

ASSAM POWER GENERATION CORPORATION LIMITED

OFFICE OF THE CHIEF GENERAL MANAGER (HYDRO & CIVIL),

BIJULEE BHAWAN, GUWAHATI-781001



TENDER DOCUMENT FOR

NIT NO: - Tender Notice No. 04 of 2018-19 of CGM (H & C)

NAME OF THE WORK: - Construction of the boundary wall around the existing plot under 80MW Amguri Solar Power Project, APGCL at Amguri Town.

-June, 2018-

Issued to:

Name:-

Address:-

Issued by:

Price: - – 2000/-
(Non Refundable)

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ASSAM POWER GENERATION CORPORATION LIMITED

Registered Office: Bijulee Bhawan, 2nd floor, Paltanbazar, Guwahati-781 001, Assam.

CIN: U40101AS2003SGC007239

Email: cgmh2010@yahoo.in. Tele-Fax: 0361-2739522.

Mira Sharma

Chief General Manager (Hydro & Civil)

Tender Notice No. 04 of 2018-19 of CGM (Hydro & Civil)

Date: 27.6.2018

The Chief General Manager (Hydro & Civil), APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-1 invites sealed tenders in prescribed forms from bonafide, experienced and financially sound contractors/firms for the following works:

Name of work	Estimated amount (Rs.)	Earnest money		Time of completion
		(2% for General)	(1% for ST/SC/OBC) (For individual only)	
Construction of boundary wall around the existing plot under 80MW Amguri Solar Power Project, APGCL at Amguri Town.	Rs. 15,51,128.00	Rs.31,023.00	Rs. 15,511.00	45 (Forty five) days

The bid document may be obtained from office of the Chief General Manager (Hydro & Civil), APGCL on written request to the CGM (Hydro & Civil), APGCL during office hours on all working days with effect from 30.06.2018 to 09.07.2018 on payment of Rs.2000.00 (Rupees two thousand) only in the shape of Demand Draft from Nationalized Bank, which is not refundable, pledged in favour of DGM (F&A), APGCL. The bid document may also be downloaded from the website www.apgcl.org.

The cost of bid is to be deposited separately with the downloaded tenders along with Earnest Money. The bid will be received up to 2.00p.m. of 10.07.2018 and will be opened at 3.00 p.m. on the same day in presence of tenderers or their authorized representatives. The CGM (Hydro & Civil) is not bound to accept the lowest rate and reserves the right to accept or reject any or all tenders without assigning any reason thereof.

M.S. 27/6/18
Chief General Manager (Hydro & Civil)
APGCL

Memo no: APGCL/CGM (H&C)/W/2010-11/303/Pt-IV/92

Date: 27.06.2018

C.c. to: -

- 1) The Managing Director, APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-781 001, for favour of kind information.
- 2) The Chief General Manager (Gen), APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-781 001, for information.
- 3) The Chief General Manager (F&A), APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-781 001, for information.
- 4) The General Manager, Design (Civil), APGCL, Narengi, Guwahati-781026, for information and necessary action.
- 5) The Deputy General Manager (F&A), APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-781 001, for information and necessary action.
- 6) The Assistant General Manager, APGCL, Amguri, Sivsagar for information and necessary action.
- 7) The P.R.O, APDCL, Bijulee Bhawan, Paltanbazar, Guwahati-1, for information with a request to publish the NIT in 1 (one) issue of Local Dailies in Regional and English language on or before 29.06.2018
- 8) Relevant File.

M.S. 27/6/18
Chief General Manager (Hydro & Civil),
APGCL

CHAPTER-II

INSTRUCTION FOR BIDDERS AND SPECIAL CONDITIONS

NIT NO: - Tender Notice No. 04 of 2018-19 of CGM (H & C)

BID INVITATION FOR: - Construction of boundary wall around the existing plot under 80MW
Amguri Solar Power Project, APGCL at Amguri Town.

EARNEST MONEY DEPOSIT:

Rs. 31,023.00 (for General)

Rs. 15,511.00 (for SC/ST/OBC)(For Individual only)

1. DUE DATE AND CLOSING TIME

The bid will be received up to 2.00 p.m. on 10.07.2018. The opening time of the bids will be at 3.00 p.m. on the same day and the venue will be the office of the Chief General Manager (Hydro & Civil), APGCL. Bidders or their authorized representatives will make it convenient to attend the bid opening.

2. TIME OF COMPLETION OF WORK

The stipulated time of completion of the works is 45 (Forty five) days from the date of handing over the site.

3. BID-GUARANTEE OR EARNEST MONEY DEPOSIT: (E.M.)

3.1 Every bid or tender shall be accompanied by a deposit of E.M for an amount indicated in the Tender Notice pertaining to the work (ordinarily equivalent to 2% of the estimated value of work, unless otherwise specified in the Notice), in the form of an acceptable Demand Draft from a Nationalized Bank pledged in favour of the **Deputy General Manager (F & A), APGCL**, Guwahati. Irregular tender is liable to be rejected.

3.2 The E.M. as mentioned above will be returned to the respective unsuccessful bidder soon after the award of the contract. The E.M. will be retained towards the contract security deposit in the case of selected bidder or bidders in whose favour the contract is awarded. The APGCL will not entertain any claim for release of the E.M. during pendency in selection of contractors for awarding the contract. The APGCL will not pay any interest on the E.M. deposit.

3.3 The E.M. is liable to be forfeited in the absolute discretion of the CGM (H&C), APGCL, if a selected bidder revokes or causes to withdraw his offer / tender before the expiry of its validity or fails after the contract is awarded to him to execute the 'Contract agreement' with the APGCL described herein after (so far as applicable) or to commence the work within the period as notified in the work order.

4. PERFORMANCE –GUARANTEE OR SECURITY DEPOSIT (S.D.)

The security to be taken for due performance of the contract in terms of the 'contract agreement' will be a deduction of 10% (ten percent) from every ad-interim payment made on account of works performed, until the sum of these deductions and E.M. together becomes equal to 10 (ten) percent of the total value of the contract.

4.1 Such S.D. shall be forfeited or appropriated by the CGM (H&C), APGCL, Bijulee Bhawan, Guwahati under authority of the owner in his discretion towards any loss, damage etc. that may be sustained by the APGCL as a result of breach of any terms, conditions of the contract by the contractor, notwithstanding other remedies open to the APGCL under the terms of the contract or law.

4.2 In the event of contractor's Security Deposit being appropriated towards loss, damage etc, the contractor shall forthwith recoup the amount to restore the Security Deposit to the full current value within 30 (thirty) days from the date of intimation.

4.3 Subject to the provisions mentioned above and the provisions of guarantee period of one year, the Security Deposit will be returned to the contractor on the due and satisfactory performance of the contract and after all claims of the APGCL shall have been settled. The APGCL will not pay any interest on the amount of Security Deposit of Performance Guarantee.

5. GOODS AND SERVICE TAX / INCOME TAX CERTIFICATE (PAN / GST):

The offered rates and / or prices for the work shall include all taxes, duties, forest royalties, monopolies etc. as may be applicable on material and labour during the tenure of the contract. There will be no reimbursement for any increase or levy of new taxes, duties etc. on materials utilized for this work or equipments furnished / supplied for completing the work or for machineries, equipments, tools and tackle, fuel and lubricants etc. used in connection with the performance of the work, unless otherwise specified or qualified by the bidder in his bid. If, however, any tax or duty is levied by the Govt. or statutory body on the finished work (after complete installation and / or delivery), such tax or duty will be to the account of the APGCL.

5.1 **The contractors must have a valid GST Registration No. and should submit copy of GST Certificate and attested copy of PAN Card.**

5.2 **Caste certificate must be produced where necessary.**

6. BIDDER'S QUALIFICATIONS:

6.1 The Bidder should submit a list and description of similar or comparable works previously executed by him successfully during last three consecutive financial years indicating the individual volume and contract price along with the name and address of the respective owner / authority.

6.2 All prospective bidders are hereby notified that, before any bid submitted in response to this invitation is considered for award, the CGM (H&C), APGCL may require the bidder to submit a further statement of facts in detail as to the previous experience of the bidder and financial resource available with him for performing the contemplated work. The CGM (H&C), APGCL expressly reserves the right to reject any bid or which the facts as to business, financial and other resources or business experience, compared with the work bid upon, justify such rejection.

6.3 **Civil Engineering firms / contractors with adequate experience must completed at least one similar work having value not less than Rs. 8.0 (Eight) lakhs during last 3(three) years. They must submit such completion certificate with the tender.**

6.4 Cost over run shall not be accepted.

6.5 **Contractors should be financially sound to invest the amount and should submit necessary evidence on this account. Annual turnover should not be less than Rs.5.00 (Five) Lakh per annum in the last three consecutive years.**

7. BIDDER SHOULD EXAMINE & UNDERSTAND

7.1 *All prospective bidders are required to thoroughly study and carefully examine all the terms and conditions, instructions, drawing & specifications pertaining to the work and visit the field of work to fully satisfy and acquaint themselves about the nature and location of work, the configuration of the ground. The spring level, the surface conditions, quality and quantity of materials required and their availability the type of equipments and facilities needed preliminary to and during the execution of the work and local conditions which may affect the work or cost thereof. Failure to do so will be at the bidder's risk.*

8. SUBMISSION OF TENDER

8.1 Bidders are to quote their rates in the prescribed format (**Schedule of works, Annex-A**) attached in this bid document.

8.2 The rates are to be quoted on item basis. Bidders are to quote their rates for all items of works as given in the "**Schedule of works, Annexure A**". The rates to be quoted both in figures and words.

8.3 The rates quoted by the bidders will be inclusive of all taxes, royalties and other statutory levies as applicable.

- 8.4 Bidders should note that unusually low rates not feasible for execution may not be technically accepted.
- 8.5 Bidders should note that during the time of execution of work, any item not covered by the schedule of work if required to be done as per decision of the CGM (H&C)/ Engineer-in Charge of work, they have to execute such work/works as supplementary item of works, rates of which will be same as the accepted rate for the work on S.O.R. for S.O.R of Assam PWD Building (Civil works) for the year 2013-14.
If the rate of such supplementary item/items is/are not available in S.O.R of Assam PWD for the year 2013-14, the same will be analyzed by the department as per reasonable market price but in any case of dispute for rate of supplementary item/items, the decision of CGM (H&C) will be final and conclusive.
- 8.6 **The quoted rates will be firm for entire period of completion of the work. No price escalation on any component will be admissible.**
- 8.7 Firms submitting tender should enclose a certified copy of the Firm's constitution and a certified copy of Power of Attorney authorizing a person to operate the tender and contract and should furnish full address of the partners and the persons holding power of attorney on behalf of the firm.
- 9. AWARD OF CONTRACT**
- 9.1 The contract will be awarded to that responsible bidder whose bid, confirming to the schedule conditions of contract and specifications will be most advantageous to the Department, price and other factors considered. An award mailed (or otherwise furnished) to the successful bidder within the time for acceptance specified in the bid will result in a binding contract without further action by either party. The CGM (H&C), APGCL does not bind itself to accept the lowest bid or any bid. **As the interest of the Department may require, the right is reserved to reject any or all bids and to waive any minor informality or irregularity in bids received without assigning any reason thereof.** Bid which are incomplete or which contain undesirable conditions are liable to rejection.
- 9.2 **APGCL will try to make timely payment of bills, but on unavoidable circumstances cannot guarantee timely payment of bills, for which no interest on the payable amount will be entertained.**
- 10. CONTRACT AGREEMENT**
- 10.1 The 'Contract agreement' (or Tender Agreement) for the works will be drawn up with the selected bidder/bidders within 7 (Seven) days of issue of the work order and the contract documents will comprise as described herein before.
- 10.2 The conditions of the F-2 form shall form part and parcel of the agreement. However wherever there is any contradiction or variation between the conditions of the F-2 form, the terms and conditions specified elsewhere in this document, the later will be treated as superseding the former. Terms and conditions shall be as per F-2 Form of agreement and has to follow accordingly. In the Form-F-2 all the designations appearing as Executive Engineer/Sub divisional Officer shall be read as Chief General Manager (Hydro & Civil), Assam Power Generation Corporation Limited (herein after called as C.G.M (H&C), APGCL.
- 10.3 In a case where the selected bidder fails to commence the work as shall be notified in the work order or fails to execute the tender agreement with the CGM (H&C), APGCL as stipulated herein before; the CGM (H&C), APGCL reserves the right to claim loss, damage etc. and take appropriate action under the terms of this document or law including forfeiture of E.M.
- 11. TOOLS & PLANTS**
- The APGCL does not ordinarily furnish any tools & tackle, plants and equipments or such facilities for carrying out the work by the contractor (excluding hypothecation). The contractor shall arrange and maintain the equipments required for implementation of work all throughout the period of the contract.
- 12. MATERIALS & LABOUR**

- 12.1 All materials (this includes without limitation raw materials, parts, components etc.) and labourers required for carrying out the work shall be arranged and furnished by the contractor all throughout the tenure of the contract and strictly conform to relevant IS (latest revision).
- 12.2 The intending tenderers should inspect the prospective sources of collection of raw materials and fully satisfy him about the quality of materials, availability of materials, lead, and mode of transportation. The Department shall not consider, after acceptance of the contract, to pay any extra charge for lead or any other reasons, in case the contractor found later on, to have misjudged, the quality/quantity of availability of such materials from the source of collection.
- 12.3 APGCL shall not issue any construction materials such as cement, reinforcement bar, or any other materials.
- 12.4 In connection with the performance of work throughout the tenure of the contract, the engagement of labour and payment therefore by the contractor shall conform to the statute, the pertinent law or act of the Central & State Govts, as well as rules, regulations and orders of the local authorities or statutory bodies, as may be in force from time to time.
- 12.5 The materials procured for the work by the contractor shall be placed at site properly for inspection of Engineer-in charge before utilization. Any defecting materials should be replaced immediately for which no extra charge will be payable to contractor.

13. CHANGES IN QUANTITY AND ITEM

- 13.1 The authority may at any time, by a written order make changes within the general scope of the contract, in any one or more of the following
- i) Quantity of any item
 - ii) Alteration or omission of any item
 - iii) Addition of any item
 - iv) Alteration in drawings, designs or specifications
- If any such change causes an increase or decrease in the cost of or the time required for performance of the contract, an equitable adjustment shall be made in the contract price or time schedule or both and the contract shall be modified in writing accordingly. Any claim by the contractor for adjustment under this clause must be asserted within 30 days from the date of receipt by the contractor of the notification of change: PROVIDED HOWEVER, that the authority if decides that the facts justify such action, may receive and act upon any such claim asserted at any time prior to final payment under the contract. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the disputes mentioned herein after. However nothing in this clause shall excuse the contractor from proceeding with the contract as changed.

14. INSPECTION

- 14.1 All works and all supplies (this term includes without limitation raw materials, parts, components, intermediate assemblies and end products) under the contract shall be subject to inspection and test by the CGM (Hydro & Civil), APGCL or his authorized person to the extent practicable at all times and places including the period of construction or manufacture and in any event prior to final acceptance.
- 14.2 In case any work or part thereof or/and any supply is found defective in material or workmanship or otherwise not in conformity with the specifications or drawings or requirements of the contract, the CGM (Hydro & Civil), APGCL shall have the right either to reject them or to require their correction, as directed by the department.
- 14.3 The inspection and test by the CGM (Hydro & Civil), APGCL or his authorized person of any work or any supplies does not relieve the contractor from any responsibility regarding defects or other failures to meet the contract requirements which may be discovered prior to final acceptance. Except as otherwise provided in this contract final acceptance shall be conclusive except as regards latent defects, fraud or such gross mistakes as amount to fraud.
- 14.4 The contractor shall provide and maintain an inspection system acceptable to the CGM (Hydro & Civil), APGCL covering the works and/or supplies hereunder. Records of all inspection works by the contractor shall be kept complete and available to the CGM (Hydro & Civil), APGCL during the performance of this contract.

15. **DEFAULT**

The contractor shall not be liable for any excess cost of any failure to perform the contract arises out of causes beyond the control and without the fault or negligence of the contractor (such as FORCE MAJEURE) PROVIDED THAT the contractor shall notify the authority in writing of the cause of any such delay, within fifteen (15) days from the beginning thereof or within such further period as the authority shall grant for the giving of such notice.

16. **LIQUIDITY DAMAGE**

The liquidated damages shall be payable for delay in completion of the work @ 0.3% (point three percent) of the contract prices per week. The liquidated damages so payable shall not exceed 10% (ten percent) of the contract prices.

17. **TERMS OF PAYMENT**

Bills shall be entertained on the basis of Actual measurement of completed works as per standard procedure. 1st Running Account Bill shall be entertained only after completion of minimum 50% of total work and payment shall be made subject to the availability of fund.

CHAPTER-III

SAFETY ENGINEERING & SAFETY CODE

1. SAFETY ENGINEERING

Accident prevention shall be an essential part of the programme of the contractor for all operations involve in performance of the contract under this invitation in order to reduce the cost of construction measures in terms of:

- a. Human life sacrificed
- b. Temporary and permanent injuries to workers.
- c. Loss of materials resulting from accidents.
- d. Loss of damage to equipment.
- e. The cost of workman's compensation insurance.
- f. Loss of times due to accidents.

Suitable safety programme to be developed to cope with the particular hazards for each operations of the performance of the contract.

2. INSPECTION

To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the contractor shall be open to inspect by the Engineer-in-Charge or his representative.

3. COMPENSATION

No extra charges or additional compensation will be admissible to the contractor by the department for any work done to comply with the provisions of safety Engineering and Safety Code. The bid price of the contractor for various items shall include these incidental cost.

CHAPTER-IV

CONTRACTOR'S CAMP

1. CAMP SITES

The contractor shall provide, maintain and operate under competent direction such camp facilities convenient to the site works under this contract as are necessary for housing, feeding and accommodation of his employees. The location, construction, operation and maintenance of such camps shall be subject to the approval of the Assistant General Manager/ Engineer in charge of the site.

2. USE OF LAND FOR CONSTRUCTION PURPOSES

Such land as may be available at work- site will be allowed to be used by the contractor for construction of his camps free of charge. However, development of clearances of the land will have to be done by the contractor at his own cost. The contractor will be responsible to clear and clean the site after completion of his works and handover the land to the Engineer-in-Charge. The contractor will be liable to pay compensation for any damages done to the land or neighboring area.

3. SANITATION IN CAMP SITE:

The temporary sanitation in the camp site should be properly maintained and hygienic so that pollution can be controlled and just before completion of the work site must be cleared properly.

CHAPTER-V

DECLARATION

I / We hereby declare that I/we shall treat the tender documents and other records connected with the works as secret/confidential and shall not communicate information derived there from to any person other than person to whom I/We authorized to communicate the same or use the information to any manner prejudicial to the safety of the state.

Signature of the tenderer

Full Name

(In Block letters)

Address

.....

.....

.....

Phone/ Mobile

Date:

CHAPTER-VI

Schedule of work:

ANNEXURE-A

To,

The Chief General Manager (Hydro & Civil)
APGCL, Bijulee Bhawan
Paltanbazar, Guwahati-1

Sub: Submission of tender for the work “Construction of boundary wall around the existing plot under 80MW Amguri Solar Power Project, APGCL at Amguri Town”.

Ref: Your Tender Notice No. 04 of 2018-19 of CGM (H & C)

Dear Madam,

In response to your above notice, I/We am /are submitting herewith, my / our rates for the work as mentioned below.

Sl. No.	Description of work	Unit	Qty.	Quoted Rate (Rs.)		Amount (Rs.)
				In figure	In words	
Schedule Item:						
1	Earthwork in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified.	cum	145.066			
2	Providing soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete. (a).Brick on flat soling.	sqm	221.474			
3	Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (shuttering where necessary shall be measured and paid	cum	12.042			

	separately). (a) In prop 1 cement: 3 sand :6 coarse aggregate by volume					
4	Providing and laying plain/reinforced cement concrete works cement, coarse sand & 20mm downgraded stone aggregate including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work (form work and reinforcement will be measured and paid separately) (I) Using Mixer Machine (A) In substructure up to plinth level N) Without using admixture, plasticizer a) M15 grade concrete or Prop. 1:2:4	cum	27.758			
5	Providing and laying plain/reinforced cement concrete works cement, coarse sand & 20mm downgraded stone aggregate including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work B) In super structure from plinth level up to 1st floor level. ii) Columns, pillars, posts, struts, suspended floor, roof, landing, shelf and support, balcony, lintel, sill band, beam, girder, bressumer, cantilever, staircase (except spiral staircase and landing) including preparing the top surface and finishing of nosing. N) Without using admixture, plasticizer a) M15 grade concrete or Prop. 1:2:4	cum	29.787			
6	Brick work in cement mortar with 1st class brick including racking out joints and curing complete as directed. (I) In Sub-structure up to plinth level including dewatering if necessary (c) In proportion 1:5.	cum	53.246			
7	Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and					

	propping etc., height of propping and centering below supporting floor to ceiling not exceeding 4.0M and removal of the same for in-situ reinforced concrete and plain concrete work in:					
	Foundation, footings, bases of columns, pile cap, raft and mass concrete works etc. (b) Using 25mm thick plank	sqm	69.9			
8	Sides of tie beams, grade beams etc. at or below ground level. (b) Using 25mm thick plank	sqm	128.87			
9	Columns, Pillars, Posts & Strut	sqm	281.115			
10	Supplying, fitting and fixing double leaf heavy duty iron gate, frame made from 50mm x 6mm M.S. flat iron with another horizontal flat at the middle, 20mm dia M.S bars at 200mm apart from bottom flat to top flat and 20 mm dia M.S. bars at 200mm apart from bottom flat to middle flat including drilling, welding etc. complete. All vertical bars are to be protruded at least 100mm above the middle and top flat is to be flattened and pointed as directed. Necessary locking arrangement on both faces, arrangement for temporary closing the gate and 2 nos.(minimum) strong iron hinges of M.S bars and flat of same sizes on each leaf to be embedded in C.C brick pillars as necessary including a red oxide painting to all iron works as directed and specified. (Separate payment will be made for posts).	Qtl.	9.62			
11	10 mm thick Cement plaster in single coat on fair side of brick/concrete walls for interior plastering up to 1st floor level including arises or rounded angles not exceeding 80mm girth and finished even and smooth including curing complete as directed. d) In cement mortar 1:6	sqm	1168.07			
Non Schedule Item:						
12	Supplying, fitting, fixing in position ISI approved TMT reinforcement bars conforming to relevant I.S Code for R.C.C work including straightening,	Kg	3200.995			

	cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete (upto 1 st floor level)					
13	Supplying, fitting, fixing in position ISI approved mild steel reinforcement bars conforming to relevant I.S. Code for RCC work including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete (upto 1 st floor level)	Kg	737.752			
14	Structural steel work in single sections of MS angles including cutting, hoisting, fixing in position and applying a priming coat of red lead paint (upto 4.6m height) from plinth level including drilling holes, supplying, fitting and fixing with bolts and nuts or welding. If necessary as directed.	Qtl.	5.4			
15	Supplying, fitting and fixing galvanized barbed wire fencing with three strands of two ply, 12SWG barbed wire with 4 pointed barbs at 75mm c/c fixed on intermediate angle iron posts duly slotted to take eye bolts and staple etc complete.(Cost of angle iron posts shall be measured and paid separately)	Rm (of 3 strands)	1028.4			

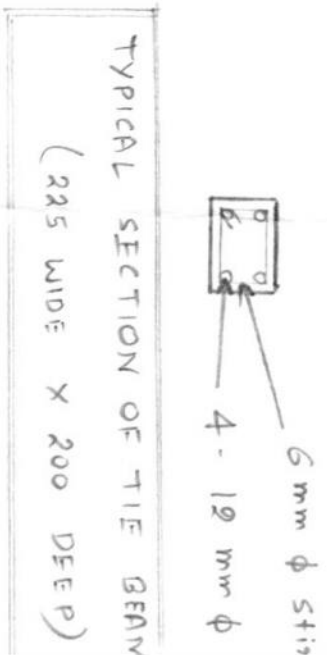
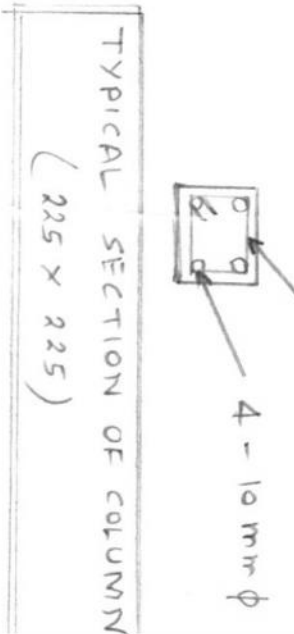
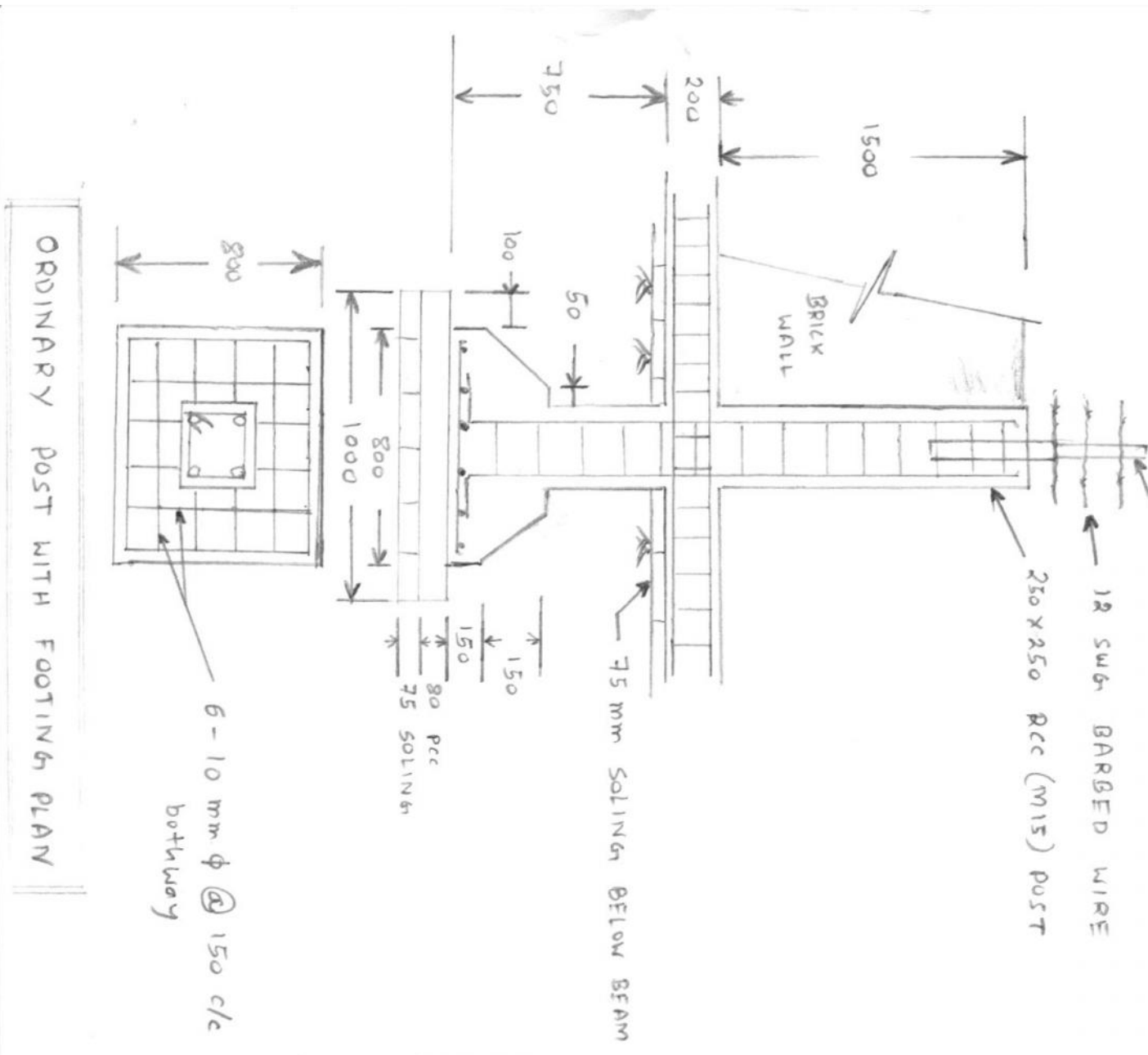
Enclo:

- 1.
- 2.
- 3.

Yours faithfully,

(Name of the contractor)

Address:-



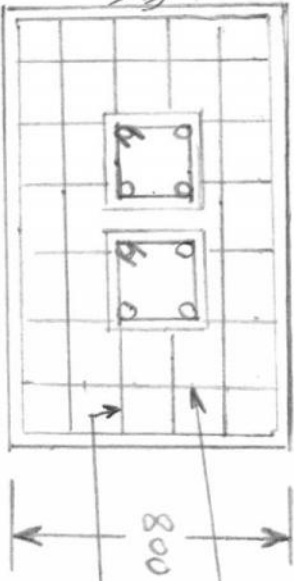
ALL DIMENSIONS

20/05/18

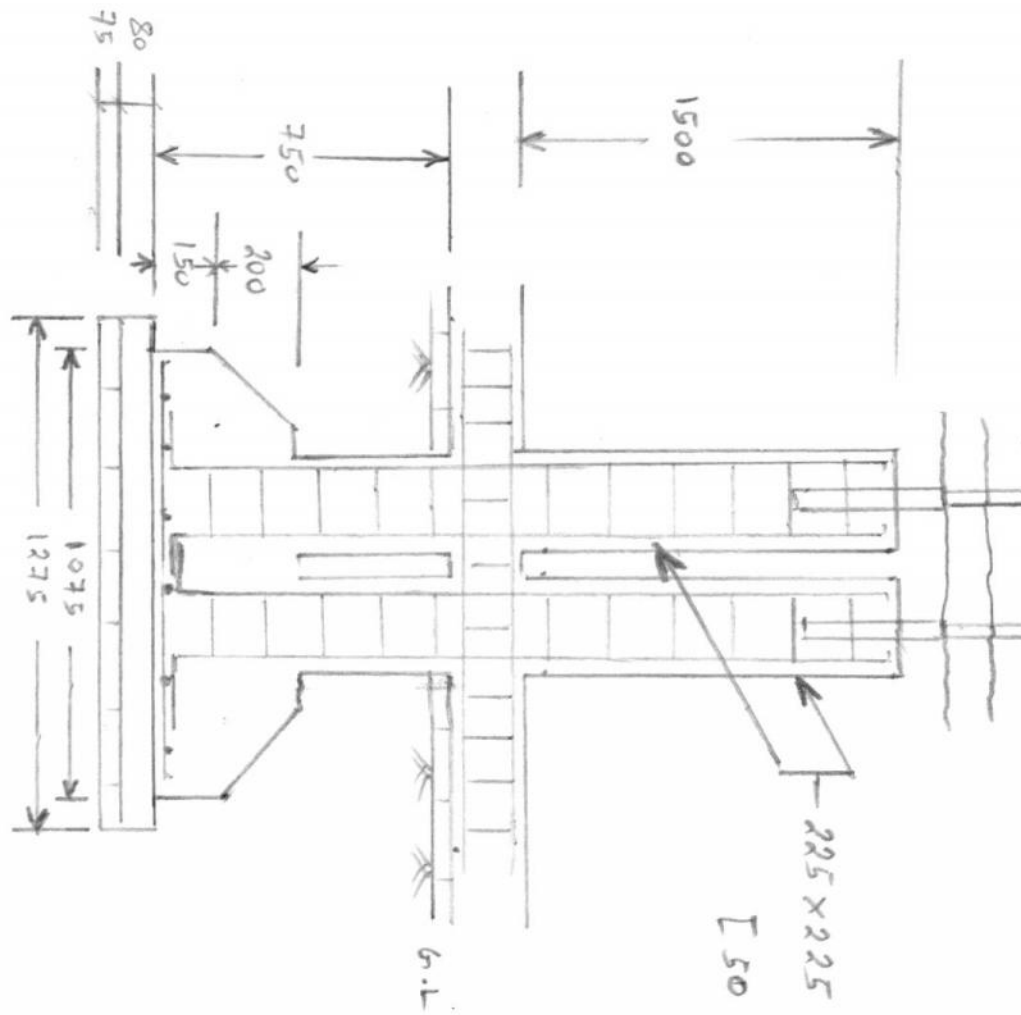
Junior Manager (C)
O/o the Chief General Manager (Hydro & Civil)
APGCCL, Bijulee Bhawan, Ghy-1

Asst.
O/o the Chief General Manager (Hydro & Civil)
APGCCL, Bijulee Bhawan, Ghy-1

30/05/18
 Junior Manager (C)
 O/o the Chief General Manager (Hydro & Civil)
 APGCL, Bijulee Bazar, Cuttack-751005



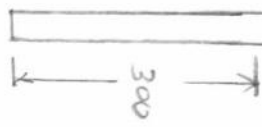
8-10 mm ϕ @ 146 c/c
 6-10 mm ϕ @ 150 c/c



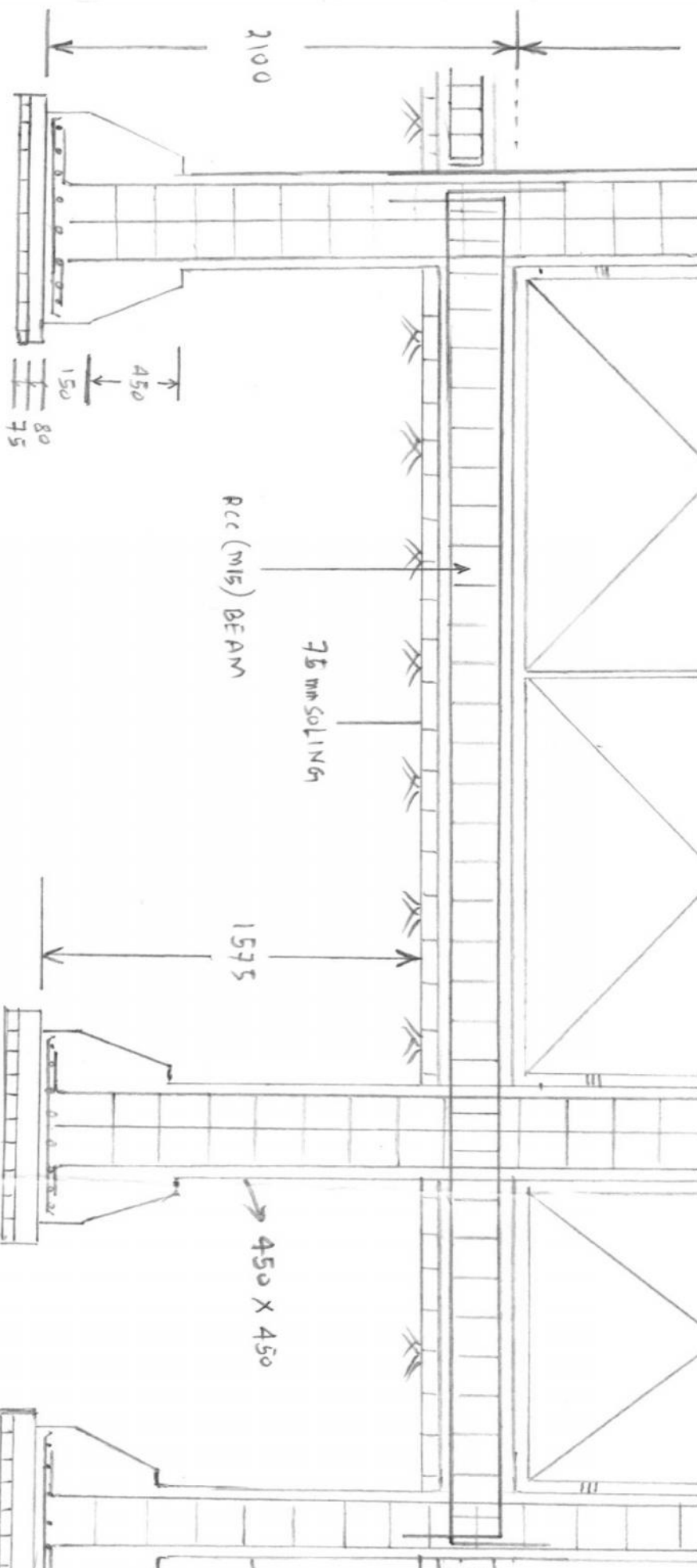
225x225 RCC (MIS) POST
 [50 mm EXPANSION GAP]

EXPANSION JOINT
 WITH FOOTING
 ALL DIMENSIONS

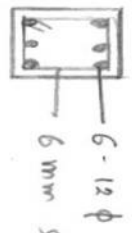
15A 50 X 50 X 6



30/05/18
 Asst. Manager (Civil)
 O/o the CGM (Hydro & Civil)
 APGCL, Bijulee Bazar, Guwahati



TYPICAL SECTION OF A TIE BEAM
(250 W X 450 D)



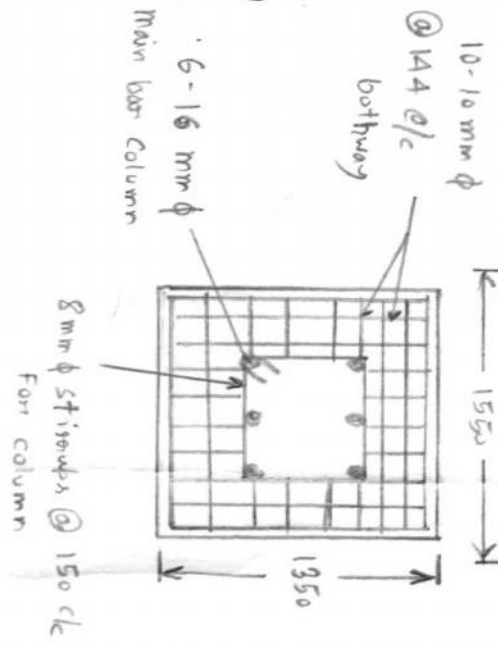
6-12 ϕ
6 mm stirrups @ 185 c/c

[Signature]
20/10/18

Junior Manager (C)
Hydro & Civil
Chief General Manager (Hydro & Civil)
Riitlee Bhawan, Ghy-2
DIMENSIONS ARE IN MM

Asst. Manager (Civil)
Hydro & Civil
Chief General Manager (Hydro & Civil)
Riitlee Bhawan, Ghy-2
Pallanbazar, Guwahati-1

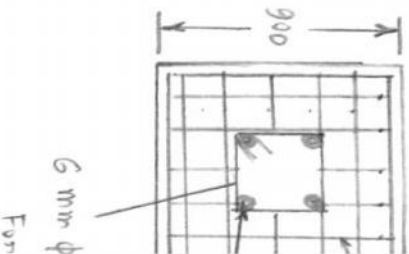
[Signature]
20/10/18



6-16 mm ϕ
Main bar Column

10-10 mm ϕ
@ 144 c/c
both way

8 mm ϕ stirrups @ 150 c/c
For column



6 mm ϕ
For

