieces of galvanized Tee bar ½” x 200mm long shall be welded at bottom before casting inside base concrete.
S/N	ITEM	DESCRIPTION
	Performance Parameter	
7	Ventilation Mode - two sides coiling mechanism	To be made of galvanised pipe minimum 1¼” and UV- treated plastic sheet 180-200 µ.
8	Fixing profiles for plastic sheet, skirt and insect proof cloth	To be made of galvanised or aluminium locking profiles.
9	Door	Opening Size: 3.0 m 2.5 m (L x W). Two- leaf doors (each of size 1.5 x 2.5 m) Made of galvanised square tubes minimum 1” with locking device and covered with insectproof cloth. Clearance between door and frame shall be closed with galvanised mild steel flat bar 2” x ¼”.
10	Galvanised wire for roof	30 rows of galvanised wire 2.8-3.0 mm on each side shall be longitudinally stretched on the top of arches. Wire shall be stretched using wire tensioners fixed on the arch.
11	Greenhouse Structure	Design to resist 3 seconds cyclonic wind gusts of 120-125 km/hr maximum.
12	Main Materials	Hot dipped galvanized circulation hollow sections (CHS) of adequate structural grade and maximum thickness 2.5 mm.

(B) CIVIL WORKS		
1	Excavation	Shall be carried out to a depth of 0.9m minimum for the poles and 0.5m minimum for strip footing.
2	Mass concrete base for CHS steel posts	Minimum size of base concrete 0.5mx0.5mx0.6m (W x H x D) – (Grade 25/20 with 10% of Blue Basalt spalls, size not to exceed 100 mm).
3	Concrete strip footing for blockwall	Size of strip footing – 450 mm wide and 175 mm thick (Grade 25)
4	Blockwall	Laying of minimum 2 courses of concrete blockwall 150 mm thick complete with 125 mm thick reinforced concrete plinth beam (2T8 {400 mm lap length} & R6-200 clips)
5	Rendering	Rendering of external and internal surfaces of the concrete blockwall.
(C) GREENHOUSE COVERINGS		
1	UV-treated PE plastic sheet 180-200 μ minimum thickness shall be fixed on top of the tunnel with rail clips.	
2	Insect proof cloth 400-500 μ x 700-800 μ should be anti-leaf miner, anti-aphid and anti-white fly and shall be fixed on all sides.	
3	40% knitted shade cloth shall be fixed on top of the plastic roof and shall be easily removed when required.	
4.	Tie – down ratchets with straps shall be fixed at regular locations to secure the coverings	

1.09 Miscellaneous

The whole of the works shall be carried out in strict accordance with the Scope of works, drawings, specifications and conditions of contract. Any discrepancy in drawings shall be immediately reported to the Project Manager.

All welded parts, if any, shall be cleaned and treated with cold galvanized paint (galvafruid) to the satisfaction of IA.

The works be carried out to the best workmanship and shall not limit to the scope of works described above.

The successful bidder shall make his own provision for electricity and water supply on site for execution of the works.

A test certificate for galvanization coating from the Mauritius Standard Bureau (MSB) may be requested for all hot dipped galvanized sections.

All debris resulting from the works shall be cleared and carted away.

1.10 Alternative Proposals

The Contractor may submit alternative proposals for the greenhouse structure but shall comply to the requirements of the greenhouses specified in the bid document. In addition, a certificate from a registered professional engineer shall be provided to certify that the alternative proposals shall withstand a maximum windspeed of 120-125 km/hr for 3 seconds.

1.11 RULES OF ORIGIN OF PRODUCTS

**EXTERNAL ACTION FINANCIAL INSTRUMENTS AND EUROPEAN
DEVELOPMENT FUND RULES ON PARTICIPATION IN
PROCUREMENT PROCEDURES AND GRANTS**

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A	Part I: 2014-2020 instruments for external action
B	Part II: Rules on nationality and origin for public procurement, grants and other award procedures financed under the ACP-EC Partnership Agreement, laid down in Annex IV to the latter Agreement as revised by Decision No 1/2014 of the ACP-EU Council of Ministers of 20 June 2014 (2014/428/EU)
C	Part III: rules on nationality and origin for public procurement, grants and other award procedures for instruments for external action financed under the Overseas Association Decision
D	Appendices.....

A. Part I: 2014-2020 instruments for external action**1) Eligible countries for DCI, ENI, PI, Greenland and INSC** (CIR - Article 9)

Participation in the award of procurement contracts, grants and other award procedures for actions financed under **DCI, ENI, PI, Greenland and INSC** for the benefit of third parties shall be open to all natural persons who are nationals of, and legal persons that are effectively established in, one of the following eligible countries/territories/beneficiaries:

- a) *EU Member States* ([appendix 1](#))
- b) *IPA II beneficiaries (listed in the Annex I of IPA II Instrument)* ([appendix 2](#))
- c) *European Economic Area* ([appendix 3](#))
- d) Developing countries and territories, (included in the OECD-DAC list of ODA recipients¹), which are not members of the G20 group²:
 - i. *Least Developed Countries (LDCs)* ([appendix 4](#))
 - ii. *Other Low Income Countries* ([appendix 5](#))
 - iii. *Lower Middle Income Countries and Territories* ([appendix 6](#))
 - iv. *Upper Middle Income Countries and Territories* ([appendix 7](#))
- e) *Overseas Countries and Territories (OCTs)* covered by Council Decision 2013/755/EU of 25 November 2013 on the association of the overseas countries and territories with the European Union ([appendix 8](#))
- f) *Member States of the OECD* ([appendix 9](#)) **are also eligible when contracts are exclusively implemented in a Least Developed Country³ or in a Highly Indebted Poor Country (HIPC)⁴.**
- g) (i) *Developing countries, as included in the list of ODA recipients, which are members of the G20 group* ([appendix 10](#));
 - (ii) *any other countries and territories* (ie. all countries of the world).

The entities of these countries can only participate in procedures, where the country itself is a beneficiary of the action. This can happen in particular, in thematic programmes, programmes financed under the PI or where the success of a regional programme necessitates the participation of the said country.

- h) any countries for which *reciprocal access* to external assistance is established by the Commission. Currently there are no such countries.

¹ Please check the DAC List of ODA Recipients, effective for reporting on 2018, 2019 and 2020 flows.

² Non eligible G20 Members developing countries are: India, Indonesia, Argentina, Brazil, China, Mexico, South Africa. South Africa will be eligible when the action will be co-financed with the EDF. *Turkey* is also a developing country (upper middle income) G20 Member but is eligible as a *beneficiary listed in the Annex I of the IPA II*.

³ See [appendix 4](#) for the full list of LDCs.

⁴ HIPC are: Afghanistan, Benin, Bolivia, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Ghana, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nicaragua, Niger, Republic of Congo, Rwanda, São Tomé & Príncipe, Senegal, Sierra Leone, Tanzania, The Gambia, Togo, Uganda, Zambia.

- i) **for ENI Instrument only:** in addition to the countries/territories/beneficiaries mentioned above that are eligible for ENI, the following countries/territories are also considered eligible for contracts financed under the ENI Instrument:
- i. *Partner countries or territories covered by the Instrument* (annex I of the ENI Instrument) ([appendix 11](#));
 - ii. in the case of relevant procedures taking place in the context of the multi-country and cross-border co-operation programmes in which it⁵ participates: *the Russian Federation*.
- j) **For DCI, ENI, PI, Greenland and INSC:** where an agreement on widening the market for procurement of goods or services to which the Union is party applies, the procurement procedures for contracts financed by the budget shall also be open to natural and legal persons established in a third country other than those specified in the basic instruments governing the cooperation sector concerned, under the conditions laid down in that agreement.

2) for IcSP and EIDHR (CIR – Article 11)

All countries are eligible for participation in contracts financed under these Instruments that are fully untied without prejudice to the limitations inherent to the nature and the objectives of the action.

3) For IPA II (CIR- Article 10)

Participation in the award of procurement contracts, grants and other award procedures for actions financed under the CIR **for IPA II** for the benefit of third parties shall be open to all natural persons who are nationals of, and legal persons who are effectively established in, one of the following eligible countries/ territories/beneficiaries:

- a) *EU Member States* ([appendix 1](#))
- b) *Beneficiaries listed in the Annex I of the IPA II* ([appendix 2](#))
- c) *European Economic Area* ([appendix 3](#))
- d) *Partner countries and territories covered by ENI Instrument* (annex I of ENI Instrument) ([appendix 11](#))
- e) countries for which Commission has adopted a decision approving the request for *reciprocal access* to external assistance. Currently there are no such countries.
- f) where an agreement on widening the market for procurement of goods or services to which the Union is party applies, the procurement procedures for contracts financed by the budget shall also be open to natural and legal persons established in a third country other than those specified in the basic instruments governing the cooperation sector concerned, under the conditions laid down in that agreement.

⁵ In line with the upcoming corrigendum of the CIR, regarding Article 9(1)(b) (OJ L 316, 4.11.2014, p. 69) (FR).

Part II: Rules on nationality and origin for public procurement, grants and other award procedures financed under the ACP-EC Partnership Agreement, laid down in Annex IV to the latter Agreement as revised by Decision No 1/2014 of the ACP-EU Council of Ministers of 20 June 2014 (2014/428/EU)

Participation in procedures for the award of procurement contracts or grants financed from the multi-annual financial framework of cooperation under the ACP-EC Partnership Agreement is open to all natural persons who are nationals of, or legal persons who are effectively established in:

- (a) *an ACP State* ([appendix 12](#));
- (b) *a Member State of the European Union* ([appendix 1](#));
- (c) *Beneficiaries of the Instrument for pre-accession assistance* ([appendix 2](#));
- (d) *a Member State of the European Economic Area* ([appendix 3](#));
- (e) *Overseas Countries and Territories* ([appendix 8](#));
- (f) *developing countries and territories, as included in the OECD-DAC list of ODA Recipients, which are not members of the G20 group, without prejudice to the status of the Republic of South Africa, as governed by Protocol 3 of the partnership Agreement (appendices 4, 5, 6 and 7);*
- (g) *countries for which Commission has adopted a decision approving the request for reciprocal access to external assistance in agreement with ACP countries; Currently there are no such countries.*
- (h) *a Member State of the OECD* ([appendix 9](#)), in the case of contracts exclusively implemented in a Least Developed Country (LDC)⁶ or a Highly Indebted Poor Country (HIPC)⁷.

Part III: rules on nationality and origin for public procurement, grants and other award procedures for instruments for external action financed under the Overseas Association Decision.

From the publication of the COUNCIL DECISION 2013/755/EU of 25 November 2013 on the association of the overseas countries and territories with the European Union ('Overseas Association Decision') the following rules are applicable to calls financed under the financial assistance of the EDF:

1. Tenderers, applicants and candidates from the following countries and territories shall be eligible to funding under this Decision:
 - (a) *Member States of the European Union* ([appendix 1](#))
 - (b) *candidate countries and potential candidates* as recognised by the Union ([appendix 2](#))
 - (c) *members of the European Economic Area* ([appendix 3](#))
 - (d) *OCTs* ([appendix 8](#))

⁶ See [appendix 4](#) for the full list of LDCs.

⁷ See full list of HIPCs in [footnote 4](#)

- (e) developing countries and territories, as included in the OECD-DAC list of ODA Recipients, which are not members of the G-20 group (appendices [4](#), [5](#), [6](#) and [7](#))
- (f) countries for which *reciprocal access* to external assistance is established by the Commission. Reciprocal access may be granted, for a limited period of at least one year, whenever a country grants eligibility on equal terms to entities from the Union and from OCTs; Currently there are no such countries.
- (g) *Member States of the OECD* ([appendix 9](#)), in the case of contracts exclusively implemented in a Least Developed Country⁸.

⁸ See [appendix 4](#) for the full list of LDCs.

APPENDICES

APPENDIX 1 : EU MEMBER STATES

Austria, Belgium, Bulgaria, Czech Republic, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom⁹.

APPENDIX 2 : IPA II BENEFICIARIES

Albania, Bosnia and Herzegovina, Kosovo, Montenegro, Serbia, Turkey, Republic of North Macedonia.*

** This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.*

APPENDIX 3 : EUROPEAN ECONOMIC AREA

(only non-EU MS are mentioned) Iceland, Lichtenstein, Norway.

APPENDIX 4 : LEAST DEVELOPED COUNTRIES

Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Sao Tome & Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, South Sudan, Tanzania, Timor-Leste, Togo, Tuvalu, Uganda, Vanuatu, Yemen, Zambia.

APPENDIX 5: OTHER LOW INCOME COUNTRIES

Democratic People's Republic of Korea, Zimbabwe.

APPENDIX 6 : LOWER MIDDLE INCOME COUNTRIES AND TERRITORIES

Armenia, Bolivia, Cabo Verde, Cameroon, Congo, Côte d'Ivoire, Egypt, El Salvador, Eswatini, Georgia, Ghana, Guatemala, Honduras, India, Indonesia, Jordan, Kenya, Kosovo, Kyrgyzstan, Micronesia, Moldova, Mongolia, Morocco, Nicaragua, Nigeria, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Syrian Arab Republic, Tajikistan, Tokelau, Tunisia, Ukraine, Uzbekistan, Vietnam, West Bank and Gaza Strip.

APPENDIX 7 : UPPER MIDDLE INCOME COUNTRIES AND TERRITORIES

Albania, Algeria, Antigua and Barbuda, Argentina, Azerbaijan, Belarus, Belize, Bosnia and Herzegovina, Botswana, Brazil, China (People's Republic of), Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, Equatorial Guinea, Fiji, Republic of North Macedonia, Gabon, Grenada, Guyana, Iran, Iraq, Jamaica, Kazakhstan, Lebanon, Libya, Malaysia, Maldives, Marshall Islands, Mauritius, Mexico, Montenegro, Montserrat, Namibia, Nauru, Niue, Palau, Panama, Paraguay, Peru, Saint Helena, Saint Lucia, Saint Vincent & the Grenadines, Samoa, Serbia, South-Africa, Suriname, Thailand, Tonga, Turkey, Turkmenistan, Venezuela, Wallis and Futuna.

⁹ The United Kingdom ceased to be an EU Member State on the 31 of January 2020. Pursuant to the Withdrawal Agreement concluded between the EU and the UK, references to the eligibility of 'Member States' for participation in programmes under the current 2014-2020 MFF and the EDFs also cover the United Kingdom (Article 127(6), Article 137 and Article 152(1) Withdrawal Agreement).

APPENDIX 8 : OVERSEAS COUNTRIES AND TERRITORIES¹⁰

Anguilla (UK), Aruba (NL), Bermuda (UK), Bonaire (NL), British Antarctic Territory (UK), British Indian Ocean Territory (UK), British Virgin Islands (UK), Cayman Islands (UK), Curaçao (NL), Falkland Islands (UK), French Polynesia (FR), French Southern and Antarctic Territories (FR), Greenland (DK), Montserrat (UK), New Caledonia and Dependencies (FR), Pitcairn (UK), Saba (NL), Saint Barthelemy (FR), Saint Helena, Ascension and Tristan da Cunha (UK), Sint Eustatius (NL), Sint Maarten (NL), South Georgia and South Sandwich Islands (UK), St. Pierre and Miquelon (FR), Turks and Caicos (UK), Wallis and Futuna Islands (FR).

APPENDIX 9 : OECD MEMBER STATES

Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

Australia, Canada, Chile, Iceland, Israel, Japan, Korea, Mexico, New Zealand, Norway, Switzerland, Turkey, United States of America.

APPENDIX 10 : G20 MEMBER DEVELOPING COUNTRIES

Argentina, Brazil, China, India, Indonesia, Mexico, South-Africa, Turkey.

APPENDIX 11 : ENI PARTNER COUNTRIES AND TERRITORIES

Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Republic of Moldova, Morocco, occupied Palestinian territory (oPt), Syria, Tunisia, Ukraine.

APPENDIX 12 : ACP COUNTRIES****Africa:***

*South Africa**, Angola, Benin, Botswana, Burkina Faso, Burundi, Central African Republic, Cameroon, Cabo Verde, Chad, Comoros Islands, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Equatorial Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius, Mauritania, Mozambique, Namibia, Niger, Nigeria, Uganda, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, Sudan, , Tanzania, Togo, Zambia and Zimbabwe.*

Caribbean:

Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Surinam, Trinidad and Tobago.

Pacific:

Cook Islands, East Timor, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, the Solomon Islands, Western Samoa, Tonga, Tuvalu, Vanuatu.

****** *While natural and legal persons established in South Africa are eligible to participate in procedures financed by the 10th/ 11th EDF, South Africa cannot be a beneficiary of contracts financed by the 10th/11th*

¹⁰ OCTs listed in Annex II to the TFEU having special relations with the United Kingdom are covered by the scope of the EU-UK Withdrawal Agreement. Therefore, pursuant to the EU-UK Withdrawal Agreement, Union law as referred to in Articles 137 WA therefore includes the rules on financing of OCTs and eligibility under the current 2014-2020 MFF and the EDFs (Article 3(1)(e), Article 127(6), Article 137 and Article 152(1),(3) Withdrawal Agreement).

EDF.

** Cotonou Partnership Agreement of 23 June 2000 (as amended by the provisional application of Decision No 1/2000 of the ACP-EC Council of Ministers of 27 July 2000, Decision No 1/2000 of the ACP-EC customs cooperation committee of 18 October 2000, Decision No 1/2001 of the ACP-EC customs cooperation committee of 20 April 2001, Decision No 2/2001 of the ACP-EC customs cooperation committee of 20 April 2001, Decision No 3/2001 of the ACP-EC customs cooperation committee of 10 May 2001, Decision No 4/2001 of the ACP-EC customs cooperation committee of 27 June 2001, Decision No 5/2001 of the ACP-EC customs cooperation committee of 7 December 2001, Decision No 2/2002 of the ACP-EC customs cooperation committee of 28 October 2002, Decision No 1/2003 of the ACP-EC Council of Ministers of 16 May 2003, Council Decision (EC) of 19 December 2002, Decision No 1/2004 of the ACP-EC Council of Ministers of 6 May 2004, Decision No 2/2004 of the ACP-EC customs cooperation committee of 30 June 2004 and Decision No 4/2005 of the ACP-EC customs cooperation committee of 13 April 2005).*

2.1. Site

The site location is indicated in the Drawings.

2.2. Inspection of site

The availability of above data and drawings do not relieve the Contractor of his responsibility to inspect the Site for further investigations required for design or execution of the Works.

The Contractor is recommended to acquaint himself with the site locations. He shall assess the presence of all visible structures or obstacles, rock piles and ranges, trees, steep slopes, conditions of track roads, etc. The Contractor shall ascertain that the equipment he intends to propose is perfectly adapted to operate fully and satisfactorily under the topographical conditions of the site. He shall take into consideration all the above factors while pricing in the Bill of Quantities.

2.3. Access to site

- The Contractor shall give notice to the Employer prior to shipment and delivery of equipment and supplies to the site. The Employer shall grant possession of site to the Contractor as directed by the Project Manager taking into consideration the programme of work.
- The Contractor shall give notice to the Project Manager prior to commence work.
- The Contractor shall be responsible for the reinstatement of existing roads if same were disturbed/damage at respective site and shall also be responsible for safe and easy passage of vehicles on the existing track roads.

2.4. CEB Supply

Electricity point is available nearby the site of work. Application for a new electricity supply shall be done by the WUCS.

The Contractor will take delivery of the meter from the CEB and allow for all that is necessary to erect, support and connect these instruments. The contractor will allow in his Price for assistance to the CEB for connections to the main switchboard.

2.5. Clearance of site

Site clearance shall be carried out over the areas to be occupied by the works and for working space and shall consist for removal of other vegetation and the grubbing out of all roots and also rocks and boulders. Topsoil so removed shall be kept aside for reinstatement.

2.6. Site to be tidy

The site shall be maintained in a neat, tidy and healthy condition, and the Contractor shall remove all waste, debris and unwanted materials and other litter from site upon completion of works.

2.7. Safety on site

The Contractor shall adhere to all rules and regulations regarding Health and Safety of personnel as directed by the OSHA 2005 & regulations, the Irrigation Authority Safety and

Health Officer. The Contractor shall take all necessary steps to ensure that the works are done in an orderly manner and that safety precautions are enforced to avoid accidents to the personnel of the successful bidder and to other parties working on Site.

2.8. First aid outfit

The Contractor shall provide and maintain on site in readily available positions near the sites of work adequate first aid outfit and have experienced first aid man available for attending minor accidents. Fire extinguishers shall also be kept on site.

2.9. Maintenance of services and structures

When service or structure is encountered on, over, under, in or through the Site during the performance of the Contract, the Contractor shall make a record of the location and detailed description of such service or structure and shall send the same forthwith to the Engineer.

Where permanent diversion or support of such service or structure is rendered necessary as the unavoidable result of the construction of the Works in accordance with the Contract, the Engineer - after consultation with the Employer will instruct the Contractor as to the diversion or support to be provided and the Contractor shall be paid the costs thereof in accordance with Clause 40 of the General Conditions of Contract.

2.10. Site records

The Contractor shall make records of the position and extent in the excavations of every type of service, stratum and ground water encountered during the construction of the Works and of samples taken and results of tests of such materials and water.

The Contractor shall also make records of the labour, plant and material employed on site. The plant schedules and labour time sheets shall be submitted for approval to the Project Manager's Representative on every working day.

The records shall be prepared in a form to the approval of the Project Manager and shall be submitted to him in duplicate as soon as practicable after the events and observations which they record.

2.11. Services provided to Project Manager

Assistance to the Project Manager

The Contractor shall make available such labour and materials as the Project Manager may require for survey work in connection with the works. The Contractor shall provide at his own expense any necessary tackle, test equipment, access, labour, staff and any other thing the Project Manager may reasonably require in order that he may conveniently and quickly carry out such inspections as he deems necessary at any time during the execution of the works and during the Defects Liability Period.

2.12. Inspections by Project Manager during defects liability period

The Project Manager will give the Contractor due notice of his intention to carry out any inspections during the Defects Liability Period and the Contractor shall thereupon arrange for an authorised representative acceptable to the Employer to be present at the times and dates named by the Project Manager. This representative shall render all necessary assistance and take note of all matters and things to which his attentions is directed by the Project Manager .

2.13. Progress photograph (Not applicable)

The Contractor shall provide progress photographs, illustrating each stage of the work being effected to the Project Manager. Photos shall be colored and of minimum size A6 (105mm*148mm). Photos are to be supplied in hardcopy and soft copy in USB pen drive. The location, date when taken and the direction in which the camera was facing shall be inscribed on the back of each photograph. The photographs shall be submitted to the Engineer in an album.

2.14. Notice of operation

The Contractor shall give full and complete written notice of all important operations to the Project Manager to make such arrangements as the Project Manager may consider necessary for the inspection of works and for any other purpose. The Contractor shall not start any important operation without the written approval of the Project Manager.

2.15. Progress meetings

The Contractor's Contract Manager shall attend regular progress meetings on Site which will be convened by the Project Manager. The Contractor shall also attend any other meetings requested by the Project Manager.

2.16. As-built drawings (Not Applicable)

The number of copies and date by which “as built” drawings are to be submitted by the Contractor are as follows:

a. Draft:

One (1) hardcopy to be submitted one (1) week before requesting the Completion Certificate. The Project Manager shall scrutinize adequacy of submission and may request modification/corrections prior to its approval.

b. Final:

The Contractor shall supply three (3) hard copies and one (1) soft copy on USB pen drive in AutoCAD drawing format of the as built drawings of the project and shall comprise of:

- The greenhouse items and equipment installed;
- All container details and pipe installation;
- Other drawings as requested by the Project Manager.

2.17. Sign boards

The contractor shall erect 1 sign board at the start of construction works as detailed in figure 1.0 and at locations to be indicated on site. The boards shall be weatherproof and mounted on stout post so as to withstand strong winds associated with cyclones.

The boards shall indicate relevant information about the project such as the Project Name, the Funding Agency, the Employer, the Project Manager and the Contractor, with lettering shown in blue on white background and in sizes not less than 50mm high.

The Contractor shall erect safety sign boards at the start of construction works and at locations to be indicated on site.

GCCA+ Flagship Initiative “Supporting Climate Change Smart Agriculture for Small Holders in the Republic of Mauritius	
Project Name:	Supply, Installation, Testing and Commissioning of Three (3) Greenhouses with ancillaries Contract No: EU-IA/GH -Apr 23/04
Employer:	IRRIGATION AUTHORITY
Financed by:	EUROPEAN COMMISION AND GOVERNMENT OF THE REPUBLIC OF MAURITIUS
Contract Value:	-
Supervision:	IRRIGATION AUTHORITY
Contractor:	-

Figure 1.0: Signboard

3. Earthworks

3.1 Notice to be given before commencing earthworks

The Contractor shall give to the Project Manager at least seven days written notice of his intention to commence earthworks on any part of the Site so as to enable the Project Manager to be furnished with all ground levels and other particulars he may require for the purpose of measurement. The earthworks shall not be commenced until written approval has been received by the Contractor from the Project Manager.

The Project Manager shall have the right to direct the Contractor as to the length or location of portions of excavation which shall be opened at any one time, in addition to the normal limits to lengths of open excavation imposed by the local authorities.

3.2 Excavation generally

Excavation shall be made in open cutting unless tunnelling or heading is specified or approved by the Project Manager and shall be taken out as nearly as possible to exact dimensions and levels so that the minimum of infilling will afterwards be necessary.

It shall be the Contractor's responsibility at all times to ensure the stability and safety of excavations and the Contractor shall take all measures necessary to ensure that no collapse erosion or subsidence occurs.

The sides of all excavations shall be kept true and shall where necessary be adequately supported by means of timber, steel or other type struts, walling, poling boards, sheeting, bracing and the like. All supports shall be of sound design and construction and shall be sufficiently watertight to permit excavation, concreting and other work to be completed satisfactorily.

Excavations shall be kept free from water and it shall be the Contractor's responsibility to construct and maintain temporary diversion and drainage works and to carry out pumping and to take all measures necessary to comply with this requirement.

If the Contractor encounters any unsound material in the formation, he shall immediately inform the Project Manager who will instruct the Contractor in writing as to whether or not the said material shall be treated as unsound. Unsound material shall be removed and disposed of to the satisfaction of the Project Manager. Unless otherwise specified or ordered by the Project Manager, the voids so formed shall be filled with concrete Grade 10 in the formations to structures, with the same material as that which comprises the fill in the formation to embankments, with compacted granular material in the formation of pipelines and with concrete Grade 10 filling approved by the Project Manager in the formation to roads. If, in the opinion of the Project Manager, the unsoundness is due to failure of the Contractor to comply with the Specification including keeping the excavation free from water, the cost of dealing with the unsound material shall be borne by the Contractor.

The Contractor shall not deposit excavated materials on public or private land except where directed by the Project Manager in writing or with the consent in writing of the relevant authority or of the owner or responsible representative of the owner of such land and only then in those places and under such conditions as the relevant authority, owner or responsible representative may prescribe.

4. Concrete for Minor works

4.1. Scope

This specification deals with reinforced and unreinforced concrete works, formwork and falseworks of any kind, and the reinforcement. It applies to structural concrete in platforms, tie columns, ground beams etc.

4.2. Concrete

The concrete ingredients, manufacture, testing and workmanship shall conform to the recommendations of Sections 6 and 7 of BS 8110 Part 1 & 2.

The grade number refers to the 28-days characteristic strength in N/mm².

The concrete composition shall generally conform to the requirements of the prescribed mix design, as set out in BS 8110 Part 1 & 2. Small quantities of concrete may with the approval of the Engineer be batched in accordance with BS 8110 Part 1 & 2.

5. Miscellaneous Works

5.1. Cement mortar

Cement, water and aggregate used for mortar, rendering, grout, screeding and other construction work shall be in accordance with Section 5 of BS 8110 Part 1 & 2.

Cement mortar for block work and rendering shall consist of ordinary Portland cement and approved natural sand mixed by hand or an approved mechanical mixer.

The cement and sand shall first be mixed dry until the cement colour can no longer be distinguished from the sand in any part of the mass and the whole shall then be uniformly wetted by approved means while undergoing further mixing. The water content shall be just sufficient to ensure mixing. The water content shall just be sufficient to ensure a dense mortar of stiff consistency and adequate workability to permit trowelling or floating into place. The workability of cement mortar to be used for rendering may be improved by adding an approved plasticiser in the proportions recommended by the supplier of the plasticiser.

Mortar shall be prepared and used as rapidly as possible after mixing. Under no circumstances shall any mortar be used that has stiffened by commencing to set. Fresh mortar shall not be mixed with mortar prepared earlier and all batches shall be used entirely separately.

5.2. Blockwork

Precast concrete blocks for block works shall be cellular block or hollow type as indicated in the Price Activity Schedule and manufactured from ordinary Portland cement and aggregates complying with BS6073 Part 1 and 2 "Specification for the precast concrete masonry units". The concrete block shall be cured for not less than 28 days before they are used in the works. The Contractor shall supply a certificate from the supplier for each consignment of block received to the effect that the blocks meet the requirements and strength of the latest relevant BS. No broken block or block of improper quality shall be used.

The blocks to be used under this contract is proposed as specified in the Schedule of Prices.

The compressive strength of blocks shall be in accordance with BS6073 Parts 1 and 2. The minimum compressive strength of blocks shall be as specified below.

Structural block work units: 3.5N/mm²

Mortar to be used for block laying shall be composed of 1 part of cement to 3 part of sand. The cement and sand shall first be mixed dry until the cement colour can no longer be distinguished from the sand in any part of the mass. The latter shall then be uniformly wetted by approved means while undergoing further mixing. The water content shall just be sufficient to ensure a dense mortar of stiff consistency and adequate workability to permit troweling and floating into place.

Every batch of mortar shall be used within 30 minutes of mixing. No partially or wholly set mortar will be allowed to be used or re-mixed.

Laying of blocks

All blocks shall be wetted with water before being bedded and jointed to minimize absorption of water from the mortar and tops of walls where work has been left off shall be thoroughly wetted and raked back before block laying. Block shall be bonded in accordance with the best constructional practice with vertical joint staggered. Where required for bond, blocks shall be carefully cut to size. Laying of blocks shall be carried up evenly in courses, no portion shall rise more than one metre above adjacent portion and at such changes in levels work shall be stepped back. Courses shall be properly levelled and perpendicular joints, quoins, and angles shall be plumbed as the work proceeds. No joint, horizontal or vertical shall exceed 12 mm thickness. Joint shall be raked out for rendering.

Blockwork and concrete columns shall be bonded by approved galvanised metal ties cast into the concrete spaced at alternate courses and extending not less than 150mm into the block joints.

The Contractor shall protect and keep clean the facework.

5.3. Rendering

Rendering shall be carried out in a mix consisting of one part cement and four parts of sand gauged by dry volume unless otherwise directed by the Engineer. Rendering shall be in two coats of 20mm total thickness and is to be finished with a wood float.

The undercoat which shall have a thickness of 12mm shall be roughened to provide an adequate key for the finishing coat.

Surfaces to receive rendering shall be thoroughly cleaned. Concrete surfaces shall be roughened either by hand by treating the formwork with an approved retarder and wire brushing after removing the formwork whilst the concrete is still green to form an adequate key or by treating with an approved cement bonding agent in accordance with the manufacturer's recommendation. Otherwise, the surfaces shall be well hacked to form a good key. The joints of block or stone walls shall be raked. All surfaces shall be dampened as necessary, and the rendering applied immediately afterwards.

The finishing coat shall be applied with a wood skimming float and afterwards trimmed with a feather edge rule to a true and even surface. A hollow fillet shall be formed at internal angles. Any inequalities shall then be thoroughly scoured with a hand float and filled in. Overworking of the surface shall be avoided to reduce the tendency of surface crazing.

All rendering shall be protected from the sun and rain by adequate and suitable coverings and the rendering shall be kept damp while setting. Any cracks or parts which sound hollow when tapped or other defects in the rendering shall be cut out and re-rendered.

5.4. Steelwork - general

All steel excluding pipes and pipe fittings shall be hot dipped galvanised in accordance with Clause 5.5 of this Specification after fabrication.

Where welding, cutting or drilling is carried out on Site the surrounding area shall be thoroughly cleaned by grinding, wire brushing or other method approved by the Engineer. The area shall then be painted accordingly as specified under this specification.

5.5. Galvanising

Where steel or wrought iron is specified to be galvanised, the galvanising shall be executed after all fabrication has been completed. Galvanising method shall be in accordance with British standard or equivalent standards. Edges shall be clean and surface bright.

5.6. Painting

Unless otherwise specified, the workmanship and quality of materials for painting shall comply with BSCP 231.

The Contractor shall regard the preparation of surfaces to be painted as work of fundamental importance.

5.7. Galvanised Surfaces

All surfaces shall be thoroughly cleaned of all scale, and every particle of rust, dirt or grease removed by scrapers, wire brushes, or other approved method. Painted surfaces or bituminous surfaces shall be removed. Galvanised surfaces shall be treated before painting with an approved etching primer (other than a mordant containing copper), which shall be supplied in two parts for mixing at Site in accordance with the manufacturer's instructions. The surface shall afterwards be thoroughly rinsed with clean water and allowed to dry.

The metal surfaces shall be painted with one undercoat a high-quality rust inhibitive primer approved by the Project Manager and at least 2 coats of bitumen paint as per instruction of the manufacturer to the satisfaction of the Project Manager. Each coat of paint must be allowed to dry before another coat is applied.

Application of primer and bitumen paint shall be as per instruction of Manufacturer.

6. Design, materials and workmanship**a. Design**

The Contractor shall design the materials to comply with the duties stated in this Specification, to the Project Manager's satisfaction and in accordance with relevant standards and it shall be such as will facilitate inspection, cleaning, maintenance and repair and ensure satisfactory operation under all conditions.

The general mechanical design of the products and particularly that of the seals, and other wearing parts, shall be governed by the need for long, trouble-free operation without frequent maintenance or attention being necessary.

b. Standards of Workmanship

The standard of workmanship shall be of the best quality and to the satisfaction of the

Engineer and shall comply with the requirements of the standards or codes of practices issued by any recognized organisations.

The Contractor may propose other internationally recognised codes of practice or regulations equivalent to those specified for approval by the Project Manager. Such approval to these alternative standards must be obtained prior to start work under this Contract. Two copies of such alternatives standards are to be supplied in English to the Engineer when required.

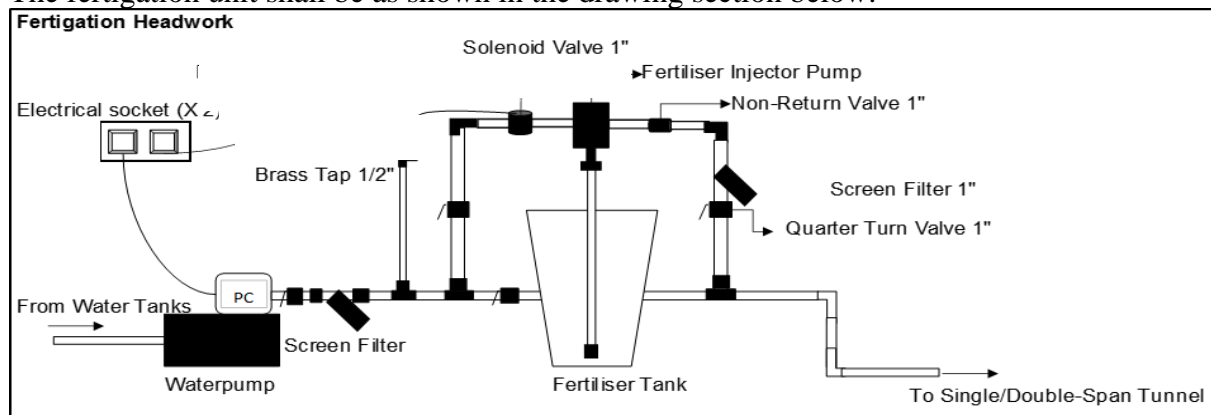
Installation shall be carried out to good standards of workmanship and all equipment, materials and fittings shall be new and according to the specifications. Any other equipment, materials and fittings required for the works shall be proposed by the Contractor. Where no details have been provided, products shall be manufactured to the British Standards applicable to the particular product.

7. Drip System

The in-field irrigation system shall be suitable for the irrigation of food crops mainly. The trickle irrigation laterals shall be durable, leak-proof and shall not be susceptible to deterioration by ants and termites.

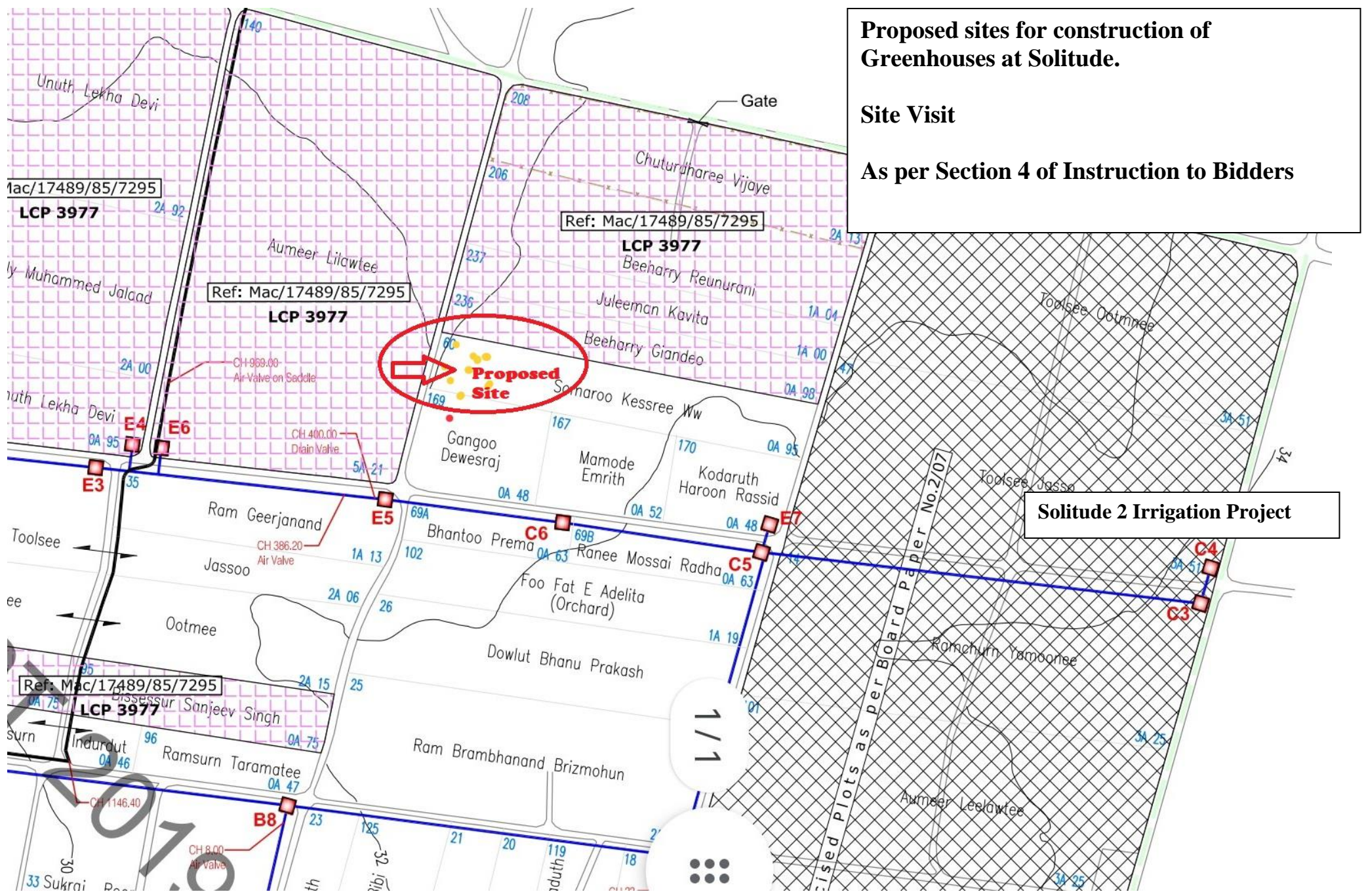
8. Fertigation system

The fertigation unit shall be as shown in the drawing section below.



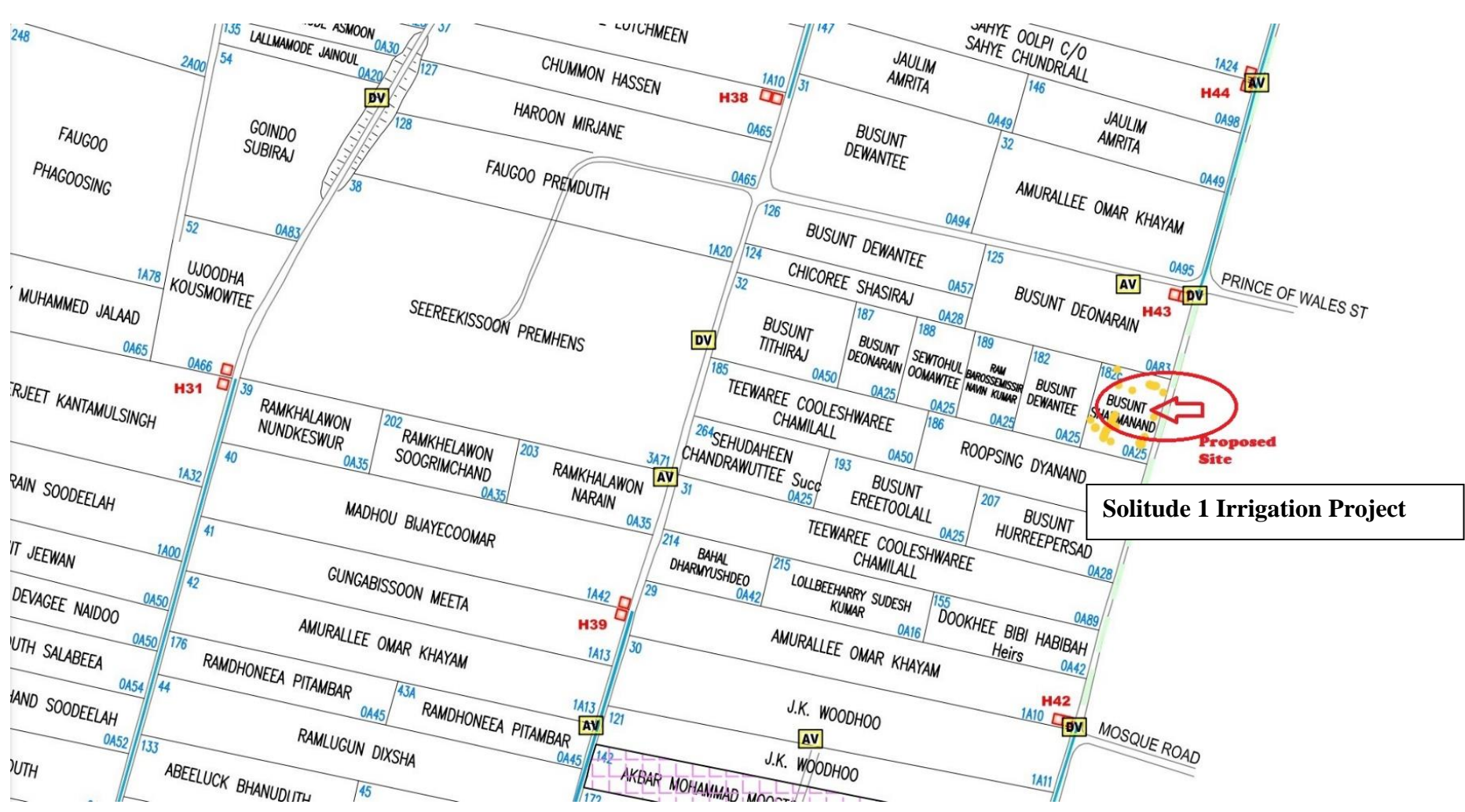
9. Operation and Maintenance Manuals

The Contractor shall supply to the Project Manager with the material, plant or/and equipment, all the manuals and drawings describing the recommended procedures for their assemblies, dismantling, installation and operation. These documents shall give the dimensions, weight and space required for the operation and maintenance of the said plant and equipment. A draft of these documents shall first of all be submitted for approval by the Project Manager one month prior to delivery to Site. After approval by the Project Manager, the Contractor shall submit within two (2) weeks two (2) copies of the approved documents suitably bound under hard cover to the Project Manager.



Proposed sites for construction of Greenhouses at Solitude.
Site Visit
As per Section 4 of Instruction to Bidders

Solitude 2 Irrigation Project



Solitude 1 Irrigation Project

Section IV: General Conditions of Contract and Particular Conditions Of Contract

Any resulting contract shall be placed by means of a Letter of Acceptance and shall be subject to the General Conditions of Contract (GCC),(ref: W/GCC10/12-21), for the Procurement of Works (available on website ppo.govmu.org) except where modified by the Particular Conditions of Contract below.

Procurement Reference Number: EU-IA/GH-Apr23/04

The clause numbers given in the first column correspond to the relevant clause number of the General Conditions of Contract.

Particular Conditions of Contract

A. General	
GCC 1.1 (r)	The Employer is Mr G. Seetah, General Manager, Irrigation Authority, 5 th Floor, Fon Sing Building, 12, Edith Cavell Street, Port Louis.
GCC 1.1 (v)	The Intended Completion Date for the whole of the Works shall be 12 weeks from the Start Date of Works specified in the order to commence.
GCC 1.1 (y)	The Project Manager is to be nominated by the Employer.
GCC 1.1 (aa)	The Site is located at Solitude and is defined in drawings No. EU-IA/GH-Apr23/01
GCC 1.1 (dd)	“The Start Date shall be 2 days from the issuance of the Order to commence Works.”
GCC1.1 (hh)	The Works consist of the Supply, installation, testing and commissioning of three (3) greenhouses with ancillaries
GCC 2.2	Sectional Completions are Not Applicable
GCC 2.3(i)	The following documents also form part of the Contract: Pre – award and post-award correspondences, insurance policies, Programme of Works and other technical documents submitted by bidder.
GCC 3.1	The language of the contract is English The law that applies to the Contract is the law of Mauritius.

GCC 5.1	The Engineer shall not delegate any of his duties and responsibilities.
GCC 8.1	Schedule of other contractors: Not Applicable
GCC 13.1	<p>Except for the cover mentioned in (d)(i) hereunder, the other insurance covers shall be in the joint names of the Contractor and the Employer and the minimum insurance amounts shall be:</p> <ul style="list-style-type: none"> (a) for the Works, Plant and Materials: Contract price + 15 % (b) for loss or damage to Equipment: Cost of Equipment + 15 % of its value. (c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract: MUR 1,000,000 (One million rupees). (d) for personal injury or death: <ul style="list-style-type: none"> (i) of the Contractor’s employees: As per Laws of Mauritius (ii) of other people: MUR 2,000,000 (Two million rupees). This cover shall be in the joint names of the two parties covering any this party and extended to the site representatives of the Irrigation Authority. (e) for loss or damage to materials on-site and for which payment have been included in the Interim Payment Certificate, where applicable. <p>The Contractor shall choose to take the insurance covers indicated above as separate covers or a combination of the Contractor’s All Risks coupled with the Employer’s liability and First Loss Burglary, after approval of the Employer. All insurance covers shall be of nil or the minimum possible deductibles at sole expense of the contractor. The draft insurance shall be submitted within two days from award.</p>
GCC 14.1	<p>There is no site data available for the project. Bidders are however advised to visit the site prior to submission of bid. They should acquaint themselves with the nature of the site, extent of the work, means of access, general nature of the soil and all other matters which may influence the preparation and execution of their bid. All costs incidental thereof shall be at the Bidder’s own expenses.</p> <p>No claim due to ignorance of these factors as mentioned in the preceding paragraph shall be entertained from the Contractor.</p>
GCC 20.1	<p>The Site Possession Date shall be stated by the Project Manager in the Order to Commence Work and based on the Programme of Work to be approved by the by the Project Manager.</p> <p>The Contractor shall be responsible for obtaining a site for</p>

	his camps, offices, stock of materials, constructional plant and other temporary works and for making all payment in connection therewith.
GCC 23.1 & GCC 23.2	Appointing Authority for the Adjudicator: No Adjudicator shall be appointed for this Contract.
GCC 24.	<p>In case a dispute of any kind arises between the Employer and the Contractor in connection with, or arising out of, the contract or the execution of works or after completion of works and whether before or after repudiation or other termination of Contract, including any dispute as to any opinion, instruction, determination, certificate or valuation of the Employer’s Representative, the matter in dispute shall, in the first place, be referred in writing to the employer’s representative, with a copy to the other party.</p> <p>The Employer and the Contractor shall make every effort to resolve the dispute amicably by direct informal negotiation. If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation,</p> <p>then either the Public Body or the Contractor may give notice to the other party of its intention to refer the matter to</p> <p>“ the competent courts of Mauritius”</p>
B. Time Control	
GCC 25.1	The Contractor shall submit for approval a Program for the Works within 2 days from the date of the Letter of Acceptance.
GCC 25.3	<p>The period between Program updates is fourteen (14) days.</p> <p>The amount to be withheld for late submission of an updated Program is MUR 2,000 (Two thousand rupees)</p>
C. Quality Control	
GCC 33.1	The Defects Liability Period is: six (6) months calculated from the date of completion of the works certified by the Project Manager.
GCC 34.1	<p>Delete sub-clause 34.1 and replace by the following:</p> <p>Should any defect arise during the contractual period and up to the end of the Defects Liability Period and the Contractor fails to correct the Defect within the time specified in the Project Manager’s notice, this shall constitute a breach of the Contractor’s obligations under the contract. The Project Manager shall assess the cost of having the defect corrected and recover the money from monies due to the contractor or from the Performance Security.</p>
GCC 39.7	Payment shall be made as per progress of works.

D. Cost Control	
GCC 40.1	Amend clause 40.1 by replacing 21 days by 7 and 42 days by 28 days.
GCC 41.1 (I)	<p>The term “exceptionally adverse weather conditions” is hereby defined as any one of the following events:</p> <ul style="list-style-type: none"> (i) 100 mm rainfall or above recorded in one day of the nearest rain station; (ii) An official declaration of “Torrential Rain” by meteorological Department of Mauritius; and (iii) Cyclone warning Class II or above.
GCC 43.1	The currency of the Employer’s country is: Mauritian Rupees.
GCC 44.1	The Contract is not subject to price adjustment. It shall be a fixed price which shall not be revised or adjusted for any fluctuation in the cost of inputs.
GCC 44.5	GCC Clause 45 is not applicable.
GCC 46.1	<p>The liquidated damages for whole of the works shall be MUR 2,000 (Two thousand rupees) per calendar day beyond the Intended Completion Date.</p> <p>The maximum amount of liquidated damages for the whole of the works is 10 % of the Contract Price.</p>
GCC 47.1	The Bonus for the whole of the Works is not applicable.
GCC 48.1	<p>An amount representing 15 % of the Awarded Contract Price shall be released against a Bank Guarantee (in the format given in Section VIII) for mobilisation of plant and equipment. The Advance Payment shall be paid to the Contractor not later than 7 days after signature of the Contract Agreement.</p> <p>The advance payment shall be repaid by the Contractor to the Employer by deductions from each interim certificate issued by the Project Manager in terms of these conditions until full repayment of the advance. The amount of each deduction shall be calculated progressively provided that the total of the advance payment is reimbursed when the gross value of the works certified reaches 90 % of the value of the works.</p>

GCC 49.1	The Performance Security amount is 10 % of the Bid Price excluding VAT.
E. Finishing the Contract	
GCC 56.1	The date by which operating and maintenance manuals are required is 2 weeks before the commissioning of the project. The date by which “as built” drawings are required is 2 weeks after the issuance of the completion certificate.
GCC 57.2 (g)	The maximum number of days is: 60 days
GCC 59.1	The percentage to apply to the value of the work not completed, representing the Employer’s additional cost for completing the Works, is 25 % of the Contract Price.

Section V - Contract Forms

Performance Security

.....*Bank/Insurance Company's Name and Address of Issuing Branch or Office*.....

Beneficiary:*Name and Address of Public Body*.....

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..... with you, for the execution of..... *[name of Contract and brief description of Works]*..... (hereinafter called "the Contract").

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

At the request of the Contractor, we *[name of Bank/Insurance Company]*
.....hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[amount in figures (amount in words)]* 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 and returned to us not later than twenty- one days from the date of issuance of the Defects Liability Certificate, calculated based on a copy of such Certificate which shall be provided to us, or on the.....day of,, whichever occurs first. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

.....**Seal of bank/Insurance Guarantee and**

Signature(s).....

Advance Payment Security

[Bank’s/ Insurance Company’s Name, and Address of Issuing Branch or Office]

Beneficiary: *[Name and Address of 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 with you, for the execution of.....*[name of contract and brief description of Works]*..... (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 figures]* ¹. (. *[amount in words]*.....) is to be made against an advance payment guarantee.

At the request of the Contractor, we *[name of the Bank/Insurance Company]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[name of the currency and amount in figures]* *. (. *[amount in words]*) 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 used the advance payment for purposes other than the costs of mobilization in respect of the Works.

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/Insurance Company]*

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 eighty (80) percent of the Contract Price has been certified for payment, or on the . . . day of², whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

. ***[Seal of Bank/Insurance Company and Signature(s)]***

Note –

All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.

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 a freely convertible currency acceptable to the Employer.

2 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 [six months][one 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.”

Letter of Acceptance

[on letterhead paper of the Employer]

..... *[date]*

To: *[name and address of the Contractor]*

Subject: *[Notification of Award Contract No]*

This is to notify you that your Bid dated *[insert date]* for execution of the
. . . . *[insert name of the contract and identification number, as given in the Appendix to Bid]* for the Accepted Contract Amount of .Rs *[insert amount in numbers and words and name of currency]*, exclusive of VAT, as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by *(insert name of Public Body)*.

You are requested to furnish the Performance Security in accordance with the General Conditions of Contract, using for that purpose of the Performance Security Form included in Section V (Contract Forms) of the Bidding Document.

Authorized Signature:

Name and Title of Signatory:

Name of Agency:

Attachment: Contract Agreement

Contract Agreement

THIS AGREEMENT made theday of, between
. *[name of the Employer]*. (hereinafter “the Employer”), of the one part, and
. . *[name of the Contractor]* (hereinafter “the Contractor”), of the other part:

WHEREAS the Employer desires that the Works known as*[name of the Contract]*.
.should be executed by the Contractor, and has accepted a Bid by the Contractor for the
execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
 - (a) the Letter of Acceptance
 - (b) the Bid
 - (c) the Addenda Nos *[insert addenda numbers if any]*.
 - (d) the Appendix to the General Conditions of Contract
 - (e) the General Conditions of Contract;
 - (f) the Specification
 - (g) the Drawings; and
 - (h) the completed Schedules,
 - (i)
3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Mauritius on the day, month and year indicated above.

Signed by:
for and on behalf of the Employer

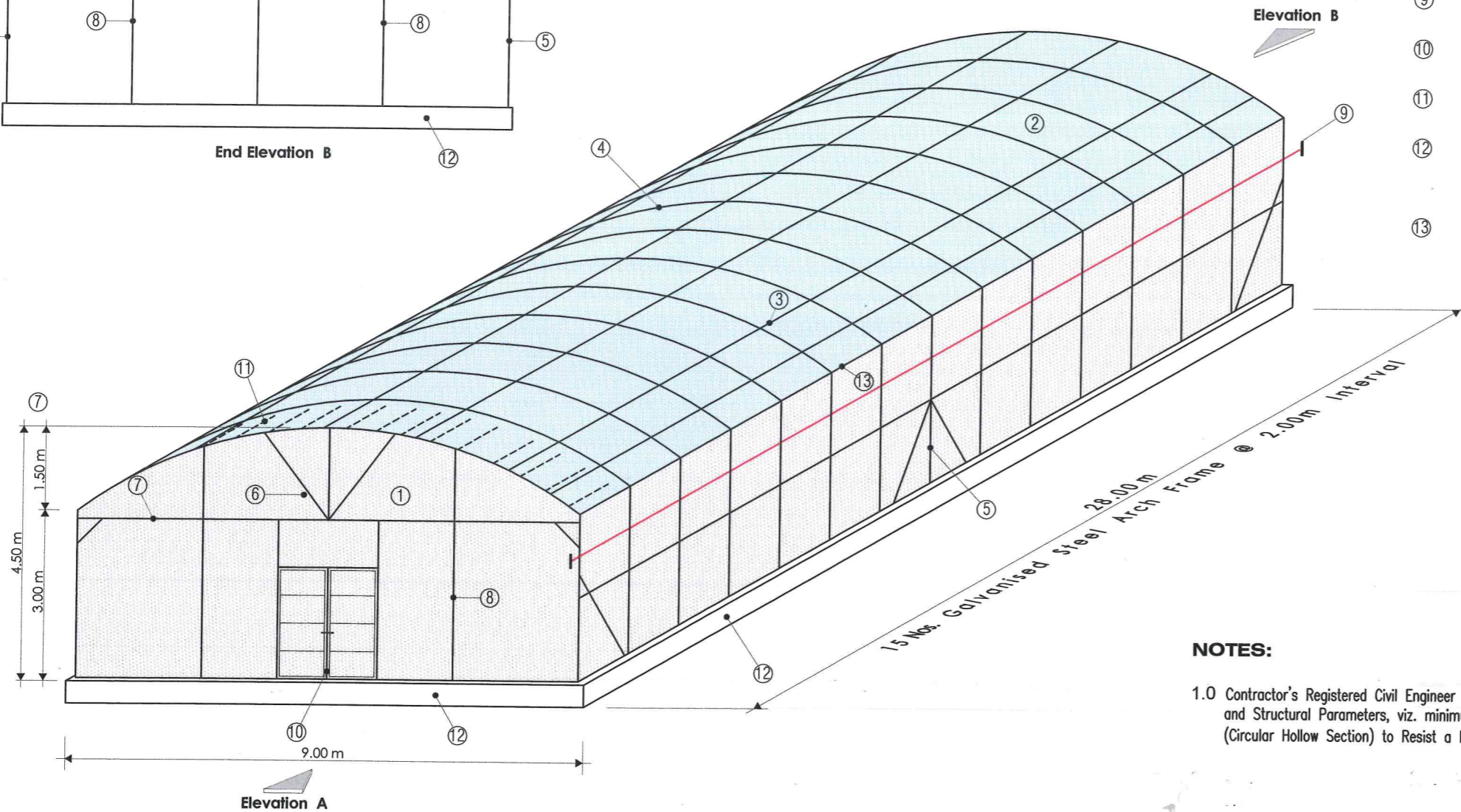
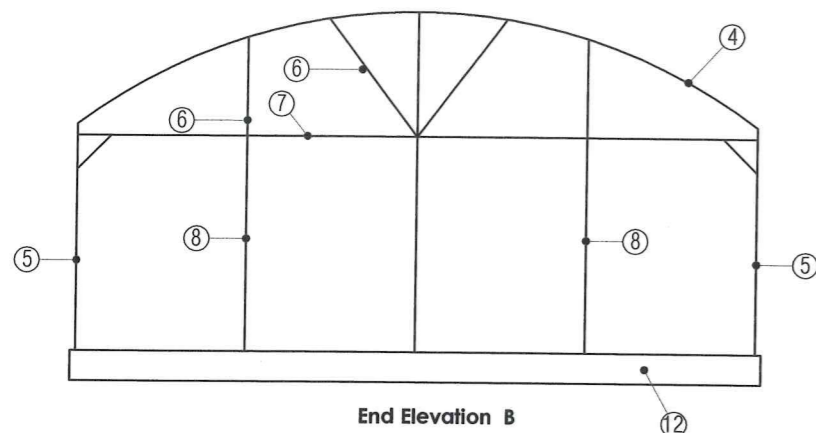
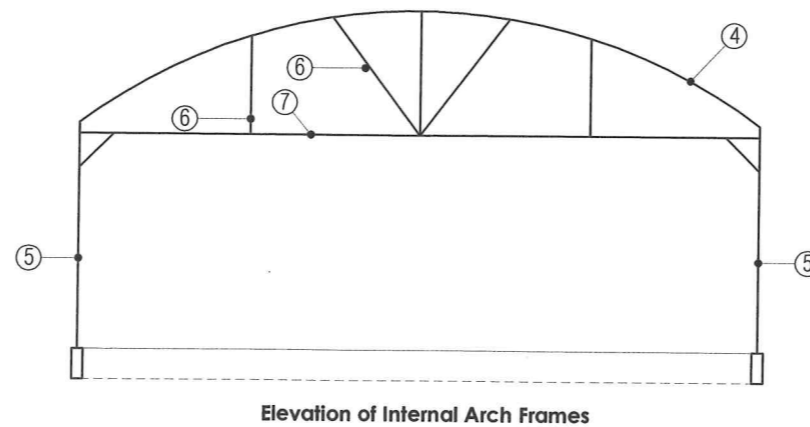
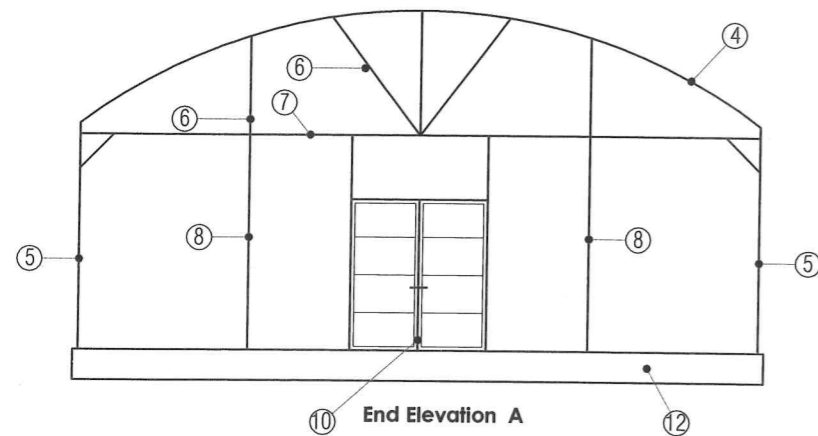
Signed by:
for and on behalf the Contractor

in the
presence of:

in the
presence of:

Witness, Name, Signature, Address, Date

Witness, Name, Signature, Address, Date



LEGEND

- ① Insectproof Cloth
- ② UV-Treated Plastic Sheet 180-200 micro min. Thickness
- ③ Galvanised Steel Purlin of Circular Hollow Section 1" Diameter
- ④ Galvanised Steel Circular Hollow Section Arch Frames 1 1/4"
- ⑤ Galvanised Steel Circular Hollow Section Side Vertical Post 1 1/2"
- ⑥ Galvanised Steel Circular Hollow Section Bracings 1 1/4"
- ⑦ Galvanised Steel Circular Hollow Section Horizontal Cross Tie 1 1/4"
- ⑧ Galvanised Steel Circular Hollow Section End Vertical Post 1 1/2"
- ⑨ Two Sides Manual Coiling Mechanism / Roll-Up Pipe of Circular Hollow Section 1 1/4"
- ⑩ Double Door 3.0m wide X 2.5m High. (Each door 1.5m x 2.5m)
- ⑪ Straining Wire 2.8-3 mm
- ⑫ Minimum 2 Courses of Concrete Blockwork 150mm Thick Complete with 125mm Thick Reinforced Concrete Plinth Beam. (Height of Peripheral Concrete Blockwall be 300mm minimum Above Ground)
- ⑬ Galvanised Steel Circular Hollow Section Horizontal Tie Post 1 1/4"

NOTES:

1.0 Contractor's Registered Civil Engineer Shall Design the Arch Greenhouse Steel Structure Under the Drawing Guidelines Showing the Size and Structural Parameters, viz. minimum Spacing of the Arch Steel Frame and Minimum Diameters of Structural Members, (Circular Hollow Section) to Resist a Maximum Cyclonic Wind Speed of 120 Km/Hr (3 Seconds Gusts)

SOURCE: Amended Version of **FAREI** Drawing

MARK	REVISION	DATE	DRAWN : W.R (S.T.D.O)	DESIGNED ...	PROJECT	TITLE
			SCALE : N.T.S	SURVEYED ...	<p>IRRIGATION AUTHORITY SHELTERED FARMING - Schematic Diagram EU-IA/GH-APR 23/04</p>	Isometric View of Greenhouses
			DATE : April 2023	CHECKED ...		DRG No. IA/EU/23/01
			FILE NAME : Shel...	APPROVED ...		ISSUE