

Bharat Heavy Electricals Limited

**High Pressure Boiler Plant
Tiruchirappalli – 620 014. India
Civil Engineering Department (Factory)**

TENDER DOCUMENT (PRICE BID)

Name of work : Providing storage facility for intermediate & PSS Components in Bldg.No.107, foundation and other facilities for Grinding machine near thermo press, storage facility for drum components in Bldg. No.1, providing coal storage facility at CCDP Complex and Providing class room cum auditorium in HRDC Complex at BHEL, Trichy-14.

Value of work : Rs. 132 Lakh

Tender Notice No. : 06/10-11

Tender Schedule No. : 15/10-11

Period of Contract : 9 Months

Issued to :

**BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI – 620 014**

CIVIL ENGINEERING DEPARTMENT (FACTORY)

PREAMBLE

01. The scope of work includes **Providing storage facility for intermediate & PSS Components in Bldg.No.107, foundation and other facilities for Grinding machine near thermo press, storage facility for drum components in Bldg. No.1, providing coal storage facility at CCDP Complex and Providing class room cum auditorium in HRDC Complex at BHEL, Trichy-14.**
02. The tender value excludes cost of cement, reinforcement steel & structural steel which will be supplied by BHEL at Stores at free of cost. Other free issue materials by BHEL are indicated in Schedule B of the Price bid document.
03. Time is the essence of the contract. Being a time bound expansion scheme with capital expenditure, the contractor should make all efforts to complete the work in time. Even though the overall completion period is indicated as **9 months**, the shop floor and other works shall be completed progressively and handed over as per agreed split up schedule.
04. The tenderers are advised to visit BHEL Factory at Tiruchrappalli and get themselves acquainted with the site conditions before submitting the offer.
05. **The following eligibility criteria shall be complied to fulfill the Qualification Bid:-**
 - a) **Contractor should have separate Registration Code No. for EPF, ESI and Service Tax.**
 - b) **The tenderer / Contractor should have PAN and submit the IT return filed and acknowledged by IT Office for the last three financial years.**
 - c) **Average annual turnover in the last 3 financial years shall be minimum of Rs.40.00 Lakh**
 - d) **During last seven financial years should have successfully completed works either Three similar works each not less than Rs. 53.00 Lakh (or)
Two similar works each not less than Rs. 66.00 Lakh (or)
One similar work not less than Rs. 106.00 Lakh**
 - e) **Solvency certificate shall be minimum for Rs. 53.00 Lakh
(The Certificate should have been issued within 6 months from the date of tender opening.)**
06. The works executed in the own name of the tenderer only will be considered for eligibility criteria.
07. Dissimilar / irrelevant works will not be considered for eligibility criteria.
08. Documentary evidences (Xerox copies - attested) for turnover, works experience, P.F, ESI, Sales Tax and Service Tax registration etc., all as indicated & required in the tender document should be furnished without which it will not be taken into account.

09. The value of turnover and the value of similar works mentioned above excludes cost of cement, reinforcement steel and structural steel. However if the turnover value furnished by the tenderer includes the above materials, then the tenderer has to furnish the cost of the same separately. If it is not furnished, the materials cost will be presumed as follows: -
- | | |
|---|--------|
| Civil & structural works combined | - 50 % |
| Civil works alone | - 35 % |
| Structural works including cloaking items | - 70 % |
| Other minor maintenance works | - 20 % |
10. The norms for qualification with prescribed score is attached in the Qualification Bid Document. Evaluation will be done accordingly. Minimum score required for qualification is 60.
11. Tender Value is only approximate and liable for variation without entitling the tenderer to any compensation, till the total value of contract vary by more than 20% (twenty percentage).
12. Quoted rate shall be firm throughout the contract period of **9 (Nine) months including extended period if any** and no cost escalation is allowed on any account.
13. The item rate offered is for finished item of works and shall provide for the complete cost towards fuel, tools, tackles, plant & machinery, temporary works, labour, materials, levies, taxes, transport, lay-out, repairs, rectifications, maintenance till handing over, supervision, labour colonies, establishment, services, roads, revenue expenses, overheads, profits & all other incidentals etc., complete. **However if the service tax is applicable for this contract work and free issue materials, the same will be reimbursed on production of valid document proof for having paid service tax by the contractor.**
14. Some changes are likely in the quantities furnished as well as in the layout, design and specifications of the work. The rates quoted shall be deemed to be inclusive of all such contingencies.
15. Usually, working hours are limited to day time only. In emergency cases to carryout works during nights, it may be done so with the specific prior permission of BHEL. In such case, it is to be carried out in the presence of BHEL officials or their authorized persons.
16. The work shall be carried out as per drawings released then and there, Civil Engineering Department Work & Safety procedure, AWS / BIS specifications, standard code of practice and as per the instructions of Engineer-in-charge. The brief description of items of work is given in the bill of quantities provided in the Price Bid. **Tenderer has to quote rates both in figures and in words for all the items given in the Bill of Quantities provided in the Price Bid. (From page No. 18 to 52).**
17. For any item of work not covered in Bill of Quantities, the rate will be arrived at based on the conditions given in BHEL General Conditions of Contract in force.
18. **After award of work the contractor has to furnish the security deposit, as per Clause 13 of Tender Notice, attached in the Price Bid. Also it is to be noted that after award of work the contractor has to furnish 50 % of security deposit before the commencement of work.**

19. The contractor has to arrange sufficient number of lorries to collect & transport the surplus earth, construction debris generated, etc. at site. Otherwise BHEL would clear the debris at the contractor's risk and cost.
20. The contractor has to execute any item of work irrespective of the quantity available in the tender without any reservation till the contract value does not vary more than 20%.
21. Since the responsibility for the quality, workmanship and accuracy of any work being carried out under this contract lies with the contractor, the contractor should ensure that no work is done without the presence of contractor's representative at the work spot. The contract should arrange for surveying construction site wherever required at his own cost.
22. Statement of completed works with detailed measurements along with material reconciliation statements shall be submitted by the contractor in the last week of every month for processing bill.
23. The decision of Engineer-in-charge shall be final and binding on the contractor regarding clarification of items in this tender schedule.
24. The works contract to be entered into with the successful tenderer will be governed by the BHEL Revised General Conditions of Contract in force.
25. The contractor shall strictly adhere to various labour laws in force.
- 26.. The contractor has to submit the organization chart of their set up for the works and any change thereafter in the organization set up shall have the prior approval of BHEL.
27. The contractor should submit the programme for the completion of work and the list of machineries and site personnel to be deployed for the work along with tender.
28. The contractor is required to carry out construction activities as directed by the department officials. It is required to engage certain minimum strength of staff for effective supervision of works as indicated below:

Site in-charge / Construction Manager	-	1 No.
Planning Engineer and coordinator	-	1 No.
Supervisor/Engineer (Diploma Holder)	-	2 Nos.

In addition to the above, qualified Safety Engineer should be deployed at site to ensure the working safety at site.
29. To safeguard the persons working at height in roof, wall etc., sufficient number of Industrial Safety nets shall be provided at tenderer's cost in appropriate level and locations. The working hand including Supervisors, Engineers should wear the personal protective items and safety measures such as helmets, safety belts, shoes, etc., before entering into working place.
30. The tenderer has to deploy adequate labour of required categories such as Unskilled, Skilled, Mason, Carpenter, Plumber, Welder, Fitter, Mistry, Technically experienced, etc. so as to execute the works simultaneously in all areas of work. The Technical persons with experience shall have to produce valid certificate for verification.
31. Expertised labour only to be engaged for specialized items of work like laying of ceramic tiles, marbles, cuddapah slabs, granite slabs and false ceiling, partition, wall paneling, architectural finishing etc. and work experienced persons shall be engaged for fabrication, water supply, railway track laying and aligning works, sewerage system work, etc.
32. The contractor shall follow norms of BHEL security system for movement of men & materials within the complex.

33. Exclusive Stores personnel should be engaged who would co ordinate with department official for clearance and collection of BHEL supplied materials required for works.
34. Separate non-technical persons should be engaged for arranging daily gate passes for labours and vehicles entry in all the gates of Factory Complex.
35. The tenderer shall carry out health performance test at his cost for all the workmen engaged in the work through a registered medical practitioner and produce certificate on demand.
36. It shall be the responsibility of the contractor to see that the workmen do not utilize the departmental canteen facilities. Contractor has to make his own arrangements to provide refreshment for the workmen.
37. All the works shall be executed as per the standard specifications as provided in TNBP / BIS.
38. All the materials to be used in the work and the nature of work shall conform to the respective TNBP & BIS and National Building Organization, Standard Specifications forming part of "ALL INDIA STANDARD SCHEDULE OF RATES" specifications and shall be got approved by the Engineer-in-charge before actual incorporation in the work.
39. The contractor should maintain proper accounts for cement, reinforcement steel and structural steel sections and other materials if any supplied by this organization and these should be available at the site of work for verification and check by the Officials of this Organization at any time.
40. All materials brought by the Contractor for incorporation in the work shall be got inspected and approved by the Engineer-in-charge before they are incorporated in the work.
41. **The contractor should use only the materials of brand and quality as approved by BHEL.**
42. All materials and consumables brought by the contractor should have manufacturer's certificate.
43. All tools and plants including jack hammer with silencer & bits, rock drilling machine, etc., required for all the works covered under this contract will have to be brought by the contractor.
44. All safety measures are to be followed during execution of work, particularly during blasting and only licensed blaster should be engaged for this purpose. Sufficient care shall be taken by the contractor during excavation to avoid damages to the buried pipe lines, cables and other infrastructure like railway lines if any etc. Controlled blasting including muffling can be carried out with prior permission from safety department.
45. Contractor's materials and tools & plants shall have to be brought inside factory with proper invoice / voucher and make necessary entry in the security gate. They should maintain proper record for tools and plats, materials, etc., brought inside the factory complex.
46. The contractor should extend full co-operation to the other contractors who may be doing other works in the same areas to enable them to execute their portions of work without any delay or difficulty.
47. With regard to specifications not covered by the General and Special Conditions of Contract, those contained in the Tamil Nadu Building Practice Standard Specifications or other specifications approved by Bharat Heavy Electricals Limited, shall apply.

48. On the written request from the contractor **Water required for the work may be provided by this organization at only one point at the site of the work at free of cost.** In case of failure of water supply, the Contractor will have to make his own arrangements for water without any extra claims until supply is restored. BHEL does not accept any liability whatsoever for non-supply or delay in the supply of water under any circumstances. The contractor shall ensure that there is no wastage of water otherwise supply of water is liable to be stopped at contractor's risk and cost.
49. On the written request from the contractor **Electrical energy required for the work may be given by this organization at any one point at the site of work at free of cost.** BHEL does not accept any liability whatsoever for non-supply, delay in supply or failure of supply of electrical energy. Contractor shall ensure that there is no wastage of electrical energy otherwise supply is liable to be stopped at contractor's risk and cost. The contractor shall make leak proof / fire proof shed and provide control panel board of required capacity and lay the required cables at their own cost for further distribution.
50. On the written request from the contractor **Compressed air alone will be provided this organization at only one point near the site of work at free of cost. The contractor has to provide further arrangements from that point to his other areas. Also the contractor should be in a position to make his own arrangement for compressed air without any extra claim for the uninterrupted operation of jack hammer with silencer wherever BHEL is not in a position to supply compressed air.**
51. Tenderers are requested to furnish the duly filled in E format attached as separate sheet along with a cancelled cheque leaf to accept Electronic fund transfer / R T G S transfer for any payment from BHEL, Trichy.
52. Exclusive lorries to be deployed on daily basis to clear the debris generated and on no account the debris can be left for more than three days. Otherwise BHEL would clear the debris at the contractor's risk and cost.
53. The contractor has to carryout the work in production shops without affecting the production by planning such work on holidays / obtaining proper shut down.
54. The works contract to be entered into with the successful tenderer will be governed by the BHEL Revised General Conditions of Contract in force.
55. The contractor should use only weigh batch for all reinforced cement concrete works (controlled concrete). The tenderer is advised to install concrete mini batching plant at site considering the quantum of concrete work involved.
56. Bank Guarantee format can be obtained after award of work in case of successful tenderer.
57. No advance / mobilization advance will be given.
58. LD / Penalty clause is applicable as per General Conditions of Contract in force.
59. BHEL reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at another project/unit awarded against a different enquiry.
60. BHEL reserves its right to accept/reject any or all the tenders.
61. BHEL reserves its right to finalize the contract through reverse auction for which only qualified tenderers will be provided with necessary documents containing reverse auction rules, terms and conditions for this purpose.

REVERSE AUCTION

BHEL reserves the right to go for a Reverse Auction (RA) instead of Opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions governing RA are given below.

GENERAL TERMS AND CONDITIONS OF RA

Against this tender for the subject work/system with detailed scope of work as per tender specifications, BHEL may resort to "REVERSE AUCTION PROCEDURE" i.e., ON LINE BIDDING ON INTERNET.

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
3. BHEL will inform the vendor in writing in case of reverse auction, the details of Service Provider to enable them to contact & get trained.
4. Reverse Auction rules like event date, time, Start price, bid decrement, extensions etc. also will be communicated through service provider for compliance.
5. Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of Reverse auction. Without this, the vendor will not be eligible to Participate in the event.
6. BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Taxes and Duties, Freight charges, Insurance and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the vendor to enable them to fill-in the price and keep it ready for keying in during the Auction.

However if the service tax is applicable for this contract, the same will be reimbursed on production of valid document proof for having paid service tax by the tenderer.

7. Reverse auction will be conducted on scheduled date & time.
8. At the end of Reverse Auction event, the lowest bidder value will be known on the network.
9. The lowest bidder has to Fax the duly signed Filled-in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail.
10. Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHEL as per prevailing procedure.
11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL's standard practice.
12. BHEL reserves the right to negotiate if need be, with the "L1" vendor of the Reverse Auction

Force Majeure clause: If at any time during the continuance of this contract the performance in whole or in part by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events) then provided notice of happening of any such events is given by either party to other within twenty one days from the date of occurrence thereof neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by BHEL subject to prompt notification by the tenderer to BHEL of the particulars of the events and supply to the BHEL if required of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.

The correspondence exchanged against the tender from both tenderer and BHEL through email are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business.

Any transaction pertaining to the tender from both the parties of business done round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties. This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the parties to the business.

In case Letter of Intent (LOI) is issued through email, the PC generated time and date of mail shall be construed as the official time and date of release of LOI. In as much as this date is within the last date of validity given by the bidder the LOI is said to have been issued within the validity period and shall be binding on both the parties to the business.

Tenderers participating in the tender should declare in their technical bid that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be clearly furnished to BHEL. If no such details are mentioned in the offer then it will be construed that the subject bidder is not under any such hold. But at a later date if it comes to the notice of BHEL about any such hold under enforcement on the subject bidder, BHEL will have every right to reject the offer of such vendors at any point of time and also under any stage of the finalisation of the subject tender irrespective of the status of the subject bidder in that tender. Such bidders will not be permitted to participate in the further tender proceedings and will be communicated suitably. They will not be also considered for any on going tenders even if participated till the hold is officially lifted and confirmed in writing.



BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
Unit : TIRUVERUMBUR, BOILER PROJECT, P.O.
TIRUCHIRAPALLI - 620 014.

CIVIL ENGINEERING DEPARTMENT

NOTICE INVITING TENDER

01. Name of work : **Providing storage facility for intermediate & PSS Components in Bldg.No.107, foundation and other facilities for Grinding machine near thermo press, storage facility for drum components in Bldg. No.1, providing coal storage facility at CCDP Complex and Providing class room cum auditorium in HRDC Complex at BHEL, Trichy-14.**
02. Estimated Cost : **Rs.132 Lakh**
03. Earnest Money Deposit : **Rs.2,00,000/-**
04. Completion Time : **NINE (9) Months**
(From the date of commencement of the work which will be reckoned from the date of handing over to the Contractor)
05. Cost of Tender Document : **Rs.750/- (including Sales Tax)**
This amount will not be refunded under any circumstances
06. Last Date for Receipt of Tenders : **14.55 Hrs. on 18.02.11**
07. Date of Tender Opening : **15.00 Hrs. on 18.02.11**
08. Maintenance Period : **6 (Six Months from the date of actual completion of the entire work and handing over to Bharat Heavy Electricals Limited)**

Tender document contains **244** pages in Qualification Bid and **66** pages in Price Bid including Bill of Quantities, Drawing etc.

Issued to Messrs. / Thiru :

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ISSUING OFFICER

CONTRACTOR

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ACCEPTING OFFICER

INSTRUCTIONS TO TENDERERS

1. The tender is open to all Contractors. The Contractors not borne on the approved list of contractors of this Organization must submit the following testimonials simultaneously with their tenders.
 - i. A Certificate to establish that the tenderer is an independent contractor working on his own
 - ii. At least two certificates from responsible Officers of Government of Firms of repute, regarding the tenderer's capacity to undertake to undertake and carryout the work tendered for or similar work satisfactorily

NOTE :

- a) Copies of testimonials unless attested a Gazetted Officer will not be accepted
 - b) Non – Submission of the above testimonials simultaneously with the tenders may result in the tender being rejected
2. The tenders should be accompanied by a list of contracts already held by the contractor at the time of submitting the tender and giving the following particulars
 - a) Value of each contract
 - b) The balance value of work to be done on the same
 3. The tenderer is advised to obtain the tender documents in person or by a messenger duly authorized to do so. The BHARAT HEAVY ELECTRICALS LIMITED will not under any circumstances accept responsibility for the non – receipt of delay in the receipt of the tender documents by the tender.
 4. Rate for each item of the tender schedule should be quoted in FIGURES and in WORDS. In case of any difference in the rates quoted in figures and in words, the lower of the two rates will be taken as the tendered rate. Unit rate quoted shall be the basis for arriving the total value of the tender. The total amount for every item shall be arrived by multiplying the unit rate with the quantity indicated for that item. In case of any arithmetic deviation is noticed in the total amount, the same will be corrected and evaluated by taking unit rate as basis and multiplying with the quantity indicated.
 5. Rate quoted shall include all royalties, terminal taxes, Octroi duties, Central or Provincial Excise Tax, Sales Tax and any other taxes leviable under the State or Central Government rules. The Bharat Heavy Electricals Ltd., will not entertain any claim whatever in this respect. **However if the service tax is applicable for this contract, the same will be reimbursed on production of valid document proof for having paid service tax by the tenderer.**
 6. Tender Value is only approximate and liable for variation without entitling the tenderer to any compensation, till the total value of contract vary by more than 20% (Twenty Percentage)
 7. Quoted rate shall be firm throughout the contract period of 12 months sand no cost escalation is allowed on any account including extended period if any.
 8. The works contract to be entered in to with the contractor will be governed by the BHEL Revised General Conditions of contract in force.
 9. Should a tender find discrepancies or omissions in the drawings or any of the tender documents or should be in doubt as to their meaning, he should at once address the authority inviting the tender for clarification. Every Endeavour is made to avoid any error which can materially affect the basis of the tender but the successful tenderer shall take upon himself to provide for the risk of any error which may be subsequently by discovered and shall make no subsequent claim on account thereof.

10. Tenders submitted by post should be sent "Registered Post with Acknowledgement due". These should be posted with due allowance for any delay in postal delivery. Tenders received after the due date and time of opening, tenders are liable to be rejected.
11. Where the tender called for covers only the building work and excludes internal services such as sanitary and water supply installations, electrification etc., the building contractor will have to leave pockets, holes, etc., as required for other works and will have to phase his work to ensure smooth progress of the work of the other agencies also as directed by the Engineer – in – charge.
12. Where the tender schedule contains special items of work such special floor finishes, foam concrete for insulation, special water proofing treatment to roofs etc., it will be entirely at the discretion of the Project Authorities to allot these items of work to other contractors specialized in these works. In such cases, the main building Contractor will have to tender all necessary co-operation to the agencies involved so as to ensure the smooth progress of all work.
13. The contractor's responsibility under this shall commence from the date of receipt of the contract order of acceptance of his tender. The scheduled period of completion for this work will be as mentioned in page No. 01, and the Contractor will have to plan his work accordingly.
14. Generally, the maintenance period for this work under BHEL Organization will be Six(6) months .

15. Earnest Money Deposit:

Earnest Money is to be paid by each tenderer to ensure that the tenderer does not refuse to execute the work after it is awarded to him. EMD be furnished only in the form of Pay Order or Demand Draft in favour of BHEL, Trichy , EMD in any other form will not be accepted. The rate of earnest money deposit shall be as under:

Works costing up to Rs. 2 lakhs	NIL
Works costing more than Rs.2 lakh and up to Rs. 5 lakhs	Rs. 10000/-
Works costing more than Rs.5 lakhs and up to Rs.10 lakhs	Rs. 20000/-
Works costing more than Rs.10 lakhs and up to Rs.20 lakhs	Rs. 40,000/-
Works costing more than Rs.20 lakhs and up to Rs.30 lakhs	Rs. 60,000/-
Works costing more than Rs.30 lakhs and up to Rs.50 lakhs	Rs.1,00,000/-
Works costing more than Rs.50 lakhs and up to Rs.100 lakhs	Rs.1,50,000/-
Works costing more than Rs.100 lakhs	Rs. 2,00,000/-

One time EMD will also be Rs.2.00 lakhs.

EMD by the Tenderer will be forfeited as per tender Documents if:

- i) After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates,
- ii) The tenderer does not commence the work within the period as per LOI / Contract. In case the LOI / contract is silent in this regard then within 15 days after award of contract.

EMD given by all unsuccessful tenderers shall be refunded normally within fifteen days of acceptance of award of work by the successful tenderer.

EMD shall not carry any interest.

16. Should a tenderer or a contractor on the list of approved Contractors have a relative, or in the case of a firm or Company of contractors any of its share holders or shareholder's relative, employed in a gazetted capacity in the Engineering Department of the Bharat Heavy Electricals Limited, the authority inviting tenders shall be informed of this fact at the time of submission of the tender, failing which tender, may be disqualified or if such fact subsequently comes to light, the contract may be rescinded in accordance with the relevant provisions in the General Conditions of Contract.
17. If tenderer expires after the submission of his tender or after the acceptance of his tender the BHEL may, at their discretion, cancels such tender. If a partner of a firm expires after submission of tender or after the acceptance of the Tender, BHEL may cancel such Tender at their discretion unless the firm retain its character.
18. The Bharat Heavy Electricals Limited will not be bound by any power of attorney granted by the tenderer or by changes in the composition of firm made subsequent to the execution of the contract. They may however recognize such power of attorney and changes after obtaining proper legal advice the cost of which will be chargeable to the contract concerned.
19. If the tenderer deliberately gives wrong information in his tender or creates conditions favorable for the acceptance of his tender, the Bharat heavy Electricals Limited, reserves the right to reject such tender at any stage.
20. Words importing the singular number shall also be deemed to include the plural number and vice versa where the context so requires.
21. The expenses for competing and stamping the agreement shall be paid by the contractor.
22. The General and special conditions are complementary to each other and where they are conflict the Special Conditions shall prevail. In regard to matters not covered by the General and Special Conditions of Contract, those contained, those contained in the Tamil Nadu Building Practice Standard Specifications or other specifications approved by the Bharat Heavy Limited, Shall apply.
23. 20.Tenderers shall not increase their quoted rates in case the Bharat Heavy Electricals Limited, negotiates for negotiation for reduction of rates. Such negotiation shall not amount to cancellation or withdrawal of the original offer and the rates originally quoted shall be binding on the tenderes for a period of three months from the date of opening of tenders.
24. 21. Canvassing in any form in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection

All contractors will have to produce Income tax Clearance Certificate from the Income Tax- Officer concerned along with their tenders. Those Contractors whose income is not taxable will be required to give an affidavit of their income on the prescribed form. If the successful tenderer fails to produce the Income – tax clearance certificate within the stated period the Earnest Money Deposit and Security Deposit of the tenderer may be forfeited and the contract terminated.

TENDER NOTICE

NAME OF WORK : Providing storage facility for intermediate & PSS Components in Bldg.No.107, foundation and other facilities for Grinding machine near thermo press, storage facility for drum components in Bldg. No.1, providing coal storage facility at CCDP Complex and Providing class room cum auditorium in HRDC Complex at BHEL, Trichy-14.

ESTIMATED COST : Rs 132.00 LAKHS

1. SEALED TENDERS for the above noted work are hereby invited from contractor experienced in works of similar kind and magnitude. Tenders will be received by **SR.MANAGER/CIVIL/FACTORY (PLANNING)** Bharat Heavy Electricals Limited, Tiruchirappalli – 620 014. Up to 14.30 Hrs. on **18.02.11** and will be opened on the same day at 15.00 Hrs. at the **Office of the SR.MANAGER/CIVIL/FACTORY (PLANNING)** in the presence of such of those tenderers. Or their agents who may choose to attend.
2. TENDER FORMS and other particulars regarding the proposed work can be obtained on any working day from 8.00 A.M. to 4.30 P.M. up to **15.02.11** on payment of the prescribed sum of Rs. **750 / -** per set (including Sales Tax) Amount nor refundable.
3. TENDERS must be submitted in sealed covers and should be addressed to the with full name and address of the tenderer and the name of work being noted on the cover
4. All entries in the tender documents should be in the one ink. Erasers and over writings are not permitted. All cancellations and insertions should be duly signed by the tenderer concerned.
5. TENDERERS should fill in all the required particulars in the blank spaces provided for this purpose in the tender documents and also sign each and every page of Tender Documents including the drawings attach there to before submitting their tender.
6. UNIT rate should be quoted in figures as well as in words with reference to each item and for all the items shown in the attached schedule. These rates shall be for the finished work in site. Amount of each item and the total page by page and also the grand total amount of the whole contract should be filled in by the tenderers. Unit rate quoted shall be the basis for arriving the total value of the tender. The total amount for every item shall be arrived by multiplying the unit rate with the quantity indicated for that item. In case of any arithmetic deviation is noticed in the total amount, the same will be corrected and evaluated by taking unit rate as basis and multiplying with the quantity indicated.
7. QUANTITIES shown in the attached schedule are only approximate and are liable to variation without entitling the Contractors to any compensation, provided the total value of the Contract does not vary by more than 20% (twenty percent)
8. In quoting their rates, the tenderers are advised to take account all factors including any fluctuations in the market rates etc. No claim will be entertained on this account after acceptance of the tender or during the currency of the contract.
9. Before tendering, the tenderers are advised to inspect the site of work and its environments and be well acquainted with the actual working and other Prevalent conditions position of materials and labour, General and Special Conditions of Contract. Instructions to tenders, drawings and Specifications and all other documents which form part of the Agreements to be entered into.

10. The rates quoted in the tender shall remain valid for a period THREE MONTHS from the date of opening of tenders.
11. In the event of tender being submitted by firm the tender must be signed separately and legibly by each partner or member of the firm or in their absence, by the person holding the power of attorney on behalf of the firm concerned in the latter case a copy of the power of attorney duly attested by a Gazetted Officer must accompany the tender.
12. Every tender must be accompanied with EMD for the amount as specified in Page No. 01 in any of the form mentioned in Para 12 of the "Instruction to Tenderers". This Earnest Money will be refunded to the unsuccessful tenderers within fifteen days of finalization of the award of work. In case of the successful tenderer, the Earnest Money will be retained as part of the Security Deposit for satisfactory completion of the work in accordance with Clause 16 of the General Conditions of Contract

NOTE : Cheques, Currency Notes and Money Orders will not be accepted in lieu of the deposit receipt referred to above

13. Security Deposit

13.1 Security Deposit should be collected from the successful tenderer . The rate of Security Deposit will be as below:

Up to Rs. 10 lakhs	: 10%
Above Rs. 10 lakhs up to Rs.50 lakhs	: 1 lakh + 7.5% of the amount exceeding Rs. 10 lakhs.
Above Rs. 50 lakhs	:Rs.4 lakhs + 5% of the amount exceeding Rs.50 lakhs.

The security Deposit should be collected before start of the work by the contractor.

13.2 Security Deposit may be furnished in any one of the following forms

- i) Cash (as permissible under the Income Tax Act)
 - ii) Pay Order, Demand Draft in favour of BHEL.
 - iii) Local cheques of scheduled banks, subject to realization.
1. Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc.
(Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back).
 - v) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL.
 - vi) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act . The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.
 - vii) Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be collected before start of the work and the balance 50% may be recovered from the running bills.

- viii) EMD of the successful tenderer shall be converted and adjusted against the security deposit.
- ix) The security deposit shall not carry any interest.

NOTE: Acceptance of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

14. Unless the contractor whose tender is accepted signs the Contract Agreements and makes the necessary security deposit specified in Para 13 above within Seven days of the date of the order directing him to do so the amount of Earnest Money Deposit already deposited by him will be forfeited and acceptance of his tender withdrawn.
15. If after opening of tenderer revokes his tender or increases his earlier quoted rates or after acceptance of his tender does not commence the work in accordance with the instruction of the Engineer-in-charge, the Earnest Money deposited by him will be forfeited and acceptance of his tender withdrawn. If only a part of the work included in the tender had been awarded to the tenderer, the amount of Earnest Money to be forfeited will be based on the value of the contract so awarded.
16. The Bharat Heavy Electricals Limited reserve the right to reject any or all the received or accept any tender or part there of without assigning any reason thereof. In the case acceptance of part of tender, time for completion may also be reduced to the extent considered appropriate by the Accepting Authority.
17. Conditional and Unwitnessed tenders, tender containing absurd rates and amounts tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions laid down by the Accepting Officer are liable to be rejected.
18. Tenders not submitted on the prescribed form are liable to be rejected
19. The work must be completed within a period as mentioned in Page No.09.
20. The Chairman / General Manger / Deputy General Manager / Deputy Manager / Senior Engineer shall be Accepting Officer, herein after referred to as such for the purpose of this contract.
21. This tender notice shall be deemed to form an integral part of the contract to be entered into for this work.
22. The tenderers are advised to go through the condition stipulated in Tender document & code of conduct for 'Health & Safety of Contract Labourer' in details. Any violation thereof will invite punitive action being taken against them. While quoting the rate all the above factors are to be taken into account.

BHEL APPROVED BRANDS FOR THE FOLLOWING MATERIALS / ITEMS

Sl.No.	Material	Manufacturing Co.	Brand
1.	Synthetic Enamel Paint	Asian Berger ICI	Apcolite Luxol Dulux gloss
2.	Aluminium Paint	Berger	Berger Aluminium
3.	Interior Emulsion	Asian Berger ICI	Royale Luxol Silk Supercote
4.	Exterior Emulsion	Asian ICI	ACE Supercote
5.	Distemper	Asian Berger ICI	Tractor Bison Maxilite
6.	Cement Paint	Snowcem Agsarcem	Snowcem Agsarcem
7.	A.C. Sheets	Everest India Ltd. Hyderabad India Ltd. Visaka Industries Ltd. Ramco	Everest I Charminar Visaka Ramco
8.	G.I. Pipes	TATA Zenith TNT	TATA Zenith TNT
9.	PVC Pipes	Avonplast Finolex Truebore Vignesh	Avonplast Finolex Truebore Vignesh

SCHEDULE 'A'

LIST OF WORKS AND PRICES

DETAILS & QUANTITIES of each item of work shown in the BILL OF QUANTITIES are only approximate. They are given as a guide for the purpose of tendering only and are liable to variation and alteration of the Competent Authority. The work under each item as executed shall be measured and priced at the corresponding rate quoted by the contractor in the BILL OF QUANTITIES

Sl.No.	Description of work / supplied	Total amount of work / supplies (in figures and words)		Period of contract
		Rs.	Ps.	
1.	Providing storage facility for intermediate & PSS Components in Bldg.No.1, foundation and other facilities for Grinding machine near thermo press, storage facility for drum components in Bldg. No.107, providing coal storage facility at CCDP Complex and Providing class room cum auditorium in HRDC Complex at BHEL, Trichy-14.	1,32,00,000/-		NINE (9) MONTHS

BILL OF QUANTITIES

Sl.No.	Appx.Qty.	Description of work	TNBP No.	Rate (Both in Unit fig & Words)	Amount Rs.	Ps.
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AS PER SEPARATE SHEETS ATTACHED CONTAINING**35**.....PAGES

FROM SERIAL No. **18** to **52**

CONTRACTOR

17

ACCEPTING OFFICER

**BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI – 14**

BILL OF QUANTITIES

NAME OF WORK: Providing storage facility for intermediate & PSS Components in Bldg.No.107, foundation and other facilities for Grinding machine near thermo press, storage facility for drum components in Bldg. No.1, providing coal storage facility at CCDP Complex and Providing class room cum auditorium in HRDC Complex at BHEL, Trichy-14.

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
<u>PART-A (CIVIL WORKS)</u>					
1		Dismantling / removing / demolishing as the case may be of the following by manually / mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge.			
a)	15	Brick work in cement mortar		CUM	
b)	15	Stone rubble masonry in cement mortar		CUM	
c)	12	Plain Cement Concrete.		CUM	
d)	5	RCC works including stacking of steel bars.		CUM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
e)	15	RCC louvers / RCC jally		SQM	
f)	30	Brick jelly lime concrete		CUM	
g)	20	AC sheets from roofs and side cladding including ridges, valleys, gutters etc.,		SQM	
h)	300	G I / Aluminum sheets from roofs & side cladding including ridges, valleys, gutters etc.		SQM	
i)	2	Steel structures / steel works in built up sections including bolts, nuts, cutting rivets, welding, dismembering, preparation of DODL's etc.,		MT	
j)	10	North light glasses at various levels ranging from 9 to 24m.		SQM	
k)	25	Bituminous roads		CUM	
l)	25	WBM road.		CUM	

CONTRACTOR

19

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
				CUM	
2	5	Demolishing CC/RCC works by any mechanical means and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000m, stacking serviceable and unserviceable materials separately including cutting reinforcement bars. All as per instructions of Engineer-in-charge.			
3		Earthwork excavation (TRENCHES) in soils given below by mechanical means (Hydraulic excavator)/manual means and depositing the excavated earth at suitable places within the initial lead of 50 meter and initial lift of 1.5 meter for foundation in building works, roads, narrow drains, sewers, bridges, pipe lines etc., sectioning the subgrade to proper level and grade, watering and consolidating the subgrade to receive concrete bed, all as per standard specifications and instructions of Engineer-in-charge. <u>Rate also includes bailing or pumping out water during excavation due to subsoil water, rain etc.</u>			
a)	1915	All kinds of soil except rock		CUM	
b)	210	Ordinary rock		CUM	
c)	240	Hard rock (requiring blasting)		CUM	
d)	25	Hard rock (Blasting prohibited)		CUM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
4		Extra for earth work for every additional lift of 1.50m or part thereof.			
a)	40	All kinds of soils excluding rock		CUM	
b)	40	Ordinary or hard rock		CUM	
5		Earth work for surface excavation (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) in soils given below by mechanical means (Hydraulic excavator)/manual means including disposal of earth at suitable places within a lead upto 50 metres and lift upto 1.5 metre, sectioning the subgrade to proper level and grade. Disposed soil are to be leveled and neatly dressed.			
a)	1110	All kinds of soils except rock		CUM	
b)	1110	Ordinary rock		CUM	
6	25	Supply and filling with river sand in foundation, plinth, under floor etc. including watering, ramming, consolidating and dressing complete.		CUM	

CONTRACTOR

21

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
7	25	Hire charges for engaging earth moving machinery (pockline) to attend to channeling works at river bed, pipe line burst works, cleaning the areas including uprooting thorny plants/heavy jungles/trees etc.of all heights and leveling the areas thereafter including all debris etc., all as per instructions of Engineer-in-charge. Rate includes hire, fuel, operation charges, to and fro charges for machinery, all labour and all other incidentals etc., complete.		HOUR	
8	215	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50 m and lift up to 1.5 m etc. complete.		CUM	
9	15	Bailing or pumping out water from trenches, foundations etc., at all depths wherever necessary as per standard specifications.		HP/ HOUR	
10		Providing and laying in position plain cement concrete of specified grade including consolidation, curing etc, complete, all as per standard specifications. All works up to plinth level. Rate excludes cost of centring and shuttering.			
a)	10	1:2:4 with graded stone aggregate 20 mm nominal size.		CUM	
b)	110	1:4:8 with graded stone aggregate 20 mm nominal size.		CUM	
c)	32	1:4:8 with graded stone aggregate 40 mm nominal size.		CUM	

CONTRACTOR

22

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
11	46	Providing and laying in position machine batched, machine mixed and machine vibrated design mix of reinforced cement concrete of specified grade for structural elements using 10 to 20 mm hard broken granite stone jelly, excluding cost of centring, shuttering, finishing and reinforcement but including admixtures in recommended proportions (as per IS:9103) to accelerate, retard setting of concrete, improve workability without impairing strength and durability, all as per directions of Engineer-in-charge. M-20 Grade reinforced cement concrete. All work in foundation, basement and upto Floor V level.		CUM	
12		Providing and laying in position of the specified grade of reinforced cement concrete including vibration charges, curing etc., complete but excluding cost of centering, shuttering, finishing and reinforcement – 1: 1.5: 3 with graded stone aggregate 20mm size.			
a)	80	All works in foundation, basement.		CUM	
b)	85	Above plinth level up to floor V level		CUM	
13	25	Straightening, cutting, bending, placing in position of MS/CTD bars and binding with MS binding wires of 18/20 gauge etc. for reinforcement of RCC works at all levels. Rate includes cover blocks, cost of binding wire, conveyance of MS/ CTD bars from BHEL stores to site of work, labour etc. complete. MS/CTD bars will be supplied by BHEL at Stores at free of cost.		M.T	
14		Centring and shuttering including strutting, propping, assembling etc. and removal of form work up to a maximum height of 4.50 metre of each floor and also up to floor five level.			

CONTRACTOR

23

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
a)	75	Foundations, footings, bases of columns, equipment foundations, precast slabs, kerbs etc. for mass concrete.		SQM	
b)	120	Walls (any thickness) including attached pilasters, plinth, stairs, chimney, shafts and string courses etc.		SQM	
c)	300	Suspended floors, roofs, landings, balconies, access platform and sunshades.		SQM	
d)	200	Lintels, beams, plinth beams, girders, bressumers and cantilevers.		SQM	
e)	160	Columns, pillars, piers, abutments, posts and struts.		SQM	
f)	3	Pockets or holes in foundations for holding down bolts.		SQM	
15	5	Providing vertical drops, fins, facias etc., for the following thickness with 1:2:4 cement concrete using 6mm granite stone chips for inner core applied on chickenmesh and neatly plastered with cement mortar 1:4, 12mm thick on both faces, finishing, curing etc., complete. Rate includes cost of all materials and labour but excluding fabrication charges for reinforcement. 75mm thick.		SQM	

CONTRACTOR

24

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
16	5	Providing, hoisting and fixing upto floor five level precast reinforced cement concrete elements like slabs etc. of 25 to 150 mm thick in required sizes with mix 1:2:4 using 10 to 20 mm size hard broken granite stone jelly for cupboards, shelves etc. including setting in cement mortar 1:3, cost of centring, shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement and fabrication charges.		CUM	
17	25	Providing, hoisting and fixing upto floor V level plain cement concrete elements like slabs etc. of 25 to 150 mm thick of required sizes in mix 1:2:4 using 10 to 20 mm size hard broken granite stone jelly. Rate includes centring, shuttering & finishing with neat cement punning on exposed surfaces but excluding pointing.		CUM	
18	185	Providing precast cement concrete Jalli 1:2:4 using graded stone aggregate 6 mm nominal size with suitable reinforcement including centring and shuttering, roughening, cleaning, fixing and finishing in cement mortar 1:3 etc., complete. Rate excludes reinforcement steel and fabrication charges. 50 mm thick		SQM	
19	5	Encasing rolled steel sections in beams and columns in cement concrete 1:2:4 using graded stone aggregate 12.50 mm nominal size including centering, shuttering etc. complete but excluding cost of reinforcement and fabrication charges.		CUM	
20	12	Providing and fixing in position of 12 mm thick bitumen impregnated fibre board conforming to IS:1838 including cost of primer, sealing compound in expansion joints.		SQM	

CONTRACTOR

25

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
21	1	Providing and filling in position of bitumen mix filler of proportion 80 Kg of hot bitumen, 1 Kg of cement and 0.25 cubicmetre of coarse sand for expansion joints.		CUM	
22	205	Random rubble masonry in foundation and basement in cement mortar 1:5 including simultaneous flush pointing, all as per standard specifications.		CUM	
23		Brick work with F.P.S bricks (second class ground moulded chamber bricks) of class designation 50 /75 in cement mortar 1:5 as per standandard specifications and instructions of Engineer-in-charge.			
a)	5	In foundation and plinth.		CUM	
b)	465	In superstructure above plinth level up to floor three level in all shapes and sizes..		CUM	
24	30	Providing rough stone dry packing for aprons and revetments including filling interstices with spalls, wedges, consolidating and preparing the surface, all as per standard specifications.		CUM	
25	18	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators side/top/centre hung with beading etc., complete of standard rolled steel sections, joints mitred and flash butt and sash bars tenoned and riveted with 15 x 3 mm lugs, 10 cm long, embedded in cement concrete blocks 15 x10 x 10 cm of 1:3:6 or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of hinges, pivots, 4 mm plain glass panes with glazing clips and special metal-sash putty of approved make, handles, peg stays etc., complete including a priming coat of approved steel primer excluding the cost of metal beading and other fittings. Rate includes dismantling the masonry and making good all damages etc., complete.		SQM	

CONTRACTOR

26

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
26	0.1	Providing best teak wood frames for doors, windows, ventilators and other frames, wrought framed and fixed in position. All as per standard specifications and drawings. Rate includes cost of wood, holdfasts, other materials, labour etc. complete.		CUM	
27	5	Supplying and fixing in position of 38/40mm thick best quality single leaved flush shutters solid core type of approved quality with formaldehyde bonded teak ply (both faces) and with teak wood internal lippings etc., complete all as per drawings and standard specifications but excluding cost of frame and furniture fittings. (Area of shutter only to be measured).		SQM	
28		Supply and fixing the following furniture fittings of approved brand and quality (ISI marked) in the appropriate position of doors, windows, ventilators, cupboards etc., with appropriate screws, nails etc., all as per standard specifications and instructions of Engineer in charge.		SQM	
a)	2	Hydraulic door closer – universal type (Heavy duty)		EACH	
b)	2	Brass Mortice Lock 100mm, 6 levers and a pair of brass lever handles.		EACH	
c)	2	D type Anodised Aluminium handle – 125 mm		EACH	

CONTRACTOR

27

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
d)	4	150x11/12 mm Anodized Aluminium tower bolt		EACH	
e)	10	125 mm oxidized iron butt hinges (Heavy duty)		EACH	
f)	2	Hanging type door stopper		EACH	
29	6	Manufacturing, supplying and fixing in position of anodized Powder coated aluminium single leaved / double leaved glassed door of overall size 1.00m x 2.10m or thereabout with suitable frame work as per the following specification and instructions of Engineer-in-charge. The all-round vertical and horizontal outer frame shall with 4" x 1 3/4 " x 1.6mm (unit weight 1.301 Kg / m) section and for door shutter the bottom member shall be with 3 3/4 " x 1 3/4 " x 1.70 mm thick (unit wt 1.301 kg / m) shutter top and vertical shall be of size 1 3/4 " x 1 3/4 x 1.52mm (unit wt. 0.881 Kg/m) thick and shutter divider shall be of 3 3/4 " x 1 3/4 " x 1.70mm thick (unit wt. 1.243Kg/m) with necessary beddings and rubber gaskets as per standard specification. The panels shall be with 5mm thick plain glass. Door shall be provided with 2 no of 300mm long anodized powder coated aluminium handles, one no of ISI marked heavy duty door closer of approved brand, one No. of 200mm long anodized aluminium tower bolt, suitable lock (4 lever) required top & bottom all as per specification of Engineer – in charge. Rate included cost of all materials, labour and other incidentals etc., complete.		SQM	

CONTRACTOR

28

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
30	7	Supplying and fixing of PVC doors with frame of size 0.75m x 2.00m or thereabouts having PVC frame of size 38mm x 38mm PVC shutter of 25mm thick single leaved of approved colour, brand including cost of furniture, fitting etc., all as per standard specification and instructions of Engineer-in-charge.		SQM	
31	7	Supply and fixing SINTEX (superior variety) or equivalent 40 mm thick polymer door with frame, all as detailed below:- Supply and fixing of polymer doors of required overall size (single leaf) with polymer door frame and polymer shutter (superior variety). The door frame of 60 mm thick made out of superior quality polymeric material to IS: 10151-1982. The door frame is made of Rigid Thermo Vinyl Polymer extruded section having overall dimension of 60 x 50 mm with wall thickness not less than 2.5 mm. Corners of door frame to be mitre cut and mechanically fastened or thermally welded. The corners of the door frame shall be reinforced with special polymeric 'L' corners in case of mechanically fastened the hardware position shall be reinforced with special polymeric rods of suitable size special EPDM gaskets shall be provided along with the frame. The door shutter of 40 mm thick made out of one – piece moulded superior quality Rigid Thermo Vinyl Polymer Extruded sections with overall thickness of 40 mm conforming to IS 10151-1982. The door shutter is made out polymeric extruded sections in the configuration of 'C' and the overall dimension of the same is 25 x 40 mm with a wall thickness not less than 2.0 mm.		SQM	

CONTRACTOR

29

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
		<p>The shutter frame is mitred and joined at the corners by means of high quality stainless steel / aluminium screws. All the corners of the shutter frames were being reinforced by high quality polymeric reinforcement to avoid any type of corrosion (or) rusting. The infill of the door shutter is side with glass and to have all polymeric reinforcement of the size 32 x 19 x 252 mm at the position of lock rail. The door should be pre-laminated in different teak wood prelim / mat wood finish / gray colour as per the department's requirement. The entire door shutter should have stainless steel / aluminium screws at appropriate places for rust free quality.</p> <p>Stickers indicating the places of hardware to be used shall be pasted at appropriate places. The shutter shall be provided with 3 Nos. of 4" aluminium / SS butt hinges, 2 Nos. of 4" aluminium / stainless steel handles, 3 Nos. of 6" aluminium / stainless steel tower bolts with required stainless steel / aluminium screws including labour charges for fixing the shutter frame, shutter and furniture fittings in position and finished smooth with template etc. complete, all as directed by the Engineer-in charge. Fittings provided shall bear ISI mark if available. The quality and brand of door shutter and furniture fittings should be got approved by the Engineer-in-charge before use.</p>			
32	22	Providing and fixing powder coated aluminium two track sliding windows of approved colours aluminium sections of size 60 x 28 x 1.20 mm for outer frame , 38 x 17 x 1.20 mm for shutter box and 38 x 17 x 1.20 mm for inter lock 4 mm thick plain glass for panes, PVC wheels, U rubber, screws, locking arrangements etc. complete, all as per instructions of Engineer – in – charge.		SQM	

CONTRACTOR

30

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
33	15	Supplying and fixing in position of aluminium powder coated window cum ventilator of which powder coated aluminium window having fixed glass and powder coated adjustable glass louvers above window using standard anodized aluminium section of size 2½" x 1½" for frames conforming to IS: 1948 of latest edition. The fixed and louvered glass panels shall be 5mm thick frosted glass panes. The ventilator should have required No. of louvers fitted properly in aluminium frame work having arrangement to close / open. The rate quoted shall include cost of all materials, labour, fixing charges, locking arrangements etc. all as per standard specifications, drawing and code of practice and instruction of Engineer-in-charge.		SQM	
34	1	Fabrication of S.S tubes / ERW tubes to the design specified for railing. Rate includes conveyance of raw materials and fabricated railings, fabrication charges, preparation of DODLs, incidentals etc., complete. Tubes and other steel materials required for the work will be supplied by BHEL at Stores at free of cost.		M.T	
35	1	Carrying from stacks to site of work and fixing in position in line, level and alignment of fabricated railings at places as directed by the Engineer-in-charge. Excavation for pits and concrete bed will be paid separately under relevant items.		M.T	
36	1950	Providing holding down bolts of required sizes with nuts, washers etc., and fixing in proper level, line, alignment etc., all as per drawings and instructions of Engineer-in-charge. Rate includes cost of steel materials, bolts, nuts, washers, fabrication and machining charges, fixing, all labour etc. complete. Bolts including nuts and washers etc., complete in all sizes and lengths.		K.G	

CONTRACTOR

31

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
37	50	Conveying all types and sizes of holding down bolts, nuts, washers etc. from BHEL Stores to site of work and fixing in proper level, line, alignment etc., all as per drawings and instructions of Engineer-in-charge. Rate excludes cost of bolts, nuts, washers etc.		K.G	
38	35	Supplying and fixing rolling shutters made of 80mmx1.25mm MS laths with 1.25mm top cover interlocked together through the entire length and joined together at end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation etc., complete including cost of providing and fixing necessary 27.5 cm long wire springs grade No.2. for rolling shutters of area 10.00 sqm to 16.80 sqm . (Gear operated type with gear box , crank , handle and ball bearings.)		SQM	
39	235	Flooring with reinforced cement concrete of mix 1:2:4 using 20 mm nominal size hard broken granite stone jelly laid in panels not exceeding 6 x 30 m between expansion joints, including necessary vibration using needle / board / screed vibrators, all as required including necessary shuttering, painting the sides with bitumen, but excluding fabrication charges for reinforcement, all as per standard specifications.		CUM	
40	200	Finishing the top of all floors with 25mm thick cement concrete (without using sand) in the proportion of one part of cement and three parts of 3 to 10mm gauge hard broken granite stone chips and finishing the top surface smooth, rounding of corners, curing, providing borders etc., complete, all as per standard specifications. (Ellis pattern flooring)		SQM	

CONTRACTOR

32

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
41	985	Floor finish with 40 mm thick granolithic flooring over the concrete base while it is wet for proper bonding, the bottom 25 mm thick consisting of one part of cement and one part of 6 mm gauge hard broken granite stone chips (the proportion being by volume) and the top 15 mm finished with hardening compound of proportion one part of hardonate (ironite or equivalent) four parts of cement and eight parts of 6 mm gauge blue granite stone chips (the proportion being by weight) including finishing and painting the sides with bitumen etc., complete, all as per standard specifications.		SQM	
42	165	Providing and laying 7mm thick (approximate) ceramic glazed wall tiles of first quality of approved make confirming to IS:15622 and in all colours of required sizes in skirting, walls, risers of steps and dado laid over a bed of cement slurry @ 3.30 Kg/SQM and a backing layer of 12 mm thick cement mortar 1:3 plaster and joined with white cement using appropriate colour pigment etc., complete, all as per standard specifications.		SQM	
43		Providing, laying and finishing the top of floor with the following best quality slabs of required sizes over a bed of cement slurry @ 4.40 Kg/SQM and a backing layer of cement mortar 1:4, 20 mm (average) thick, finished with flush pointing in white cement using appropriate colour pigment including rubbing and polishing wherever necessary etc. complete, all as per instructions of Engineer in charge and standard specifications.			
a)	5	Cuddappah slabs 20 to 25 mm thick single side polished		SQM	
b)	10	Marble slabs 16 to 18 mm thick, polished - Rajnagar plain white.		SQM	

CONTRACTOR

33

ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
44	205	Marbonite tiles or equivalent, 8.50 mm thick (approx.) and 60 x 60 cm size (cement slurry is 3.30 Kg/SQM instead of 4.40 Kg/SQM)		SQM	
45		Providing, laying and finishing the top of floor with the following best quality tiles of required sizes over a bed of cement slurry @ 3.30 Kg/SQM and a backing layer of cement mortar 1:4, 20 mm (average) thick, finished with flush pointing in white cement using appropriate colour pigment including rubbing and polishing wherever necessary etc. complete, all as per instructions of Engineer in charge and standard specifications.			
a)	5	Granite tiles (polished), 8 to 10 mm thick (approx)- Gray (Steel) colour		SQM	
b)	60	Granite tiles (polished), 8 to 10 mm thick (approx.) - Red (Gem) colour		SQM	
46	25	Providing weathering course on top of roof slab with 20 mm size brick jelly and pure lime (no sand) in the proportion of 32 : 12.5 to the required thickness, well beaten with wooden battens, so as to secure adequate slope, all as per standard specifications and instructions of Engineer-in-charge.		CUM	
47	250	Providing weathering course on top of roof slab with one course of split tiles or pressed flat tiles of 17 to 20 mm thick and of approved brand & size, set in cement mortar 1:3 with an admixture of crude oil at 10% by weight of cement, 12 mm thick bedding layer including pointing the tiles with the same oiled mortar etc., complete, all as per standard specifications.		SQM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
48	3610	Plastering with cement mortar 1:5, 12mm thick at all levels as per standard specifications.		SQM	
49	360	Damp proof course with cement mortar 1:3, 20 mm thick mixed with an admixture of crude oil at 5 % by weight of cement, all labour etc. complete as per standard specifications.		SQM	
50	250	Ceiling plastering with cement mortar 1:3, 6mm thick at all levels as per standard specifications.		SQM	
51	100	Pointing to rough stone dry packing in aprons and revetments including grouting to a depth of 40mm with cement mortar 1:3, all as per standard specifications.		SQM	
52	1180	White washing three coats on surfaces at all levels using Janathacem or equivalent material to give an even shade including cleaning, brushing of walls and preparing surfaces in accordance with standard specifications. Rate includes cost of all materials, labour, curing etc., complete.		SQM	
53	220	Applying one coat of cement primer of approved brand and manufacturer on wall surfaces.		SQM	
54	730	Applying one coat of exterior emulsion primer (ACE or any other equivalent) of approved brand and manufacture on wall surfaces at all levels.		SQM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
55		Painting coats with exterior emulsion paint (ACE or any other equivalent and approved brand) of approved shade on surfaces at all levels to give an even shade including preparing the surfaces, removal of dirt, thorough cleaning by watering etc., all as per standard specifications. Rate includes cost of necessary plaster of paris and putty wherever required, labour and all incidentals etc., complete.			
a)	730	Two coats		SQM	
b)	20	One coat		SQM	
56	940	Painting walls with water proofing cement paint of approved brand and shade on surfaces to give an even shade including cleaning, preparing the surfaces, curing etc., complete. Three coats (A priming coat of cement primer and two coats of water proofing cement paint.		SQM	
57	550	Distempering using oil bound washable distemper of approved brand and shade on surfaces including cleaning, brushing, preparing the surfaces at all levels even and sand papered smooth in accordance with standard specifications. Three coats (A priming coat with approved primer and two coats of distempering)		SQM	
58	380	Painting three coats (A priming coat with approved primer and two coats of synthetic enamel paint) with synthetic enamel paint of approved brand and shade on surfaces to give an even shade including cleaning the surfaces at all levels of all dirt, dust and other foreign matters, sand papering and stopping, all as per standard specifications.		SQM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
59	12	Polishing two coats with French polish including a coat of wood filler to give an even surface, including cleaning the surfaces of all dirt, dust and sand papered smooth, at all levels all as per standard specifications.		SQM	
60	6625	Supply and stacking the following to standard gauge at site of work, all as per instructions of Engineer-in-Charge. Earth (measured in stacks will be reduced by 20 % for payment.)		CUM	
61	5300	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50 m and lift up to 1.5 m etc. complete.		CUM	
62	375	Providing ,laying and compacting wet mix macadam (WMM) with clean, crushed .graded aggregates and granular material and finished in accordance with the requirements of the specifications (MORTH 406) and thickness as per approved plans or as directed by the Engineer-in-charge.		CUM	
63	5	Refilling the column foundation pits with the stones generated from site during excavation for column foundation pits, in layers including carrying from site, packing the stones in position with sufficient spalls, so as to fill the voids completely including filling up the voids with excavated earth, watering, consolidating complying with standard specification.		CUM	
64	80	Supply and filling the column foundation pits with 150mm size soling stones / boulders in layers including supplying of soling and packing the stones in position with sufficient spalls, so as to fill the voids as completely as possible and including filling up the voids (20% by volume of soling stones / boulders) with excavated earth, watering, consolidating complying with standard specification. All as per the instruction of the Engineer-in-charge.		CUM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
65	150	Providing 50 mm consolidated thick bituminous macadam over bituminous surface using IRC grade metal of 0.35 CUM of 25 to 11.20 mm, 0.21 CUM of 11.20 to 6 mm and 0.14 CUM of 6 mm and below for 10 SQM with 40 kg of bitumen for premixing, including handling charges at CMP site, labour for loading the bitumen in bitumen tank and metal to feed units, labour for attending to paver site, heating and mixing the bitumen and metal to the required temperature in the central hot mix plant, conveying the mix by tipper to paver site, spreading the mix in required temperature and thickness with mechanical paver to the specified grade and cross section, consolidation by power roller to get the required density, including hire charges for CMP, paver finisher, tipper, power roller, bitumen boiler, all other tools and plants, incidental charges such as barricading, provision of danger lights etc., complete. Rate includes cost of metal, bitumen, hire and running charges for tools and plants and all other incidentals etc., complete. Payment will be made on pre level and post level measurements.		CUM	
66	60	Providing semidense carpet of 40 mm consolidated thickness using machine crushed IRC size HBG metal 0.16 Cu.m of 13.20 mm, 0.256 Cu.m of 11.20 mm and 0.176 Cu.m of 5.60 mm and below for 10 Sq.m with 49.60 kg of bitumen for premixing for 10 Sq.m of 40 mm consolidated thickness of semidense carpet, including cost of bitumen, handling charges, labour for loading the bitumen in bitumen tanks and metal in feeder units, labour for attending paver units, heating and mixing the bitumen and metal to the required temperature in the central hot mix plant, conveying the mix from CMP site to work site by tipper, spreading by the paver finisher to the required grade and cross profile and consolidation by power roller, .		CUM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
		including hire and running charges for CMP, paver finisher, tipper, power roller, bitumen boiler and all other tools and plants and all other incidental charges etc., complete. Rate includes cost of metal, bitumen, labour, hire and running charges of tools and plants, barricading, providing of danger lights etc.. complete. Payment will be made based on pre level and post level measurements.			
67		Providing and applying tack coat including heating the bitumen in boiler, labour for preparing the surface, spraying the bitumen as tack coat, hire and running charges for all tools & plants and all other incidentals etc. complete.			
a)	1500	Over bituminous surface using 2.50 K.G of bitumen emulsion per 10 SQM area.		SQM	
b)	1500	Over WBM surface using 4 K.G of bitumen emulsion per 10 SQM area.		SQM	
68	75	Providing and laying sub base with sand and gravel in the proportion of 1 : 0.75 for specified thick on prepared sub grade in accordance with the requirements of the specifications. Rate includes cost of all materials to site of work, mixing in the required proportion, spreading, compacting, rolling with contractor's power roller, all labour, other incidentals etc., complete. Payment will be made only for the finished (compacted) quantum of work. (without quarry dust)		CUM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
69		Supply RCC pipes (NP2 Class) of following sizes with collars at site of work, lowering to trench, laying to proper grade and alignment, joining the collars with stiff mixture of cement mortar 1 : 2, testing of joints etc., but excludes cost of cement which will be supplied by BHEL at stores at free of cost.			
a)	20	900 mm dia.		R.M	
b)	20	1200 mm dia.		R.M	
70		Providing and fixing G.I pipes and specials (B – Class) of approved brand with G.I fittings and clamps on walls and floors, including cutting and making good the walls and floors etc., complete. (Internal work – exposed on walls)			
a)	40	15 mm dia nominal bore.		R.M	
b)	60	20 mm dia nominal bore.		R.M	
c)	50	25 mm dia nominal bore.		R.M	
d)	30	40 mm dia nominal bore.		R.M	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
e)	60	50 mm dia nominal bore.		R.M	
71		Providing and laying G.I pipes and specials (B – Class) of approved brand with G.I fittings in trenches. (External work) Earth work excavation for trenches and refilling will be paid separately.			
a)	5	25 mm dia nominal bore.		R.M	
b)	5	32 mm dia nominal bore.		R.M	
c)	5	40 mm dia nominal bore.		R.M	
d)	10	50 mm dia. nominal bore.		R.M	
72		Providing and fixing in position of brass wheel valve / gate valve of approved brand with CI wheel etc., complete. (ISI marked)			
a)	7	15 to 25mm nominal bore		EACH	
b)	5	40mm nominal bore		EACH	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
c)	5	50mm nominal bore		EACH	
d)	1	100 mm nominal bore		EACH	
73	66	Providing and fixing 110 mm OD PVC pipes of 4 K.G / Sqcm conforming to ISS including joining with proper adhesive as suggested by manufacturers and suitable clamps for rain water pipes, drainage etc. Rate excludes all specials like shoe, bend, tee, tee with door etc.		R.M	
74		Providing and fixing PVC moulded fittings / accessories on walls for rain water pipes conforming to IS13592 Type A including joining with seal rings conforming to IS 5382 and proper adhesive as suggested by manufacturers etc., complete.			
a)	2	110 mm shoe		EACH	
b)	2	110 mm bend		EACH	
75	20	Providing and fixing in position of 15 mm nominal bore brass bib cock (Medium Duty) of approved brand (ISI marked).		EACH	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
76	4	Providing and fixing in position 15 mm nominal bore C.P brass long body bibcock of approved brand (ISI marked) and weighing not less than 690 grams.		EACH	
77	8	Providing and fixing in position brass stop cock (Medium Duty) of approved brand (ISI marked). 15mm nominal bore.		EACH	
78	2	Providing and fixing in position 100 mm dia C.P brass shower rose (tilting type) of approved brand with 15 or 20 mm dia inlet.		EACH	
79	4	Providing and fixing in position of White Glazed Earthen Ware Wash hand basin of oval shape 540mm x 460mm or thereabouts of approved make and quality (Parry ware or equivalent) with 32mm C.P. waste coupling and necessary fixing arrangements. Rate includes cost of wash basin, waste coupling, labour for fixing and all other incidental charges etc. complete. All as per the instructions of Engineer-in-charge.		EACH	
80	3	Providing, laying and finishing the top of counter wash basin with best quality granite slab of 18 to 20 mm thick over a bedding layer of CM 1:3, 25mm thick finished with flush pointing in white cement using appropriate colour pigment etc. Rate shall include cutting charges for the required shape, cutting oval shape holes for fixing wash basins, providing holes for fixing tap, nosing and edge polishing etc., complete and all as per standard specifications and instructions of Engineer-in-charge. <u>Steel Grey / P.White.</u>		SQM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
81	1	Providing and fixing in position of white glazed earthenware wash basin of size 550 x 400 x 225 mm of approved brand with M.S or C.I brackets painted with two coats of synthetic enamel paint, single 15 mm C.P brass pillar tap and C.P brass chain with rubber plug, 32 mm C.P brass waste coupling of standard pattern, 32 mm dia PVC waste pipe etc., complete, including cutting and making good the walls wherever required.		EACH	
82	2	Providing and fixing in position of PTMT towel rail 600 mm complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour. (600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 grams)		EACH	
83	4	Providing and fixing 600 x 450 x 5 mm bevelled edge mirror of superior glass (approved brand) mounted on 5/6 mm thick hard board / ply wood / plastic folder sheet, fixed to wooden cleats with C.P brass screws and washers, etc. complete.		EACH	
84	2	Providing and fixing in position of 100mm x 75 mm Nahani trap with PVC grating, all as per standard specifications.		EACH	
85	4	Providing and fixing in position of Orissa pattern water closet of approved brand with integral type foot rests, suitable P or S trap etc. complete. 580 mm size (White)		EACH	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
86	4	Providing and fixing in position of pedestal type water closet (European type W.C pan) 400 mm high of approved brand with seat and lid, C.P brass hinges and rubber buffers, 10 litre PVC low level flushing cistern with fittings and painted C.I / M.S brackets with 15 mm PVC connection, 32/40 mm PVC flush bend with fittings and clamps, over flow arrangement with specials and mosquito proof coupling, including painting of fittings and brackets, cutting and making good the walls and floors wherever required etc., complete. White Glazed.		EACH	
87	8	Supplying at site of work and fixing in position of white glazed earthenware Elegant 'JUMBO TYPE' long size urinal of Parry ware or equivalent make including supply and fixing of CP spreader, PC lead connection, waste coupling, CP flange, fixing brackets and PVC bush etc., complete. The rate is inclusive of conveyance of all the above materials to site of work labour for carrying to spot and fixing with necessary screws etc., complete. All as per standard specifications and instructions of Engineer-in-charge.		EACH	
88	4	Providing and fixing in position of 10 litre low level PVC flushing cistern of approved make with fittings and flush pipe etc., complete.		EACH	
89		Providing rectangular/circular manhole as per Drawing No.D/1016065 for the following depths. Rate includes earth work excavation in all soils (except hard rock requiring blasting) including soft disintegrated rock, watering and ramming of foundation bed, providing cement concrete 1:4:8 in foundation, including necessary slope and forming channels smoothly finished in C.M 1:2, brick work			

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
		in C.M 1:5 for arch ring, etc., using standard approved bricks, plastering in cement mortar 1:4 for side walls (outside and inside), cement concrete 1:2:4 using 12 to 20 mm HBGS jelly for manhole cover fixing, providing and fixing C.I steps for ladder rungs, etc., complete. Rate includes an initial lead of 10 m and all lifts for excavation and other charges etc., complete, but excludes cost of manhole cover and frame.			
a)	1	Up to 0.90 m depth (rectangular)		EACH	
b)	1	Above 0.90 and up to 1.20 m depth (rectangular)		EACH	
90	2	Supplying and fixing C.I cover with frame for manholes. 560 mm dia cover and frame. (Heavy duty) Total weight of cover and frame to be not less than 208 K.G. (Weight of cover 108 K.G and weight of frame 100 K.G)		EACH	
91	180	Providing DECOCEIL boards false ceiling with NCL seccolor exposed T & L grid system at the required heights above floor level, all as per standard specifications and instructions of Engineer-in-charge. FRAME WORK: The frame work will consists of NCL Seccolor or any other equivalent approved brand of exposed grid system using roll formed hot dipped galvanised steel sections, exposed surfaces chemically cleaned, capping pre-finished in baked polyester paint of		SQM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
		<p>approved shade of T section 25 x 38 mm, 1.20 mm thick and L section 25 x 25 mm, 0.80 mm thick. The frame grid shall be of size 610 x 610 mm. Grids are to be suspended by 6 mm M.S rods or GI wire from the RCC roof or trusses at suitable intervals (not more than 1200 mm) or as per manufacturer's recommendation. The suspenders along with spring steel 'U' clip allowing final level adjustment are to be fixed in the RCC roof or trusses by using metal fasteners, etc. Suitable T / wall angles are to be used wherever necessary such as near walls, columns, light fixtures, A.C. grills etc.</p> <p>CEILING: The DECOCEIL ceiling board of 3.20 mm thick with required patterns and sizes, painted with one coat of primer on both sides. Panels shall be placed in position and held by suitable spring clips, headless nails with the G.I. grid frames. Wherever light fixtures and A.C. grills / diffusers are flush to the ceiling, the ceiling board has to be cut accordingly.</p> <p>Rate includes cost of all materials, labour, tools, scaffolding, taxes, duties etc., complete. Payment will be made based on the actual surface area of work done.</p>			
92	2	Grouting the H.D bolts, underneath the base plates etc., after alignment with wet cement grout (1:1), all as per standard specifications. Rate includes cleaning the sleeves/pockets, tools and plants required for the work etc., complete except cement which will be supplied by BHEL at stores at free of cost.		CUM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
93		Conveyance of earth, sand, gravel, rough stone, broken stone, brick bats (debris) etc. by contractor's own lorry including loading, leading, unloading, stacking or spreading, all as per instructions of Engineer-in-charge. Payment for conveyance of earth will be made based on pit measurement and for other items based on stack measurements.			
a)	100	0 to 1km		CUM	
b)	700	Beyond 1 km but upto 2 km		CUM	
c)	1295	Beyond 2 km but upto 3 km		CUM	
94		Conveyance of debris generated by dismantling and other modification works by various departments, factory wastes discarded cotton waste, slag, cut tree branches, dried leaves, abandoned broken glass, water closets, urinals, flush tanks, broken furniture, broken refractory bricks, AC materials, hedge cuttings and all other debris and waste materials from various places of factory premises where they are stacked / accumulated and transporting the same by contractor's lorry and disposing off at the specified places, all as per the instructions of Engineer-in-charge. Rate includes labour for collection of the said debris from various places, loading, leading, unloading, spreading, leveling etc. complete. Rate also			

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
		includes for safe burning of dried leaves, cut pieces of tree branches, wood, waste paper etc., all by following safety precautions. Payment will be made on trip basis with a lorry load of minimum 300 cft./Trip.			
a)	2	0-1.0 km		TRIP	
b)	2	1-2.00 km		TRIP	
c)	2	2 - 3 km		TRIP	
TOTAL FOR PART – A				..	_____

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
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PART-B (STRUCTURAL STEEL WORKS)

95	90	Collection from BHEL stores and transporting the raw structural steel sections to the contractor's site fabrication shop, fabrication of steel work including all materials going into the process of fabrication and forming an integral part of the steel work together with all shop welding including using low hydrogen electrode wherever necessary, all as per drawings and standard specifications. Rate includes delivery of fabricated steel work at erection site ready for erection, including preparation and supply of drawing office despatch list for BHEL's approval in compact disk with two copies of printout, all charges for packing (wherever called for) handling, conveying, stacking and all other incidental charges both for raw materials and fabricated steel works. Rate excludes raw structural steel sections which will be supplied by BHEL at stores at free of cost.		M.T.	
96	30	Collection from BHEL stores and transporting the ERW / seamless steel tubes to the contractor's site fabrication shop, fabrication of columns, trusses, purlins, runners, hand rails, etc., (all tubular) and forming an integral part of the steel work together with all shop welding including using low hydrogen electrode wherever necessary, all as per drawings and standard specifications. Rate includes delivery of fabricated steel work at erection site ready for erection, including preparation and supply of drawing office despatch list for BHEL's approval in compact disk with two copies of printout, all charges for packing (wherever called for) handling, conveying, stacking and all other incidental charges both for raw materials and fabricated steel works. Rate excludes raw ERW / seamless steel tubes which will be supplied by BHEL at stores at free of cost.		M.T.	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
97	120	Carrying from stacks to erection site and erection of fabricated steel work including all handling, conveying, assembling, hoisting, erecting in position, site welding and or bolting, alignment of structures, all as per drawings and standard specifications. Rate includes cost of bolts and nuts of approved brand and quality, hire charges for cranes, lifting tackles, welding tools and plants, labour etc., but excluding cost of fabricated components. If required, power will be given free of cost by BHEL. Weight of fasteners will not be accounted for payment.		M.T.	
98	121	Painting one priming coat with Red oxide primer of approved quality over structural steel works in roof structures , columns etc., including preparing the surface by thoroughly cleaning oil, grease dirt and other foreign matters and scoured with wire brushes, fine steel wool scrapers and sand paper, all as per standard specifications..		M.T	
99	121	Painting two coats (excluding priming coat) on structural steel works in roof structures, columns etc., at all levels with synthetic enamel paint of approved brand and shade, brushing to give an even shade including cleaning the surfaces of all dirt, dust and other foreign matters, scaffolding charges etc., complete. All as per standard specifications.		M.T.	
100	3650	Supply and fixing colour coated Aluminium - zinc Alloy coated steel (Aluminium - around 55 % & Zinc - 43 %) rib profile sheets of 0.47 to 0.50 mm thick (TCT) zinc coating 120 gsm as per IS 277 (yield strength - 550 Mpa) as per ASTM A792 at site of work, sizing as required, hoisting and fixing in proper position for roofing, side sheeting etc. with necessary self drilling/self tapping screws with EPDM seal / washer complete up to any pitch in horizontal/vertical or curved surfaces all as per drawings, specifications and instructions of Engineer-in- charge. Rate includes cost of all materials, labour, incidentals etc. complete. (Payment will be based on the laid area of roof and side cladding). Rate excludes cost & laying charges of accessories such as ridge pieces, ridge finials, barge boards, curves etc.		SQM	

CONTRACTOR

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ACCEPTING OFFICER

Sl. No.	Quantity	Description of work	Rate	Unit	Amount
101	335	Supplying and fixing corrugated fibre glass reinforced polyester translucent roof light sheets of all colours including white of following thickness to match with the existing roofing including cost of G I bolts, nuts, washers and bitumen washers etc., complete. Payment will be based on the laid area. FRP sheet- 2 mm thick		SQM	
102		Supply and fixing colour coated Aluminium - zinc Alloy coated steel sheet roofing accessories of 0.47 to 0.50 mm thick (TCT) zinc coating 120 gsm as per IS 277 (yield strength - 550 Mpa) as per ASTM A792 at site of work, sizing as required, hoisting and fixing in proper position with necessary self drilling/self tapping screws with necessary EPDM washers, etc. complete.			
a)	95	Ridges plain (500-600 mm)		R.M	
b)	130	Flashing/Aprons (Up to 600 mm)		R.M	
c)	250	Barge board		R.M	
TOTAL FOR PART – B					_____
TOTAL FOR PART – A				..	
GRAND TOTAL				..	_____
(RUPEES					ONLY)

CONTRACTOR

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ACCEPTING OFFICER

SCHEDULE 'B'

1. The following materials will be issued FREE of cost to contractor at BHEL Stores / Stock yard.

SI.No.	DESCRIPTION	PLACE OF ISSUE
1	Cement	BHEL STORES or Stock yard
2	M.S Rounds, C.T.D Bars & Structural Steel,	BHEL STORES or Stock yard

2. It will be the responsibility of the Contractor to submit his demands for the above stores in writing atleast seven days in advance of the actual requirement.
3. Issue of Stores is subject of the availability at the place of issue cited above, items of stores to be issued by BHEL which are not available at the time of indenting by the contractor may be supplied by BHEL after necessary procurement. The contractor shall not be entitled to any claim of compensation for delay in the supply of stores by BHEL under any circumstances.
4. The materials will be issued only during the working hours of the BHEL Stores Department (8.00 a.m. to 4.30 p.m.). Contractor shall have to transport them as soon as they are issued to him to the site of work at his own cost.
5. The steel materials if issued will be in random lengths and sizes as stocked by the BHEL and the cost of all cutting, conversion, substitution and fabrication as well as wastage shall have to be borne by the Contractor.
6. The contractor shall from time to time render proper account of all materials issued to him by BHEL. If he fails to do so, no further issue of materials will be made to him and he will be held responsible for any delay in the execution of the work which may occur on this account.
7. Where A.C. Sheets and accessories, Doors, Windows, Sanitary fittings, Special glasses or other items are issued free of cost to the contractor, the contractor will have to make good at his own cost any loss or damage to any part or whole of the items issued to him as above. All wastage within the premises limits as fixed by BHEL will be charged for at the prescribed issued rates of BHEL. Excess wastage will be charged for at punitive rates which will be 100% higher than the issue rates.
8. All surplus materials in good condition which are not returned to the BHEL Stores as also quantities of materials consumed in excess of the max. permissible limit as fixed by BHEL shall be charged for at punitive rates.

The decision of the Senior Engineer / Dy. Manager / Manager as to the extent to which materials have been rendered surplus or consumed in excess of the actual requirements shall be final and conclusive and binding on the contractor.

SCHEDULE 'C'

ISSUE OF TOOLS AND PLANTS TO CONTRACTORS

Sl.No.	Qty.	Particulars	Details of BHEL Crew Supplied	Hire Charges Per unit Per Day	Place of Issue	Remarks
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.....Nil.....

a. Machineries shall not be operated over time without the written permission of the Sr. Engineer / Dy. Manager / Manager.

b. All Coolies, Watermen etc., required in addition to BHEL crew mentioned in column 4 above shall be arranged by the contractor at his own expense.

SCHEDULE 'D'

NOTE : All Drawings are to be signed by the Contractor as well as the officer entering into contract.

SL.No.	DRAWING NUMBER	DESCRIPTION
1	CEG:TP:01:00375	General Arrangement & details of foundation for Intermediate Store & PSS
2	01:TP:CEG:00390	General Arrangement & details of foundation for Grinding Shed.
3	01:TP:CEG:00381	General Arrangement of shed for Drum Component Stores.
4	CEG:TP:01:00167	General Arrangement of Coal Storage Shed.
5	CEG:TP:01:00335	General Arrangement of Prop. Auditorium and toilet.
6	Page 64 to 66 Fig. 2 to 4	Details of manholes

SCHEDULE 'E'

LEAD STATEMENT

Sl.No.	Name of Material	Name of Source	Lead Particulars both for Factory and Township
1	Cement	BHEL Stores	2 Kilometre
2	M.S Rounds, C.T.D Bars & Structural Steel	BHEL Stores	2 Kilometre

CONTRACTOR

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ACCEPTING OFFICER

C.A.....Date
(To be used in conjunction with BHE Ltd., General Conditions of Contract)

AUTHORITY TO TENDER

Tender Notice No. **06/10-11**

Office of the
SR.MANAGER/CIVIL/FACTORY(PLANNING)
BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHY – 14.

Tender Schedule No. **15/10-11**

~~Lumpsum / Percentage rate / Item rate~~ tender for works required in **“Providing storage facility for intermediate & PSS Components in Bldg.No.107, foundation and other facilities for Grinding machine near thermo press, storage facility for drum components in Bldg. No.1, providing coal storage facility at CCDP Complex and Providing class room cum auditorium in HRDC Complex at BHEL, Trichy-14”.**

Messrs. are / is hereby authorized to tender for the above work. The Tender is to be delivered at the Office of the **SR.MANAGER/CIVIL/FACTORY (PLANNING)** Bharat Heavy Electricals Limited Unit, Thiruverumbur, Tiruchirappalli – 620 014 superscribing the name of works as mentioned above.

Any correspondence concerning this Tender should be addressed as indicated above quoting the Tender Notice, schedule No. and other relevant particulars.

BHARAT HEAVY ELECTRICALS LIMITED DO NOT BIND THEMSELVES TO ACCEPT THE LOWEST OR ANY TENDER

**Issuing Officer with
Designation**

CONTRACTOR

55

ACCEPTING OFFICER

Contract Agreement No.....

TENDER

To

The SR.MANAGER/CIVIL/FACTORY (PLANNING)
Bharat Heavy Electricals Limited
Unit : Tiruverumbur
TIRUCHIRAPPALLI – 620 014.

I / We hereby offer to carry out the work of **“Providing storage facility for intermediate & PSS Components in Bldg.No.107, foundation and other facilities for Grinding machine near thermo press, storage facility for drum components in Bldg. No.1, providing coal storage facility at CCDP Complex and Providing class room cum auditorium in HRDC Complex at BHEL, Trichy-14.”**

I / We hereby carefully perused the following documents connected with the above noted work and agree to obide the same.

1. Specifications (General & Particular)
2. Drawings
3. Schedule ‘A’, ‘B’, ‘C’, ‘D’ & ‘E’ and Bill of Quantities attached hereto.
4. Schedule or rates
5. BHE Ltd., General & Special Conditions of Contract, Tender Notice and Instructions to Tenders attached hereto.

I / We forward herewith the sum of Rs.....as Earnest Money, which shall be refunded should this tender be rejected. I / We further agree to deposit such sum which along with the sum of Rs.....mentioned above shall make up 50% of the fully Security Deposit for this work as provided for under conditions of the BHARAT HEAVY ELECTRICALS LIMITED General Conditions of Contract.

I / We further agree to execute all the work referred to in the said documents upon the terms & condition contained or referred therein and as detailed in Schedule ‘A’ and Bill of Quantities annexure thereto an to carry out such deviations as may be ordered, vide conditions 6 of the BHEL Ltd., General Conditions of Contract upto a maximum of 20% of the tendered of Rs.....

I / WE further agree to refer all disputes, as required by condition 62 of the General conditions of Contract to the sole arbitration of an Officer, to be appointed by the General Manager, B.H.E. Ltd., in his sold discretion whose decision shall be final and binding.

WITNESS

Signature of the Contractor

Date :

1.

2.

CONTRACTOR

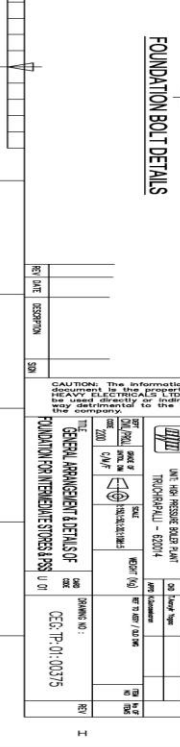
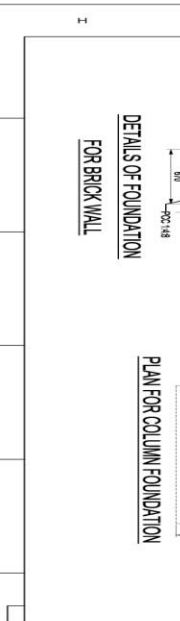
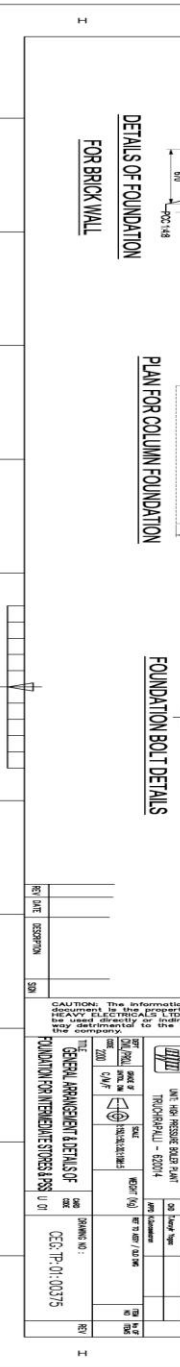
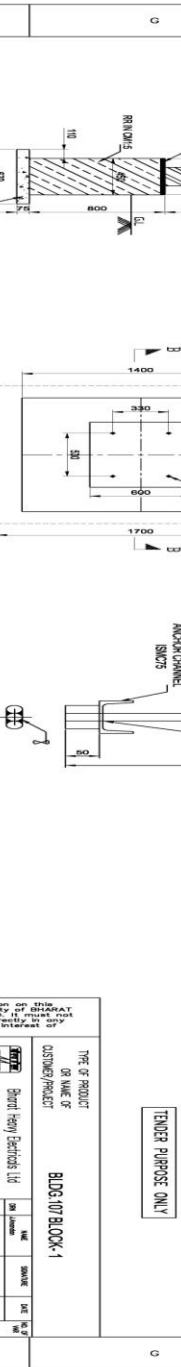
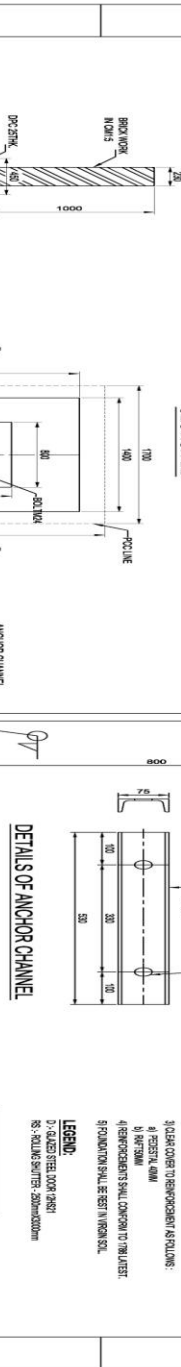
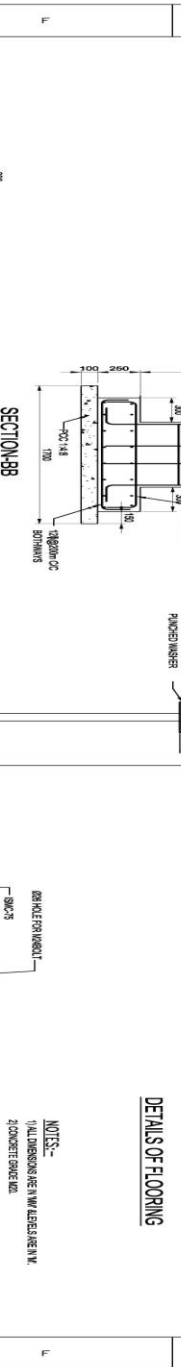
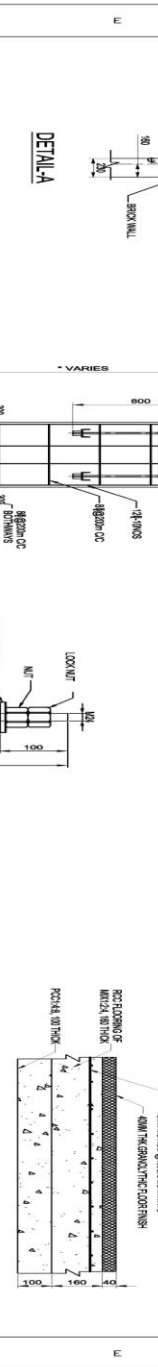
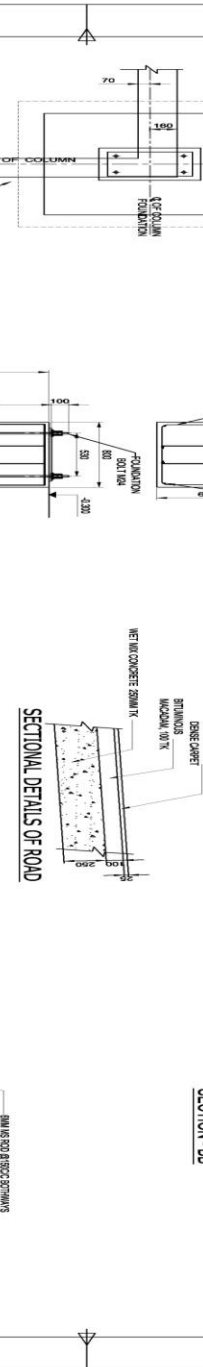
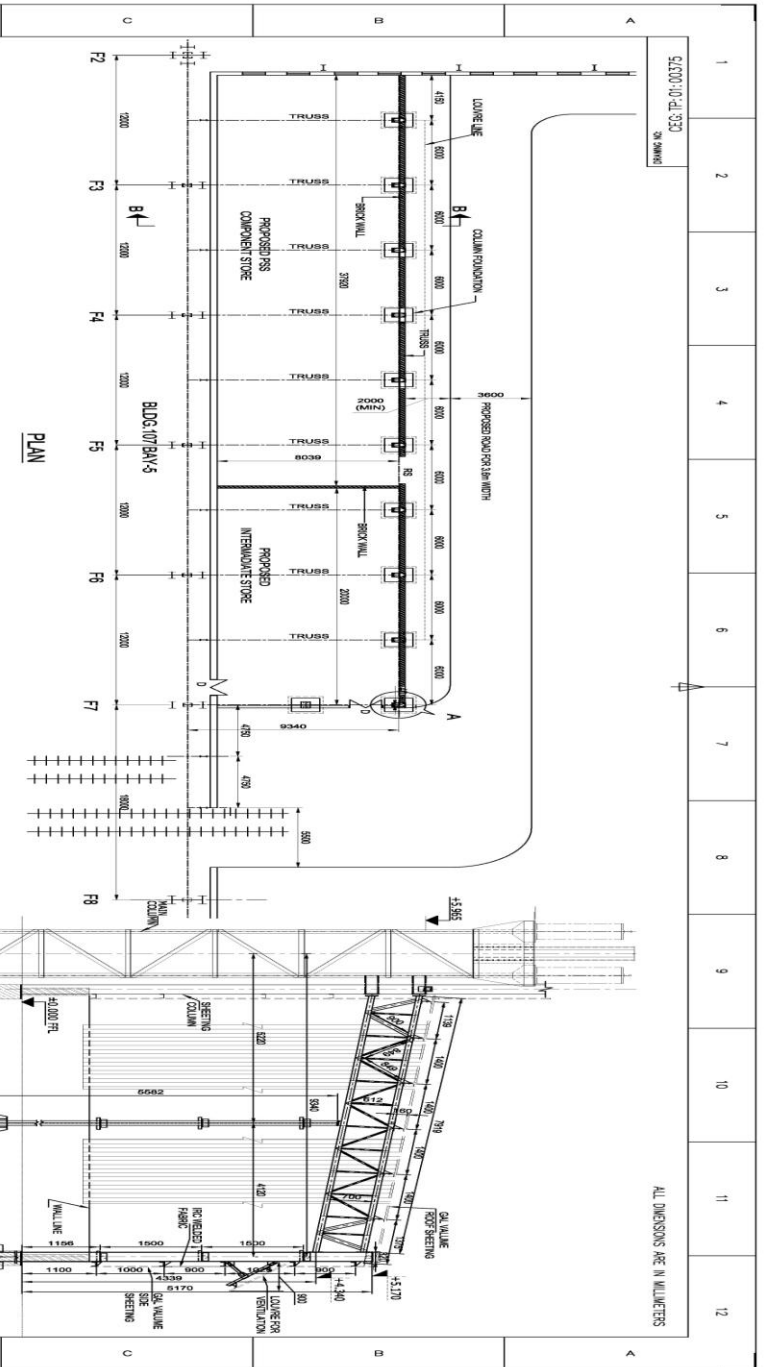
ACCEPTING OFFICER

..... alternations have been made in the Tender Document and as evidence that these alternations were made before the execution of contract agreement, they have been initialed by the Contractor and the
.....
..... is hereby authorized to sign and initial on my behalf the documents forming part of this contract (Number of alternation in figures and words to be given me)

The above tender is accepted by me on behalf of the Bharat Heavy Electricals Limited, Unit Thriuverumbur, Tiruchirappalli – 620 014. for a sum of Rs.
.....
..... at the item rates as indicated in the Bill of Quantities attached to Schedule 'A'.

Signature Date.....

Designation



GENERAL ARRANGEMENT & DETAILS OF FOUNDATION FOR PROPOSED STRESS RS

TYPE OF PRODUCT OR NAME OF CUSTOMER PROJECT: **BLOCKS FOR BLOCK-1**

Brand: **Shree Hanu** Services Ltd. (MFR) / **Shree Hanu** (SUPPLIER)

UNIT: **MM** (UNLESS OTHERWISE SPECIFIED)

SCALE: **AS SHOWN**

DATE: **01/01/2025**

PROJECT NO: **CC-1/PT-01/00375**

REVISION: **01**

REVISION: **02**

REVISION: **03**

REVISION: **04**

REVISION: **05**

REVISION: **06**

REVISION: **07**

REVISION: **08**

REVISION: **09**

REVISION: **10**

REVISION: **11**

REVISION: **12**

NOTES:-

- 1) ALL DIMENSIONS ARE IN MM UNLESS SPECIFIED OTHERWISE.
- 2) CONCRETE GRADE: M20.
- 3) ALL BARS SHALL BE REINFORCEMENT BARS (RIBBED).
- 4) REINFORCEMENT SHALL BE PROVIDED AS PER IS: 456.
- 5) FOUNDATION SHALL BE SET IN UNDISTURBED SOIL.

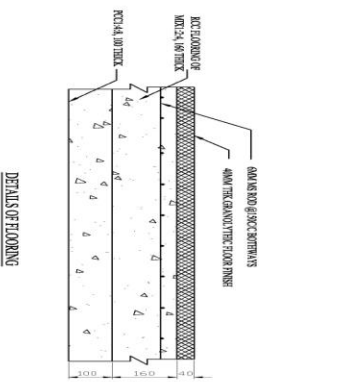
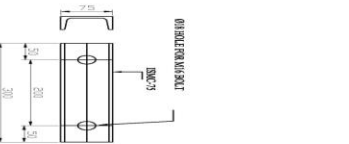
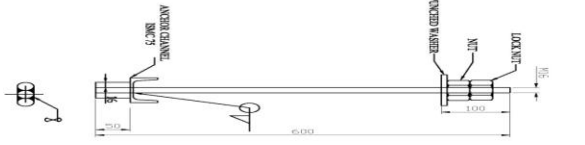
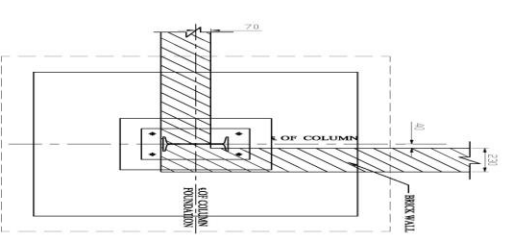
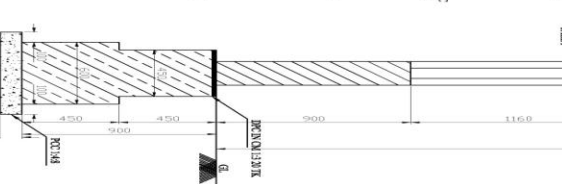
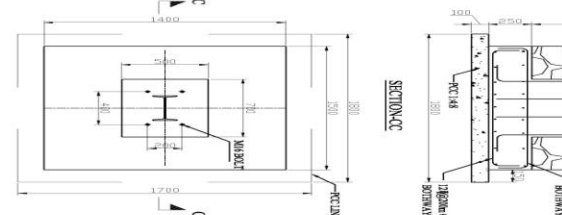
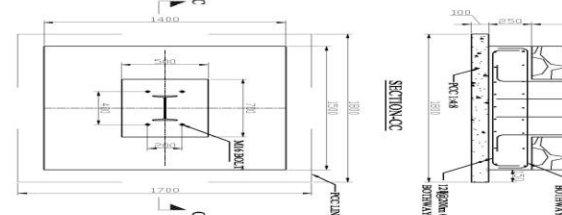
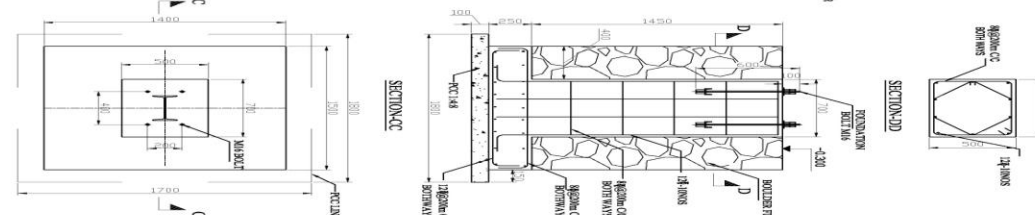
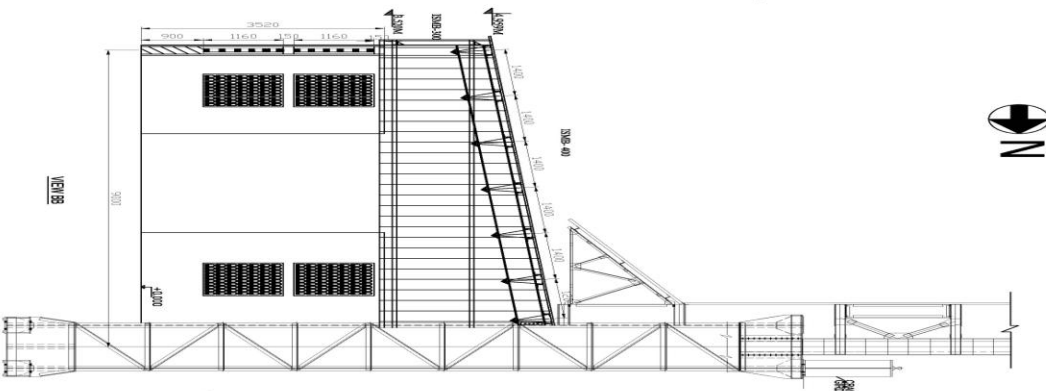
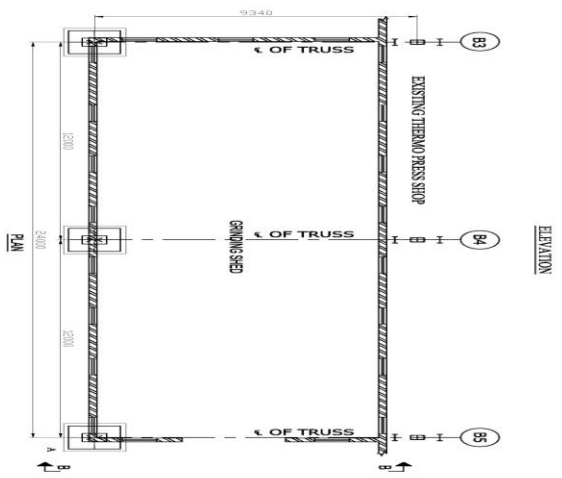
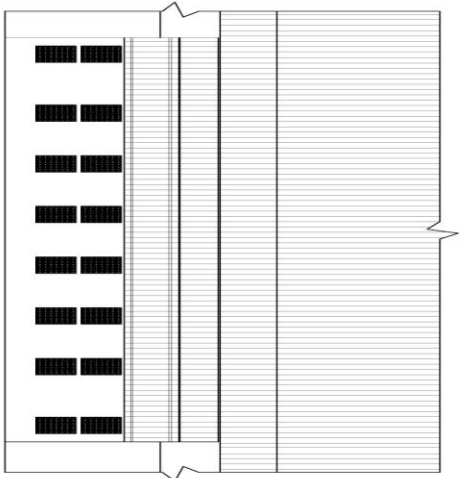
LEGEND:

- 1) 10mm STEEL ROD (RIBBED)
- 2) 10mm STEEL ROD (SMOOTH)

TENDER PURPOSE ONLY

SECTION-01-PT-00375
SH. HANU

ALL DIMENSIONS ARE IN MILLIMETERS



TENDER PURPOSE ONLY

THE OF PRODUCT OR NAME OF CUSTOMER/PROJECT

THERMO PRESSED COMPONENT SHOP

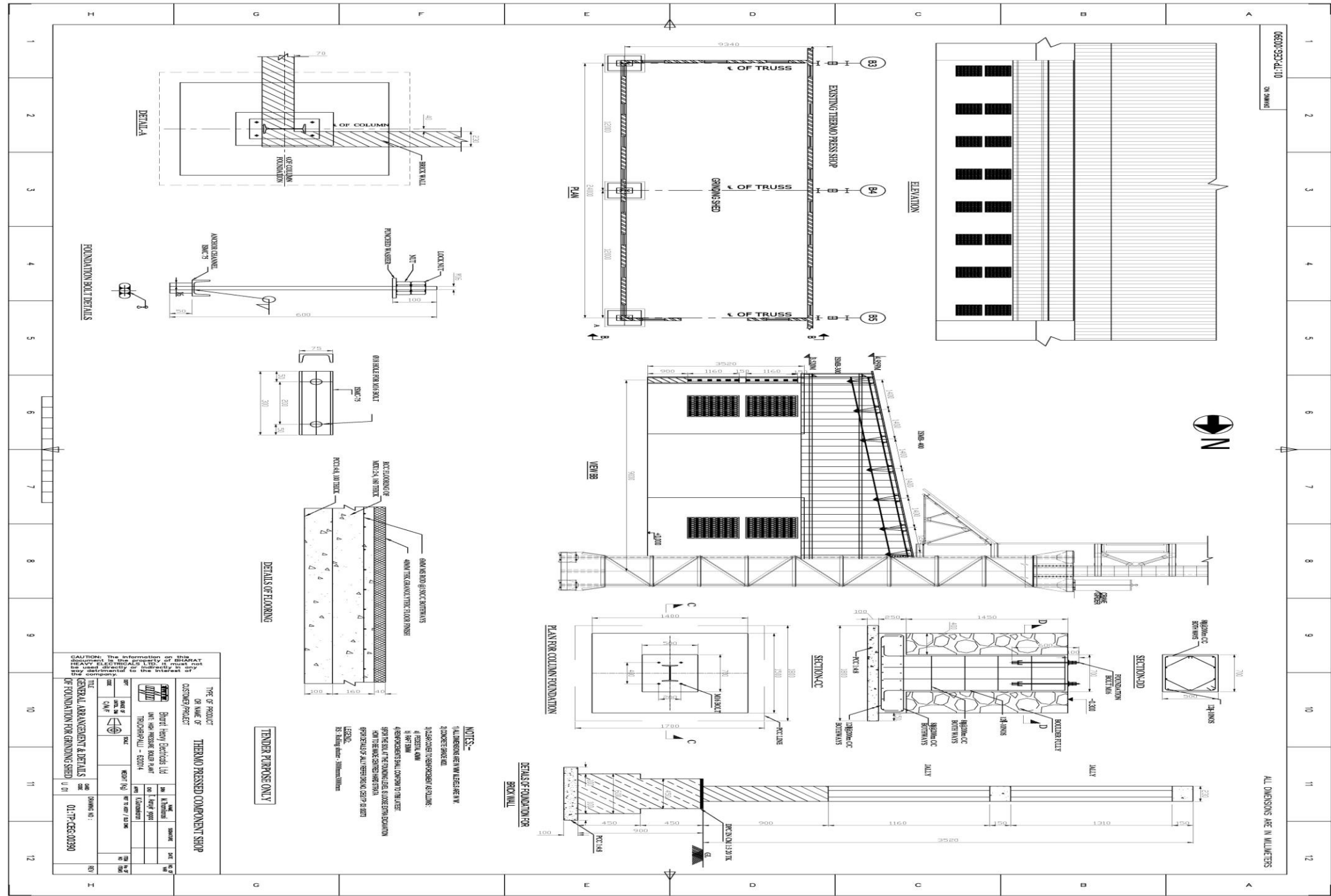
Brand: Heavy Products Ltd
 THERMO PRESSED - 0204

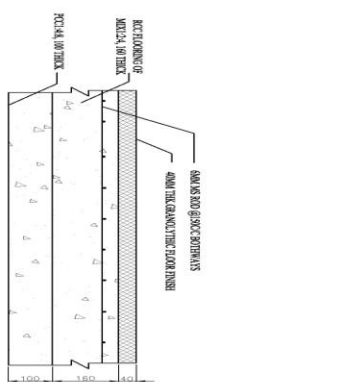
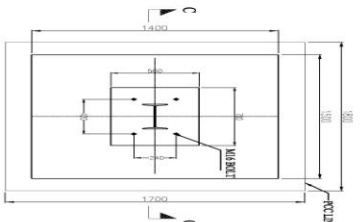
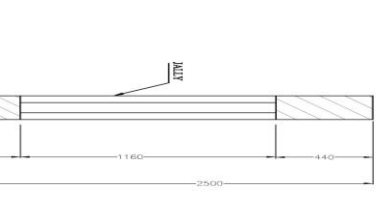
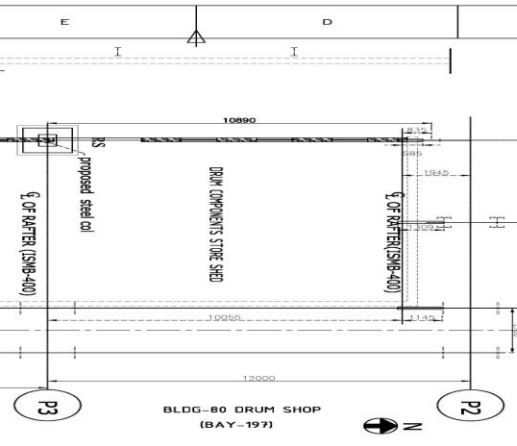
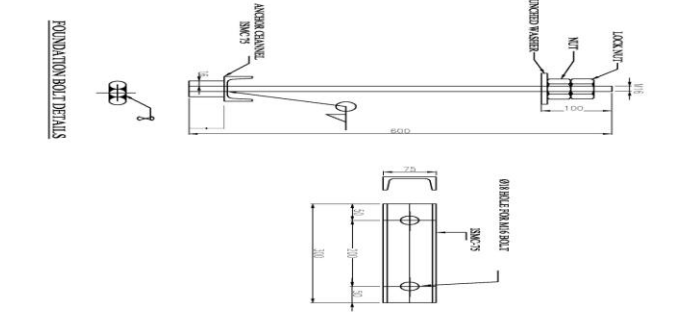
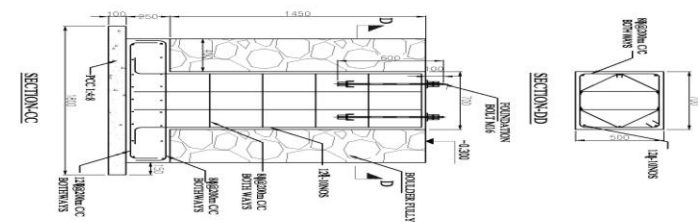
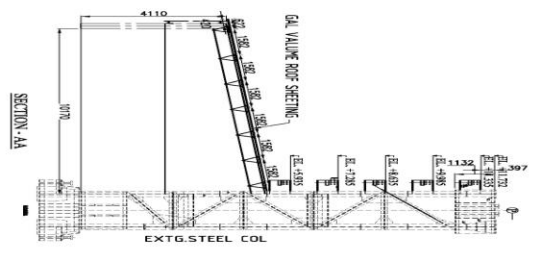
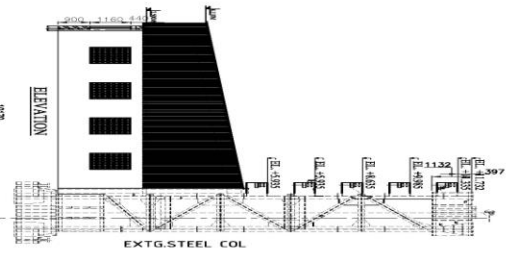
DATE	BY	REVISION
01.17.2025	01.17.2025	01.17.2025

CHANG NO.: 01.17.2025 00:39:00

NOTES:-

- ALL DIMENSIONS ARE IN MILLIMETERS
- CONCRETE SHALL BE C20
- REINFORCEMENT SHALL BE AS PER DRAWING
- PROTECT REINFORCEMENT FROM CORROSION
- PROTECT REINFORCEMENT FROM CORROSION
- PROTECT REINFORCEMENT FROM CORROSION
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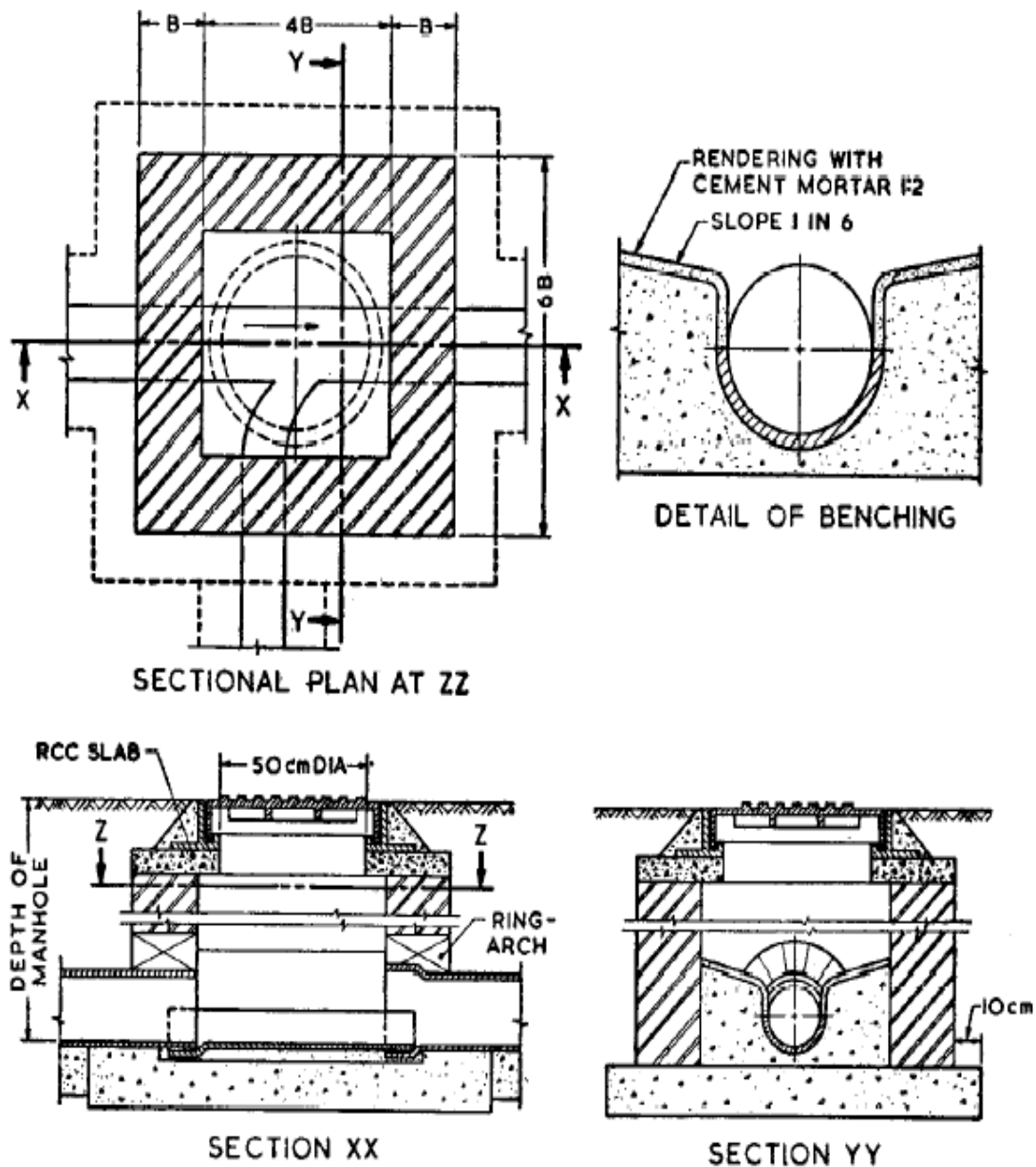


NOTES:-
 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 2. COVER OVER THE REINFORCEMENT IS IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 3. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE LATEST IS SPECIFICATION.
 4. REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE LATEST IS SPECIFICATION.
 5. THE SOIL AT THE FOUNDATION SITE IS CLASSIFIED AS MEDIUM TO HARD SAND WITH MODERATE TO HIGH PLASTICITY INDEX (MH) WITH FC=14.
 6. PROPERTIES OF SAND REINFORCED CONCRETE SHALL BE AS PER IS 456:2000.

TENDER PURPOSE ONLY

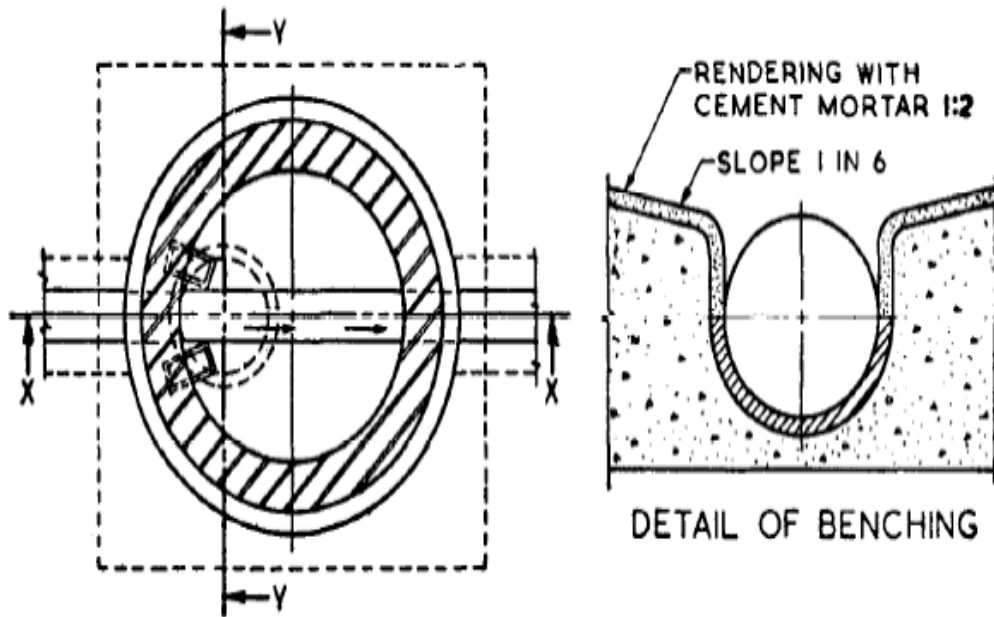
REV	DATE	REASON
01		ISSUED

TYPE OF PRODUCT OR NAME OF CUSTOMER PROJECT		BLDG-80 DRUM SHOP	
DRAWN BY		SUNIL KUMAR	
CHECKED BY		SUNIL KUMAR	
DATE		20/07/2018	
SCALE		AS SHOWN	
PROJECT NO.		1:17PC/CG/0001	
SHEET NO.		01	
SHEET TOTAL		01	



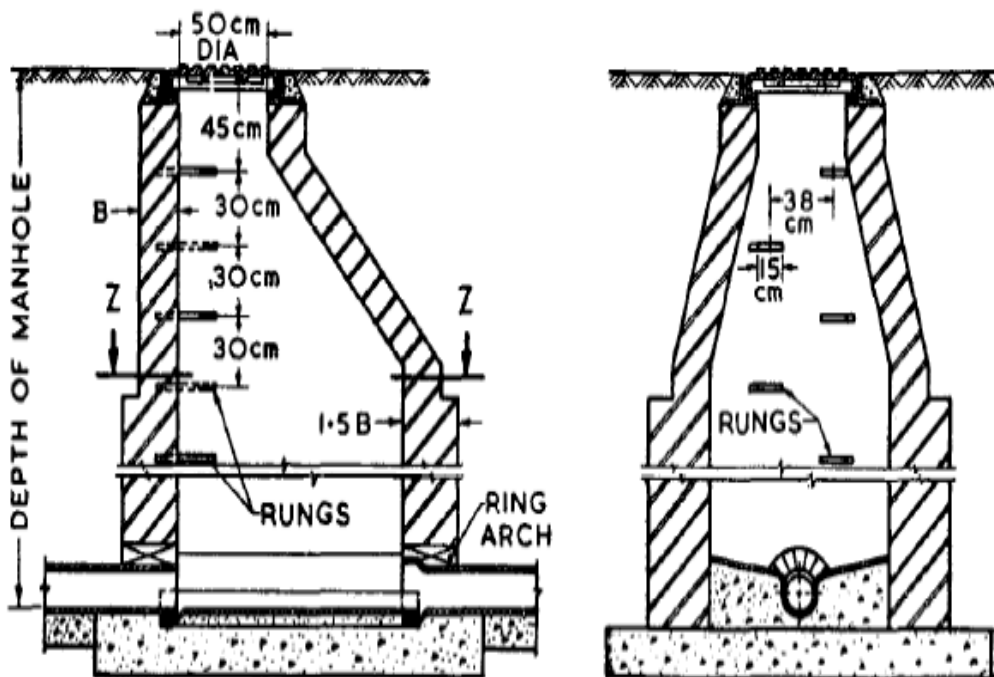
NOTE — Wall thicknesses have been indicated in brick lengths to provide for use of modular bricks [see IS : 1077-1966 ' Specification for common burnt clay building bricks (first revision). '] or traditional bricks. In the figure, $B =$ one brick length, $1.5 B =$ one and a half brick length, etc.

FIG. 2 DETAILS OF MANHOLE (DEPTHS 1 m AND BELOW)



SECTIONAL PLAN AT ZZ.

DETAIL OF BENCHING

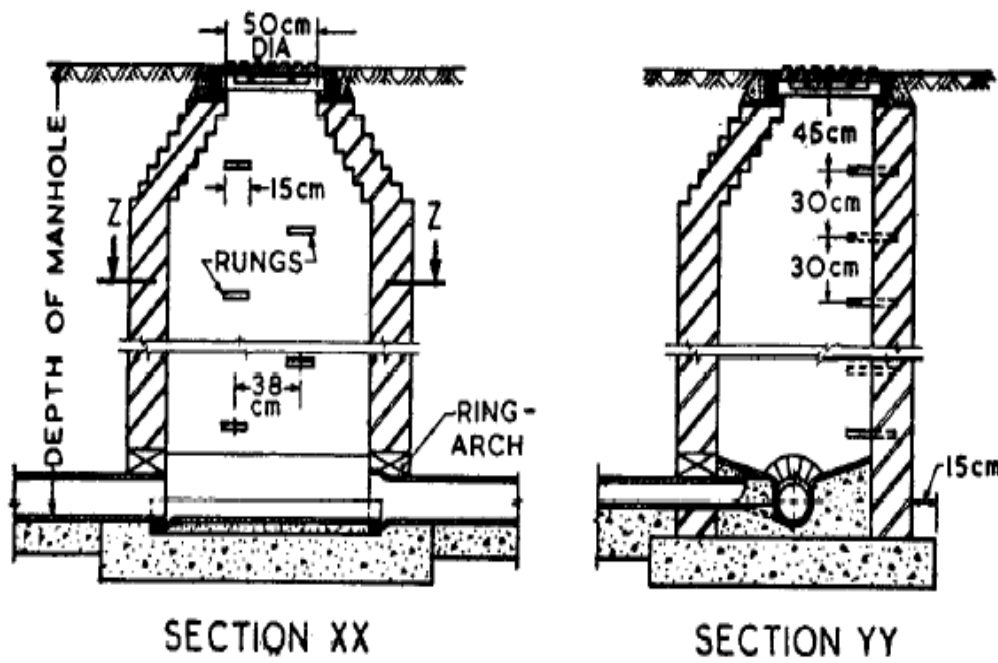
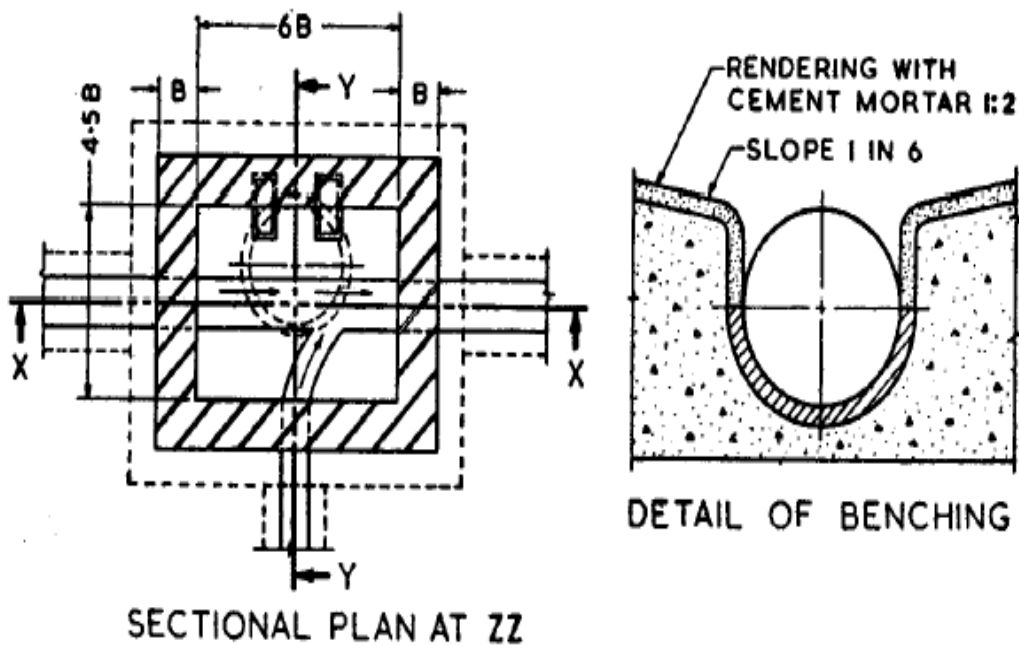


SECTION XX

SECTION YY

NOTE — Wall thicknesses have been indicated in brick lengths to provide for use of modular bricks [see IS : 1077-1966 ' Specification for common burnt clay building bricks (first revision) '] or traditional bricks. In the figure, B = one brick length, $1.5 B$ = one and a half brick length, etc.

FIG. 3 DETAILS OF MANHOLE (DEPTHS BETWEEN 1 AND 1.5 m)



NOTE — Wall thicknesses have been indicated in brick lengths to provide for use of modular bricks [see IS : 1077-1966 ' Specification for common burnt clay building bricks (first revision) '] or traditional bricks. In the figure, B = one brick length, $1.5 B$ = one and a half brick length, etc.

FIG. 4 DETAILS OF MANHOLE (DEPTHS 1.5 m AND ABOVE)