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Central Research Institute for Dryland Agriculture
Santoshnagar, Said bad Post, Hyderabad – 500 059

INVITATION TO TENDER AND INSTRUCTIONS TO TENDERERS

Tender Number: 4-7(93)/2011-2012/works

Date:

Name of the Work: **Construction of RCC underground water sump at R-6 HRF, CRIDA**

Cost of Tender: Rs. 500-00
D.D.No. :
Dated:

Bank:
Branch:

To

Dear Sirs,

On behalf of the Director, Central Research Institute for Dryland Agriculture, I invite you to tender for works as per the details furnished in the Tender Form attached herewith. The conditions of contract for undertaking the work as per the details furnished here under will be of any contract applicable to the Order placed by Central Research Institute for Dryland Agriculture, Indian Council of Agricultural Research and Research Institutes under it and special conditions detailed in the tender form (attached herewith). If you are in a position to quote for the same as per the details furnished in accordance with the requirements stated please submit your quotations in the Annexures I, II and III enclosed to tender form, in original.

The complete set of the Tender form including Annexures I, II and III in original may be submitted to office after signing on all pages by the tenderer.

Yours faithfully

Assistant Administrative Officer

TERMS AND CONDITIONS OF TENDER – PART I

Only in exceptional cases and for adequate reasons telegraphic or letter quotations will be considered if they are received from firms who are in the approved list of contractors maintained by the Indian Council of Agricultural Research provided those telegraphic or letter quotations are complete in all respects with regard to price, (itemised prices where necessary), specification, delivery and other particulars essential to enable a purchase decision to be taken and provided also the quotations are confirmed within three days from the date of receipt of tender in the prescribed form.

1. **EARNEST MONEY:** Earnest Money deposit as mentioned in the Annexure III may be paid by way of Demand Draft drawn on any schedule bank in favour of **“ICAR UNIT ACCOUNT, CRIDA, Hyderabad”** payable at State Bank of India, Edi Bazar, Hyderabad. The DD towards EMD may please be enclosed to the tender form and the tender submitted to the Director, Central Research Institute for Dryland Agriculture, Saidabad Post, Santoshnagar, Hyderabad – 500 059. Any other mode of payment will not be accepted.
2. **THE TENDER SHALL NOT BE CONSIDERED IF THE DD OF EARNEST MONEY DEPOSIT IS NOT SENT WITH THE TENDER:** No request for transfer of any previous deposit of earnest money will be entertained. It is understood that the tender document has been issued to the tenderer and the tenderer is being permitted to tender in consideration of the stipulation of his part that after submitting his tender, he will not reside from his offer or modify the terms and conditions thereof. Should the tenderer fail to observe and comply with the forgoing stipulation; the aforesaid amount will be forfeited to the Central Research Institute for Dryland Agriculture, Indian Council of Agricultural Research. In the event of the offer made by the tenderer not being accepted the amount of earnest money deposited by the tenderer will be refunded to him after he has applied for the same in a manner prescribed by Central Research Institute for Dryland Agriculture, Indian Council of Agricultural Research. The Earnest Money should not on any account fall short of the amount actually required.
3. **PREPARATION OF TENDER :**
 - a) The complete set of tender form should be returned in tact **in original** and pages should not be detached but when the rates are not being tendered for the corresponding space should be defaced by words as “Not Quoting”.
 - b) If any modification of the schedule is considered necessary you should communicate the same by means of a separate letter sent with the Tender.
 - c) In the event of space on the schedule form being insufficient for the required purpose, additional pages may be added. Each such additional page must be numbered consecutively, bearing the Tender number and be fully signed by you. In such cases reference to the additional pages must be made in the tender form.

(SIGNATURE OF TENDERER)

3/-

4. **SIGNING OF TENDER:**

a) The tender is liable to be ignored if complete information is not given therein or of the particulars and date if any asked for in the Annexures to the tender are not fully filled in, **specific attention must be paid to the delivery dates and also to the general conditions** of the contract as the contract would be governed by them.

b) Individual signing the tender or other documents connected with the contract must specify whether he signs as:

(i) 'sole proprietor' of the firm or constituted attorney of such sole proprietor.

ii) A partner of the firm if it be a partnership, in which case he must have authority to refer to arbitration dispute concerning the business of the partnership either by virtue of the partnership agreement or a power of attorney.

iii) Constituted attorney of the firm if it is a company.

NOTE:

- 1) In case of (ii) a copy of the partnership agreement or general power of attorney, in either case attested by a Notary Public, should be furnished and affidavit on stamped paper of all the partners admitting execution of the partnership agreement or the general power of attorney should be furnished.
- 2) In the case of partnership firms, where no authority to refer disputes concerning the business of the partnership has been conferred on any partner, the tender and all other related documents must be signed by every partner of the firm.
- 3) A person signing the tender form or any documents forming parts of the contract on behalf of another shall be deemed to warrant that he has authority to bind, such other and if, on enquiry it appears that the person so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies cancel the contract and hold the signatory liable for all costs and damages.
- 4) Each page of the tender, schedule to tender and annexure, if any, should be signed by the tenderer and returned to the institute in **original after filling.**
- 5) **DELIVERY OF TENDER:** The **original** copy of the tender is to be enclosed in a cover and the cover should be sealed and should bear address of this office with indication that there is a tender within.

(SIGNATURE OF THE TENDERER)

Right is reserved to ignore any tender which fails to comply with the above instructions. All tenders should be sent by registered posts or delivered in person to the Institute. A separate “tender box” has been kept for this purpose in the Institute. Only one tender should be included in a cover, all tenders so enclosed in one cover be liable to be ignored.

6. **LATEST HOUR FOR RECEIPT OF TENDERS:** The tender must reach this office not later than hours and date mentioned in Annexure III. Tenders sent by hand delivery should be put in the Tender Box at this office within stipulated time.

7. **PERIOD FOR WHICH THE OFFER WILL REMAIN OPEN:**

- i) Firms tendering should note that their offers should remain open for **acceptance for 90 days from the date of opening of tender.** If the firms are unable to keep their offers open for the specified period, they should specifically state in the tender form the period upto which they want their tenders to remain open for acceptance. In the absence of such specifications in the tender, it will be assumed that their offers will remain open for acceptance for a period of 90 days from the date of opening.
- ii) Quotations qualified by such vague and indefinite expressions such as **“subject to immediate acceptance”** will not be considered.

8. **OPENING OF TENDER :**

You are at liberty to be present or authorize a representative to be present at the opening of the tender at the specified time and date. The name and address of the representative who would be attending the opening of the tender on your behalf should be indicated in your tender. Please also state the name and address of your permanent representative, if any.

9. **SAMPLES:** QUOTATIONS WITHOUT SAMPLES WHERE SAMPLES ARE SPECIFICALLY CALLED FOR ARE LIABLE TO BE IGNORED.

- 10) **EXAMINATION OF PATTERNS OF CERTIFIED SAMPLES :**

When sealed patterns of stores are mentioned in the schedule to the tender form of specification in those of certified samples thereof, any be seen at the place stated in the schedule to tender and should be examined by the Competent person on your behalf (who should take this invitation with him) before the tender is submitted.

(SIGNATURE OF THE TENDERER)

11) **THE PRICE MUST BE QUOTED AS BELOW:**

Complete details of the proposed work shall be as per the details mentioned in the Annexures attached therein.

i) If it is decided to ask for **excise duty/sales tax or any other charges as extra**, the same must be **specifically** stated. In the absence of any such stipulation it will be presumed that the prices include all such charges and no claim for the same will be entertained. It may be mentioned here that the **Institute is not in a position to supply any 'C' or 'D' forms. Please avoid to write expression such as taxes etc., Please indicate exact amount/percentage of taxes, duties etc. payable by the Institute.**

ii) The prices quoted by the tenderers should be exclusive of sales tax (and should be clearly stated to be so) which will be paid by the purchaser, if legally leviable at the rate of ruling on the date of completion as specified in the acceptance of tender.

12) **TERMS FOR COMPLETION WORK:**

The time allowed for completion of work is indicated in the Annexure – III enclosed and should be completed within the stipulated period, failing which penalty will be imposed as specified in Annexure III. The time for completion of work indicated therein is tentative, however, this may be reduced or enhanced by the Director keeping in view of the exigency of work. No extra charges for labour etc. shall be paid.

13) **RIGHT OF ACCEPTANCE :**

This office does not pledge itself to accept the lowest or any tender and reserves to itself, the right of accepting the whole or any part of the tender.

14) **COMMUNICATION OF ACCEPTANCE:**

Acceptance by the Institute will be communicated by telegram, express letter of acceptance or formal acceptance of tender. In cases where acceptance is communicated by telegram or express letter the formal acceptance of tender will be forwarded to you as soon as possible but the instructions contained in the telegram or express letter should be acted upon immediately. On approval of rates, an agreement is to be executed by the tenderer with the institute on Non-judicial stamp paper value of Rs.100/- the cost of which shall be met by the tenderer.

(SIGNATURE OF THE TENDERER)

15) **RESERVATION OF RIGHTS TO ORDER ADDITIONAL QUANTITY :**

The Director reserves the right to place order on the successful tenderer for additional work at the rates quoted by them.

16) **PRE-INSPECTION OF STORES:**

In case an order is placed on you as a result of this tender you should satisfy yourself that the work is in accordance with the terms of order and fully conform to the required specifications by carrying out through pre-inspection. Such precaution on your part should minimize the chance of rejection in inspection and consequences thereof.

The work should be carried out as per the specification. The material used should be of good and standard Quality and to the satisfaction of CRIDA. Failing to maintain standard Quality of work, the order given shall be liable for cancellation. In such cases no payment shall be allowed for the work already completed. In addition, the EMD shall be forfeited and suitable legal action shall be taken against the Contractor / Firm.

17) **OTHER CONDITIONS:**

- a) **The appropriate specifications (I.S.I., IRS., ISO., etc., as the case may be)** should be annexed to or quoted in the tender and that the articles supplied will be subject to inspection and/or tests prescribed in the specifications before acceptance.
- b) Late tenders (i.e., tenders received after the specified time of opening) delayed tenders (i.e., tenders received before the time of opening but after the due date and time of receipt of tenders) and post tenders offers will not be considered at all.

(SIGNATURE OF THE TENDERER)

7/-

TERMS AND CONDITIONS OF TENDER – PART II

1. CLIENT : Director, Central Research Institute for Dryland Agriculture,
Santoshnagar, Hyderabad – 59.
2. The execution of work as per the details given in the tender schedule has to be completed within a period as specified in supply/work order. Please quote earliest possible guaranteed date by which you can complete the work.
3. Conditions of contract: As contained in special/general conditions of contract and schedule and annexures to the tender attached herewith.
4. Tenderers are bound to accept order for additional quantity at the rate quoted only if order is placed on them within 90 days from the date of issue of A/T.
5. In case the tenderer wants to furnish in a separate covering letter any additional information, particulars or quote conditions (e.g. those relating to allowance, discount, rebate, etc.) which cannot be accommodated in the tender form, an indication to that effect should be given in the tender form by means of a note. In the absence of such indication in the tender form the contents of the covering letter will be ignored in consideration of tender.
6. Firm should note that it is desired that their offer should remain open for acceptance for 90 days from the date of opening the tenders. In the absence of such an indication in the tender form, it will be assumed that their offers will remain open for acceptance for the period as specified.
7. The Director, CRIDA reserves right to accept/reject any tender.

TENDERERS MUST GIVE SPECIFIC ANSWERS AGAINST EACH OF THE FOLLOWING QUESTIONS. TENDERS CONTAINING EQUIVOCAL OR EVASIVE REPLIES WILL BE IGNORED.

- 1) Whether supply of stores in question confirm to particulars quoted in the schedule; if not, details of deviation must be stated here
- 2) I) Brand:
 - ii) Name and address of :
Manufacturer
 - iii) Guaranteed date by which the :
Supply can be completed

(SIGNATURE OF THE TENDERER)

- 3) Business name and constitution:
of tendering form
(is the firm registered under)
- i) The Indian Partnership Act, :
1932
 - ii) The Indian Companies Act, :
1956
 - iii) Any act, if not, who are owners:
(Please give full names)
- 4) Do you agree to the Arbitration Clause stipulated (Your acceptance or non- acceptance of this Clause will not influence the decision of the tender. It should, however be noted that as omission to answer the above question will be deemed as an acceptance of the Clause).

(FOR PARTNERSHIP FIRMS WHETHER REGISTERED OR NOT REGISTERED UNDER INDIAN PARTNERSHIP ACT, 1932)

Should the answer to this question by a partnership firm be in the affirmative, please state further:

- a) Whether by the partnership agreement, authority to refer disputes concerning the business of the partnership to arbitration has been conferred on the partner who has signed the tender.
- b) If the answer to (a) is in the negative whether there is any general power of attorney execute by all the partners tender to refer dispute concerning business of the partnership to arbitration:
- c) If the answer to either (a) or (b) is in the affirmative, have you already furnished a copy either the partnership agreement or the general power of attorney as the case may be, to this Institute. Please quote the references to the communication by which this was done.

NB.1) If a copy of neither the partnership agreement for general power of attorney has previously been furnished to this Institute please attach to the tender a copy of either documents on which reliance is placed for authority of partners of the partner signing the tender to refer disputes to arbitration. The copy should be admitted by Notary public to or its execution should be admitted by affidavit on a properly stamped paper by all the partners.

(SIGNATURE OF TENDERER)

2) Where authority to refer disputes to arbitration has not been given to the partners signing the tender, the tender must be signed by every partner of the firm.

5) **INDICATE FOLLOWING DETAILS :**

- I) What is your installed capacity
- ii) What is your working capacity
- iii) What is the existing load
- iv) What portion of your capacity
you prepared to reserve and allocate
to this Rate contract

6) Whether Earnest Money has been deposited:

Enclosures:

Annexure – I

Annexure – II

Annexure – III

(SIGNATURE OF TENDERER)

ANNEXURE (I) (ENCLOSURE TO TENDER FORM)

(To be returned by Tenderers along with Tender duly signed)

1. CONDITIONS OF CONTRACT:

Printed or cyclostyled or such terms and conditions of the tendering firms not appearing in the body of the tender will not be considered as forming part of their tender. Tendering firms should quote on the basis of the conditions referred to in para 1 of the invitation of tender and instructions to tenderers. In case any terms and conditions of contract applicable to this invitation to tender are not acceptable to the tendering firms, they should specifically state deviation there from in the body of their tender.

2. DEVIATION FROM SPECIFICATION:

It is in the interest of the tenderers to study the specifications, specified in the tender schedule thoroughly before quoting so that if any deviations are made by the Tenderers the same are prominently brought out in the body of their tender.

3. PRICES:

- a) Prices must be in terms of new coinage system, viz., rupees and paisa.
- b) The unit prices should be for the work in question indicated in the schedule to tender enquiry and not any other supply.
- c) Prices quoted should be invariably for undertaking work place mentioned in Annexure – III.
- d) Discount if any, should be indicated promptly.

4. TRANSIT INSURANCE:

The Client will not pay separately for transit insurance and the contract will be responsible till the entire supply is made.

5. PRICE PREFERENCE FOR EARLIER DELIVERY:

It should be noted that if a contract is placed on the tenderer as a result of this invitation to tender in preference to the lowest acceptable offer in consideration of offer of earlier supplies, the contractor will be liable to the Council the difference between the contract rate and that of the lowest.

(SIGNATURE OF TENDERER)

11/-

ACCEPTABLE TENDER, on the basis of duties and other incidentals in case of failure to completion of supply in terms of such contract within the date of completion specified in the tender and incorporated in the contract.

This is in addition to and without prejudice to other rights under the terms of the contract.

6. PAYMENT TERMS:

The terms of payment are indicated in Annexure III, the bills shall be submitted in triplicate on the basis of the measurement jointly recorded by the contractor and Chairman, Works Committee/his nominee. Payment shall be arranged within the 3-4 weeks time from the date of certification of satisfactory completion of the work. All tax deductions etc. shall be made at source.

7. ADDITIONAL PARTICULARS TO BE FURNISHED BY THE TENDERER:

Tenderers shall submit alongwith their tenders:

- i) An Income Tax clearance certificate (duly countersigned by the Income Tax Officer of the Circle concerned under the seal of his office)
- ii) Name and full address of their Banker:
- iii) Performance statement duly signed by them regarding work undertaken by them against contract for similar supplies for the past three years. In case the tenderer has not secured any contract during the past three years, he should give the performance against earlier contract placed on him, if any, samples of the supply work executed may please be enclosed to the tender.
- iv) The assignment, they possess for executing the supply work liable to be ignored.

8. JURISDICTION:

All questions, disputes or differences under, out or or in connection with the contract, if concluded shall be referred to the sole arbitrator appointed by the Indian Council of Agricultural Research . The decision of the sole Arbitrator shall be final and binding on both the parties.

9. I/we have understood the instructions of Tenders and conditions of contract including in the General conditions of contract governing contracts placed by the Indian Council of Agricultural Research and Institute under it and in the special conditions of contract and have thoroughly examined the specification or pattern and nature of work quoted in the schedule hereto and an/are fully aware of the completion of the work and my/our offer is in accordance with the requirement.

10. Demand Draft No.....dt.....for Rs.....
(Rupees.....) is enclosed being EMD.

Name of the Bank:

Name of the Branch:

(SIGNATURE OF TENDERER)

12/-

ANNEXURE –II (ENCLOSURES TO TENDER FORM)

(Please quote rates on Annexure III (Schedule to Tender Form))

Full name & address of the
Tenderer in addition to
Post Box No. if any, should
be quoted in all communications
to this office

Tenderers Telegraphic
Address:

Telephone /Mobile No.
Code used :

From

To
The Director
Central Research Institute for
Dryland Agriculture
P.O.Saidabad
Santoshnagar
Hyderabad – 59.

Dear Sir,

I/We hereby offer for undertaking construction of works as per the details furnished in the tender schedule (Annexure-III) hereto or such portion thereof as you may specify in the Acceptance of Tenderer at the price given in the said schedule and agree to hold this offer ninety days only. I/We shall be bound by a communication of Acceptance dispatched within the prescribed time and also agree to pay Performance Guarantee, Security Deposit and execute agreement required in this regard.

(SIGNATURE OF TENDERER)

13/-

6. I/We have understood the instructions to Tenderers and conditions of contract included in the General conditions of contracts governing contracts placed by the CRIDA, Indian Council of Agricultural Research Institutes under it and in the special conditions of contract and have thoroughly examined the specification or pattern and nature of stores quoted in the schedule thereto and an/are fully aware of the completion of the supply and my/or offer is to in accordance with the requirement.
7. The following pages have been added to and from part.

SIGNATURE OF WITNESS:

(SIGNATURE OF TENDERER)

Name of Witness :

Name of Tenderer :

Mailing Address :

Mailing Address :

DATE:

(SIGNATURE OF TENDERER)

ANNEXURE – III

Name of the work	: Construction of underground water sump at R-6 HRF, CRIDA
Place of work	: Hayathnagar Research Farm, CRIDA, R.R. District
Estimated value of the work	: 6.27 Lakhs
Time for completion of work	: 5 Weeks
Amount of EMD	: 13,000/-
In whose favour the DD's to be Drawn (Tender form & EMD)	: "ICAR Unit A/c., CRIDA, Hyderabad"
Date of publication of tender notification	: 18-02-2012
Names of Newspaper	: Andhra jyothi (Telugu), Siasat(Urdu), Deccan Chronicle(English)
Rate of Tender form	: Rs.500-00
Date of sale of Tender form	: 21-02-2012 to 29-02-2012, (1500 hrs)
Date & Time of submission of Tenders	: 29-02-2012 upto 1500 hrs
Date & Time of opening of Tenders	: 29-02-2012 at 1530 hrs

Special Conditions for R.C.C underground water sump

1. The contractor must preferably be having previous experience of constructing R.C.C. underground/overhead tanks.
2. The contractor should ensure the structural stability of R.C.C underground tank by engaging the services of authorized structural consultants. Who are capable of designing the structure taking into consideration of all the loads and design mix of concrete.
3. The contractor must give guarantee for the water proofing of the underground water sump against seepage/ leaking of the water stored in the sump.

Other Important Instructions

1. Performance Guarantee: The performance guarantee at 5% of contract amount shall be required to be submitted as Bank Guarantee, Govt. Securities, FDR within a 7 days period from the date of receipt of letter of intent to award the work.
2. Security Deposit: The security deposit @ 5% shall be deducted from the running bills of contract value. The earnest money shall form part of the security deposit.
3. Liquidated Damages: In case of delay in completion of the contract, liquidated damages shall be levied. For repair works costing up to Rs. 10 Lakh – 1% of the Contract Value per week and for all other 0.5% of the Contract Value per week of delay to a maximum of 10% of Contract Value.
4. Measurement and Payment: Measurement of all items having financial value shall be recorded in Measurement books and/or level field books so that a complete record is obtained of all works performed under the contract. Measurements and levels shall be taken jointly by the official designated for the purposed and contractor. Intermediated bill shall be submitted by the contractor for the work executed on basis o recorded measurement. Payment shall be made after verification of the bill. Final bill shall be submitted by the contractor in same manner as that in interim bills within a specified time of physical completion of work and of final certificate of completion furnished. Payment shall then be made after verification of the bill.
5. Secured Advance: Secured advances on the security of material brought to site by the contractor shall be made for items which are to be used for work. This shall be limited to 75% of the assessed value of the material. No advance shall be allowed in case material is combustible, fragile or of perishable nature. Recoveries of advance shall be made from intermediate bill based on material used in the work.
6. Commissioning and Documentation: When the work has been executed, the assests created shall be commissioned. Reasonable advance information of completion of work should be given to enable to make arrangements for taking over. “As built” drawings of the work shall be prepared by the contractor to facilities proper maintenance of the assests, additions to the assets at subsequent dates etc. and to form part of the records.

Name:

Address:

Mobile Number:

(SIGNATURE OF THE TENDERER)

**Quotation for Construction of R.C.C underground Water Sump
(1.0 Lakh litre capacity) at R-6, Hayatnagar Research Farm, CRIDA.**

Sl.no	Description of item	Unit	Qty.	Rate	Amount (Rs.)
1 M.R	Removing silt from a depth of 3m & including disposal of debris to the distance of more than 200m as directed by the site incharge. $6.00 \times 6.00 \times 2.00 = 72.00$ cum	cum	72.00		
2 2.8 2.8.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil. $9 \times 1.20 \times 1.20 \times 1.00 = 12.96$ cum	cum	12.96		
3 2.26 2.26.1	Extra for every additional lift of 1.5 m or part thereof in. All kinds of soil. $3 \times 1.50 = 4.50$ ($3 \times 18.9 = 56.70$) Qty. same as sl.no:1 = <u>72.00</u> cum	cum	72.00		
4 4.1 4.1.8	Providing & 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 : 8 graded stone aggregate 40 mm nominal size). $1 \times 6.00 \times 6.00 \times 0.15 = 5.40$ $9 \times 1.50 \times 1.50 \times 0.15 = 3.04$ $4 \times 6.00 \times 1.00 \times 0.15 = 3.60$ Total = <u>12.04</u> cum	cum	12.04		
5 5.1 5.1.2	Providing and laying in position specified grade of vibrated reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement – All work up to plinth level: 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) $9 \times 1.20 \times 1.20 \times 0.60 = 7.78$ $4 \times 6 \times 1.00 \times 0.20 = 4.80$ Total = <u>12.58</u> cum	cum	12.58		

6 5.2	Vibrated Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement:				
5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size). $8 \times 0.30 \times 0.30 \times 4.40 = 3.17$ $1 \times 3.14 \times 0.30 \times 0.30 \times 4.40 = \underline{1.24}$ Total = <u>4.41</u> cum	cum	4.41		
7 11.7	Vibrated Cement concrete flooring with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete. $6.00 \times 6.00 \times 0.10 = \underline{3.60}$ cum	cum	3.60		
8 4.2	Providing and laying vibrated cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc. up to floor five level, excluding the cost of centering, shuttering and finishing: 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size). $4 \times 6 \times 4.00 \times 0.15 = \underline{14.40}$ cum	cum	14.40		
9 5.3	Vibrated Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size). $6 \times 6 \times 0.125 = 4.50$ $12 \times 3.00 \times 0.23 \times 0.23 = \underline{1.90}$ Total = <u>6.40</u> cum	cum	6.40		

10 5.22 5.22.3	Vibrated Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete. Cold twisted bars @ 100 kg/cum for 41.39x100 = <u>4139.00</u> kgs	kgs	4139.00		
11 5.9 5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for: Foundations, footings, bases of columns, etc. for mass concrete. 9x4x1.2x0.60 = <u>25.92</u> sqm	sqm	25.92		
11.1 5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts. 8x4x0.30x4.40 = 42.24 1x3.14x0.30x4.40 = <u>4.14</u> Total = <u>46.38</u> sqm	sqm	46.38		
11.2 5.9.14	Extra for shuttering in circular work (20% of respective centering and shuttering items). <u>4.14</u> sqm	sqm	4.14		
11.3 5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc. 2x4x6x4 = <u>192.00</u> sqm	sqm	192.00		
11.4 5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers. 12x3.00x0.63 = <u>22.68</u> sqm	sqm	22.68		
11.5 5.9.3	Suspended floors, roofs, landings, balconies and access platform. 6x6 = <u>36.00</u> sqm	sqm	36.00		
11.6 5.9.16 5.9.16.1	Edges of slabs and breaks in floors and walls. Under 20 cm wide 4x6 = <u>24.00</u> metre	metre	24.00		
12 13.10	15 mm cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall. 4x6x4.00 = 96.00 3.14x0.30x4.00 = 3.77 6x6 = 36.00 6.60x6.60 = <u>43.56</u> Total = <u>179.33</u> sqm	sqm	179.33		

13 13.21	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers. $4 \times 6 \times 4.00 = 96.00$ $3.14 \times 0.30 \times 4.00 = 3.77$ Total = <u>99.77</u> sqm	sqm	99.77		
14 11.4	52 mm thick cement concrete flooring with concrete hardener topping under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume. Hardening compound is mixed @ 2 litre per 50kg of cement or as per manufactures specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete. $6 \times 6 = 36.00$ sqm	sqm	36.00		
15 M.R	Supply & fixing manhole in the roof with R.C.C precast cover over R.C.C benching wall of size 0.75x0.75 as directed by the site incharge.	Each	1		
16 M.R	Providing & fixing Aluminium ladder of approved make, 5metre length, 0.45 metre width including cost/conveyance & taxes etc. as directed by the site incharge. 1 No.	Each	1		
17 2.25	Filling available excavated earth (excluding rock) in the sides of retaining walls of the alround sump in layers not exceeding 20cm in depth, consolidating each deposit layer by ramming & watering. $4 \times 6 \times 0.45 \times 4.50 = 48.60$ cum	cum	48.60		
Total: Rs.					
(Rupees only)					

(SIGNATURE OF THE TENDERER)

PLAN OF THE R.C.C. UNDERGROUND WATER SUMP (NOT TO SCALE)

AT H.R.F. - APX 1,00,000 litres

CAPACITY



