



ಭಾ. ಕೃ. ಅನು. ಪ - ಭಾರತೀಯ ತೋಟಗಾರಿಕಾ ಸಂಶೋಧನಾ ಸಂಸ್ಥೆ  
ಹೆಸರಗಟ್ಟೆ ಲೇಕ್ ಪೋಸ್ಟ್, ಬೆಂಗಳೂರು-560 089

ಭಾ.ಕೃ.ಅನು.ಪ.- ಭಾರತೀಯ ಬಾಗವಾನಿ ಅನುಸಂಧಾನ ಸಂಸ್ಥಾನ

ಹೆಸರಗಟ್ಟೆ ಲೇಕ್ ಪೋಸ್ಟ್, ಬೆಂಗಳೂರು - 560 089

**ICAR-Indian Institute of Horticultural Research**

**Hesaraghatta Lake Post, Bengaluru - 560 089**

EPABX: 080-23086100 Extn: 218 & 217

FAX: 080-28466291 - Email: purchase.ihr@icar.gov.in



F.No.5-112-I/2022-23/SP/IIHR/

Dated: 24.01.2023

**NOTICE FOR INVITING TENDER THROUGH E-PROCUREMENT**

Online Bids are invited from interested firms under **Two bid system (Technical bid/financial bid)** for **I. Renovation of three numbers Polycarbonate Chamber at CTGC facility Block-VI (30mt x 06 mt side height 03mt and center height 04 mt) at ICAR-IIHR, Bangalore**, Manual bids will not be entertained.

Tender documents may be downloaded from e-procurement website of CPPP <https://eprocure.gov.in/eprocure/app> as per the schedule given in CRITICAL DATE SHEET as under:

**CRITICAL DATE SHEET**

<b>Tender No.</b>	<b>F.No.5-112-I/2022-23/SP/IIHR/</b>
Name of Organization	ICAR-INDIAN INSTITUTE OF HORTICULTURAL RESEARCH, Hesaraghatta Lake Post, Bangalore
Date and Time for Issue/Publishing	24.01.2023 at 12:00 PM
Document Download/Sale Start Date and Time	24.01.2023 at 12:00 PM
Bid Submission start Date and Time	24.01.2023 at 12:00 PM
Bid Submission End Date and Time	07.02.2023 at 03:00 PM
Date and Time for Opening of Technical Bids	09.02.2023 at 10:00 AM
Address for Communication	Admn. Officer (Store Purchase), IIHR, Hesaraghatta Lake Post, Bangalore

Sd/-

**CHIEF ADMINISTRATIVE OFFICER(Sr.Grade)**

**INSTRUCTIONS FOR ONLINE BID SUBMISSION**

1. The Tender form/bidder documents may be downloaded from the <https://eprocure.gov.in/eprocure/app>. **Online submission of Bids through Central Public Procurement Portal (<https://eprocure.gov.in/eprocure/app>) is mandatory.** Manual/Offline bids shall not be accepted under any circumstances.
2. Tenderers/bidders are requested to visit the website <https://eprocure.gov.in/eprocure/app> regularly. Any changes/modifications in tender enquiry will be intimated by corrigendum through this website only.
3. In case, any holiday is declared by the Government on the day of opening, the tenders will be opened on the next working day at the same time. The Council reserves the right to accept or reject any or all the tenders.
4. The interested Firms are required to deposit (in original) **EMD of Rs.51,000/- @ 2% of the estimated value of the work** in the shape of Demand Draft in favour of **THE DIRECTOR, ICAR, UNIT-IIHR payable at Bangalore** may be address to **Admn. Officer (Purchase), IIHR, Hessaraghatta Lake Post, Bangalore-560089** on or before **bid opening date and time as mentioned in the Critical Date Sheet.**
5. **Please note that only online Bids will be accepted. However hard copy of documents and technical brochures uploaded by the firm deposited to Admn. Officer (Purchase), IIHR, Hessaraghatta Lake Post, Bangalore-560089 on or before bid opening date and time as mentioned in the Critical Date Sheet.**
6. Bidders need not to come at the time of Technical as well as Financial bid opening at IIHR. They can view live bid opening after login on CPPP e-procurement portal at their remote end. If any dispute arises, Within Bengaluru Jurisdiction only.
7. The firms are also required to upload copies of the following documents for Technical eligibility and Evaluation:-

- **Technical Bid**

1. **Scanned copy of the documents Registered with PWD/CPWD/MES/Railways/PWD.**
2. **PAN Card copy**
3. **GST Number with Registration Certificate**
4. **Bank details of the firm.**
5. **Scanned copy of similar contracts to Government Departments.**
6. **Income Tax Returns for the last three years (2018-19, 19-20,20-21,21-22)**
7. **Profit and loss account & Balance Sheet which are audited & duly certified by the Chartered Accountant for the last three years.**

8. Turnover of the business should be **Rs.76.00 Lakhs** per year, to be certified by Chartered Accountant as per Balance Sheets used for ITR filing.
9. Scanned copy of work/supply order for having successfully completed similar works during last **5 years** ending last day of month previous to the one in which bids are invited should be either of the following:
  - a) Three similar completed works costing not less than Rs.10,06,146/- each
  - b) Two similar completed works costing not less than Rs.12,57,683/- each
  - c) One similar completed work costing not less than Rs.20,12,293/-  
**(Similar work: Providing polycarbonate sheet, Fabrication work, plain cement concrete, Solid block masonry)**
10. MSME or Udyog Aadhar or NSIC is a must for EMD Exemption otherwise, firms have to furnish EMD.
11. Tender acceptance letter (Annexure-V) is mandatory.
12. Latest copies of the GST returns for the current year/previous year.

- **Financial Bid:-**

- a) Price Bid as BOQ XXX.xls
- b) The estimates are made by qualified engineer of the ICAR system, and based on latest CPWD-DSR with all updates and correction slips. Firms/Contractors/Bidders should not quote too low or too high. To ensure quality materials, specification and workmanship, any tender with more than (+) or (-) 15% variation over and above or below the basic estimated cost will be summarily rejected.
- c) So, the bidders must take due care while quoting.
- d) Evaluation criteria: Tender will be awarded to the lowest quoted Firm among those firms qualified in the Technical Bid. In case, two or more firms quote the same amount in r/o all the items work together as a whole, then the tender will be awarded to the Firm which has got more average turnover in the last 3 years, based on IT returns/Profit & Loss account/Turnover duly certified by the CA and uploaded along with Tender through CPP.

**CHIEF ADMINISTRATIVE OFFICER(Sr.Grade)**

## Annexure-II

### Terms & Conditions

1. The tenderer shall quote rates, which will include the supply, installation & other incidental charges. GST, if any, should be indicated separately.
2. The rates should be quoted as per the BOQ uploaded on the CPP Portal (reference may be obtained from Annexure-III). GST, if any, should be indicated separately. It must be noted that the contract shall be awarded to the firm which fulfils all the required terms and conditions and remains L-I for **Total cost**.
3. The firm must also possess valid PAN No. & GST registration number and a copy of the same must also be enclosed with the tender document.
4. Copy of Financial year 2017-18, 2018-19, 2019-20, 20-21,21-22, Income Tax Statement may be furnished.
5. The firm should be in existence for over 05 (Five) years in the trade with the business turnover of not less than Rs. **76 Lakhs** per annum for 2016-17, 2017-18 & 2018-19 or 2017-18,2018-19 2019-20, 2020-21 & 2021-22. Chartered Accountant certified profit and Loss account, Balance sheet to this effect may be enclosed.
6. Modification in the tender documents after the closing date is not permissible.
7. The successful firm shall **commence work** within 10 days from the date of confirmed **work order** and if the work not completed in time then EMD shall be forfeited. The rates quoted shall be valid for one year from the date of opening of tender.
8. The contractor/bidder or his representative may contact the undersigned at **Tel. No. 080-23086100 Extn: 218 & 217** for any further clarification. No variation in terms and quality of the items/specifications shall be entertained or else EMD/Security deposit shall be forfeited.
9. The bidder is advised to visit the site of works at his own expenses and obtain all information that may be necessary for preparing the quotation. Submission of quotation is acceptance by the tenderer that he has inspected the site or he is aware of all conditions.
10. The Director, ICAR-IIHR, shall have the right to reject all or any of the offers, accept more than one offer, and assign part of the job without assigning any reason.
11. Merely quoting of lowest rates does not mean that order shall be given to that firm. The competent authority will finally decide on the basis of quality & performance of past installations.
12. The interested Firms are required to deposit (in original) an **Earnest Money Deposit of Rs.51,000/- @ 2% of the estimated value of the work** amount mentioned against item in the form of Demand Draft from any of the Commercial Bank in favour of **THE DIRECTOR, ICAR, UNIT-IIHR payable at Bangalore** may be address to **Admn. Officer (Purchase), IIHR, Hessaraghatta Lake Post, Bangalore-560089 on or before bid opening date and time as mentioned in the Critical Date Sheet**. No quotation shall be considered without the earnest money deposit. Demand draft drawn in favour of any officer other than 'THE DIRECTOR, ICAR UNIT-IIHR payable at Bangalore' will not be accepted and the tender will be rejected. The earnest money will be refunded only after the finalization of the procurement and no interest will be paid on earnest money. The request letter for refund of EMD & performance security is to be submitted by the firm.
13. Rates once finalized will not be enhanced/reduced during the currency of the contract.
14. In case, the successful bidder shows inability at any stage, after the contract is finalized and awarded, for whatsoever reason(s), to honour the contract, the earnest money /performance security deposited would be forfeited.
15. The Director, ICAR-IIHR reserves the right to cancel the contract at any time during the currency period of the contract without giving any reason.

16. The firm, to whom the tender will be awarded, will have to deposit the **performance security equal to 3% of the total quoted amount at which the Tender will be awarded within 21 days from the date of receipt of work order and the same will be retained during the Defect liability period(warranty) of One year. In the sense, for any material and execution defects, the firm has to set right the defects within 10 working days and maintain the said work.** If the services are not found to be satisfactory, the performance security is liable to be forfeited. No interest will be paid on performance security.
17. If any dispute(s) arises between IIHR and the firm with reference to the contract, IIHR will decide it and its decision will be binding on the firms.
18. Bid Validity: 180 days
19. Payment:- No advance or part payment will be given. The payment will be released after satisfactory completion of the work and certificate from the Indentor/Engineer.
20. **The supplier/firm has to submit the GST return for having remitted the GST amount paid by the institute to the concerned authority within 30 days from receipt of payment from IIHR, otherwise their EMD and SD/PS will not be released and such firms shall be blocklisted.**
21. **GST extra as applicable should be indicated separately in the column provided. Otherwise such quotes will be rejected.**

**Payment Terms: In order to facilitate for speedy settlement of payment you are requested to furnish the following details as below:**

1. **Name of the firm:**
2. **Name of the Bank:**
3. **IFSC Code of Bank:**
4. **Name of the Account & Account No.:**
5. **Branch Code:**
6. **Amount to be paid:**
7. **E-mail address of the party:**
8. **GST No. and Pan No. Copies**

‘Terms & Conditions are  
acceptable’

Dated

(Authorized signatory of the firm)

### Annexure-III

(Reference for BOQ) (To be quoted in format provided on CPP Portal)

Price bid for **I. Renovation of three numbers Polycarbonate Chamber at CTGC facility Block-VI (30mt x 06 mt side height 03mt and center height 04 mt) at ICAR-IIHR, Bangalore.**

Sl. No.	Name of item	Quantity	Per unit price* (in figures/words) (as per BOQ)
01	<b>I. Renovation of three numbers Polycarbonate Chamber at CTGC facility Block-VI (30mt x 06 mt side height 03mt and center height 04 mt) at ICAR-IIHR, Bangalore *</b>	01 Unit	

\*Annexure-VIII

- Items should be of reputed make and suitable for high end elite users
- **GST extra as applicable should be indicated separately in the column provided. Otherwise such quotes will be rejected.**
- **The work is to be done at ICAR-IIHR, Bangalore.**

**Note:** The above mentioned Financial Proposal/Commercial bid format is provided as BoQ\_XXXX/xls along with this tender document at <https://eprocure.gov.in/eprocure/app>. Bidders are advised to download this BoQ\_XXXX.xls as it is and quote their offer/rates in the permitted column and upload the same in the Financial bid. **Bidder shall not tamper/modify downloaded price bid template in any manner.** In case if the same is found to be tempered/modified in any manner, tender will be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with IIHR.

**Annexure-IV**

EPABX: 080-23086100 Extn: 218 & 217  
FAX: 080-28466291 - Email: purchase.iibr@icar.gov.in



**ICAR-INDIAN INSTITUTE OF HORTICULTURAL RESEARCH**

**HESSARAGHATTA LAKE POST, BANGALORE-560 089**

Name of the Firm \_\_\_\_\_

Registered/Postal Address \_\_\_\_\_

1	Permanent Account Number (PAN)	
2	GST Registration No.	
3	Bank Details	
a	Bank Name	
b	Branch Address	
c	Account Number	
d	Type of account (current/saving) MICR No.	
e	IFSC Code	

Date:

Name of the Authorized Signatory

Place:

Stamp & Signature

**TENDER ACCEPTANCE LETTER**  
(To be given on Company Letter Head)

**Date:**

To,  
The Director,  
ICAR-IIHR,  
Hesaraghatta Lake Post,  
Bangalore-560089.

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No. \_\_\_\_\_

Name of Tender/Work:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dear Sir,

1. I/ We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/work' from the web site(s) namely:

\_\_\_\_\_  
\_\_\_\_\_

As per your advertisement, given in the above mentioned website(s).

2. I/We hereby certify that I/We have read the entire terms and conditions of the tender documents from Page No. \_\_\_\_\_ to \_\_\_\_\_ (including all documents lime annexure(s), schedule(s), etc...) which form part of the contract agreement and I/We shall abide hereby the terms/conditions/clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/organization too have also been taken into consideration, while submitting this acceptance letter.
4. I/we hereby unconditionally accept the tender conditions of above mentioned tender documents/corrigendum(s) in its totality/entirely.
5. I/we do hereby declare that our Firm has not been black-listed/debarred by any Govt. Department/Public sector undertaking.
6. I/we certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving any notice or reason therefore or summarily reject that bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)



## **INSTRUCTIONS FOR ONLINE BID SUBMISSION**

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at <https://eprocure.gov.in/eprocure/app>.

### **REGISTRATION**

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL <https://eprocure.gov.in/eprocure/app>.) by clicking on the link '**Online bidder Enrollment**' on the CPP Portal which is free of charge.
- As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (class II or Class III certificates with signing key usage) issued by any certifying authority recognized by CCA India (e.g. Sify/nCode/eMudhra etc.) with their profile.
- Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- Bidder then logs in to the site through the secured log-in by entering their users ID/password and the password of the DSC/e-Token.

### **SEARCHING FOR TENDER DOCUMENTS**

- There are various search options built in the CPP Portal. To facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS/e-mail in case there is any corrigendum issued to the tender document.
- The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

### **PREPARATION OF BIDS**

- **Bidder are requested to visit the site at the institute and discuss with CTO(Works)/ACTO(Works), ICAR-IIHR, Bangalore before preparing the bid clarify the doubts and understand the requirements.**

- Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents- including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF/XLS/RAR/DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use 'My Space' or 'Other important Documents' area available to them to upload such documents. These documents may be directly submitted from the 'My Space' area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

## **SUBMISSION OF BIDS**

- Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other technical issues.
- The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- Bidder has to select the payment option as 'offline' to pay the tender fee/EMD as applicable and enter details of the instrument.
- Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- Bidders are requested to note that they should necessarily submit their financial bids in the Format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cell with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is

maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric, encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

- The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- Upon the successful and timely submission of bids (i.e. after clicking 'Freeze Bid Submission' in the portal), the portal will give a successful bid submission message and a bid summary will be displayed with the bid no. and the date and time of submission of the bid with all other relevant details.
- The bid summary has to printed and kept as an acknowledgement of the submission of the bid.

#### **ASSISSTANCE TO BIDDERS**

- Any queries relating to the tender documents and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contract person indicated in the tender.
- Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

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**Annexure-VII**

## Details of Works &amp; EMD

Sl. No.	Purchase of item	Qty	Earnest Money in INR	File. No. for reference
01	<b>I. Renovation of three numbers Polycarbonate Chamber at CTGC facility Block-VI (30mt x 06 mt side height 03mt and center height 04 mt) at ICAR-IIHR, Bangalore.</b>	01 UNIT	Rs.51,000/-	F.No.5-112-I/2022-23/SP/IIHR

Note: EMD defined on to the Portal is MINIMUM. Bidder has to submit the EMD as per item for which quoting for.

**\*WORK at ICAR-IIHR, Bangalore.**

**Technical Specification for I. Renovation of three numbers Polycarbonate Chamber at CTGC facility Block-VI (30mt x 06 mt side height 03mt and center height 04 mt) at ICAR-IIHR, Bangalore.**

<b>I. Specifications of the structural components of the CTGC</b>			
<b>No.</b>	<b>Details</b>	<b>Unit</b>	<b>Qty.</b>
1	Removing of side and roof polycarbonate sheet of all thickness up to a height of 03 mt side height and 04 mt central height, removing polycarbonate sheet by removing the self-threaded screws, aluminum profile, without damaging the structural sections and other electrical fittings and fixtures, and disposal of unserviceable material within 50 meters lead (It's necessary to visit the site before tendering)	Sqm	1,400
2	Removing of the colling pad without damaging the gutter and necessary repairs to gutter holding the colling pad and repainting of the gutter with the required type of paint two coats as instructed at site complete work including stacking of unserviceable material within 50 mts lead, including a required sheet of same gutter material to welded and finished and made leak free wherever necessary (It's necessary to visit the site before tendering)	Sqm	45
3	Dismantling G.I. pipes of sizes 2'' , 1'', 1/4'' by mechanical means, including stacking of pipes within 50 meters lead (in purlins , verticals, roof truss) without damaging the pipes as the purlins and verticals has to be reused, cutting grinding and finishing has to be done to joints and cutting of all sizes of pipes as mentioned cutting locations and length of pipes to be handled will be as per site conditions and a minimum length of handling will be approximately 31 mts , all work has to be carried out by mechanical means only etc., complete (approximately 1,900 rmt of pipes) (It's necessary to visit the site before tendering)	One work	Ls
4	Dismantling of solid block masonry and stacking of serviceable material within 50mts lead and disposal unserviceable material within 2 kilometers lead location of disposal as instructed at the site (approximately of 40-meter cube or 186 sqm) (It's necessary to visit the site before tendering)	One work	Ls
5	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 meters lead, Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	Cum	06
6	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead up to 50 m and lift up to 1.5 m, as directed by Engineer-in-charge. All kinds of soil for walls and pipe foundation grouting	Cum	08

7	Cutting and grouting of 2'' available GI pipe to said size as verticals including finishing grinding and applying zinc-rich primer and paint to all the cut and welded joints of the portion of the pipe to be grouted, including handling of available 4 mt length, 2'' GI pipe and cutting it to 1mt or 1.5 mt accordingly to tube level and slope, at the site and stacking of remaining length of pipe within 50 mts lead	One work	Ls
8	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:4:8 (1 Cement: 4 coarse sand (zone- III) derived from natural sources: 8 graded stone aggregate 40 mm nominal size derived from natural sources) for wall base and plinth protection	Cum	25
9	Centering and shuttering including strutting, propping etc. and removal of form work for vertical pipes grouting above ground level all along wall line	Sqm	14
10	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:3:6 (1 Cement: 3 coarse sand (zone- III) derived from natural sources: 6 graded stone aggregate 20 mm nominal size derived from natural sources)	Cum	02
11	Providing and constructing concrete block masonry using 150x200x400 mm solid core compact concrete block (Grade C - 50Kg/Cm <sup>2</sup> ) in CM 1:6 including all scaffolding, curing, etc. complete for side parapet walls (blocks to be laid 200 facing ground, as the pipe size is big)	Sqm	190
12	Supplying and fixing, hoisting and cutting grinding welding and bending by mechanical means to the required shape to suit a 6 mt width polycarbonate house, 1 1/2'' (one and a half inch) G.I. pipe heavy @ 4.43 kg /mt weight, a sample has to be bent and made to required shape as directed at the site and after approval of the sample the remaining roof truss to be bent and prepared fixed and hoisted, without any cracks or damages to pipe and fixed to a 2'' GI pipe by required heavy bolt and nut if required, cutting grinding and welding finishing and applying zinc-rich primer and paint to all cut and welded joints (Note: measurement will be as per actuals no wastages will be considered)	Kg	2,020
13	Supplying and fixing, hoisting and cutting grinding welding and finishing 1'' (one inch) G.I. pipe heavy @ 2.97 kg /mt weight, finishing and applying zinc-rich primer and paint to all cut and welded joints for purlins at roof and sides (Note: measurement will be as per actuals no wastages will be considered)	Kg	750
14	Cutting, welding grinding finishing hoisting 1'' size available GI pipe for purlins to said places and applying zinc-rich primer, and paint to all the welded joints (including handling of available 31mt length 1'' GI pipe) accordingly to tube level without damaging the pipe all by mechanical means and stacking of remaining length of pipe within 50 mts lead (total of 5 purlins of 31 mt length to each polycarbonate house for three numbers polycarbonate house)	One work	Ls

15	Supplying and fixing cleats to purlins and other required said places in angular form aluminium 5 mm thick cleats cut required shape grinded including primer and suitable paint to cut and welded locations complete	Kg	40
16	For roof, front and back: Providing and fixing 06 mm thick UV Stabilized multiple wall Poly Carbonate Sheet with 10 year onsite warranty for 85% PAR, yellowing, breaking etc. (GE Lexan / Sunlite / Tufflite / Juli or equivalent) of approved quality with all necessary overlaps, aluminum profiles at every 2mt c/c, silicon joint sealants, fixtures, anodized bolts, nuts, washers, heavy stainless self-threading screws etc complete as per directions. (Note: measurement will be as per actuals no wastages will be considered)	Sqm	980
17	Supplying and fixing 100mm cellulose cross fluted colling pads of standard make and material as per approved sample with anti-rot, rigidify and wet resins are made of maximum efficiency, at minimum pressure drop sterile mixed cellulose easter (MCF) filter	Sqm	60
18	Providing plastering 12 mm cement plaster of mix: 1:6 (1cement: 6 fine sand) For walls For Plinth protection	Sqm Sqm	325 155
19	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface Water thinnable cement primer	Sqm	325
20	Finishing walls with water proofing cement paint of required shade: Old work (one or more coats @ 2.20 kg/10 sqm) complete.	Sqm	325
21	Re suiting the existing fan and pad to adjust to the roof bend of GI pipe including removing supporting the MS I section approximately 8 feet height 2nos to each fan x 6 fans , and relocating without damaging and grouting with 1:4:8 cement concrete (1 Cement: 4 coarse sand (zone-III) derived from natural sources: 8 graded stone aggregate 40 mm nominal size derived from natural sources) at new location , for colling pad cutting the outer frame of cellulose pad cover made of aliminium or MS sheets including cutting , welding , grinding and finishing with zinc rich primer and paint to all cut and welded joints and including cutting the cellulose pad to required size and refixing the colling pads , all work complete as required at site	One work	Ls
22	Cutting, welding grinding finishing hoisting 1'' and 1 ¼'' size available GI pipe for roof truss struts and applying zinc-rich primer, and paint to all the welded joints (by cutting existing roof truss pipes as directed at site) accordingly to tube level without damaging the pipe all by mechanical means and stacking of remaining length of pipe within 50 mts lead (total for 64 truss providing struts)	One work	Ls
23	Supplying and fixing, hoisting and cutting grinding welding and finishing 1'' (one inch) G.I. pipe heavy @ 2.97 kg /mt weight, finishing and applying zinc-rich primer and paint to all cut and welded joints for struts (Note: measurement will be as per actuals no wastages will be	Kg	230

	considered)		
24	Removing of MS sheet duct from inside Polycarbonate hose (three number PC house) of approximate size .60 cm x 0.35 cm of 30mts length in each polycarbonate house, like that for three number polycarbonate house without damaging the Co2 gas pipe line tube and other electrical wiring, and after dismantling the duct by removing angle support all by mechanical means, after dismantling and stacking the serviceable materials with in 50 mts lead the co2 pipe line tube to be refixed with necessary MS tube support as required at site and reconnecting the electrical wiring as required at site	One work	Ls

**Sd/-  
CAO(Sr.Grade)**