

Bharat Heavy Electricals Limited
CORPORATE R&D DIVISION ,VIKASNAGAR
Hyderabad--500093

Phone No.(040) 23772339
&(040)23882110

E MAIL : gowtamb@bhelrnd.co.in

Projects /CIVIL DEPT.

NOTICE INVITING TENDERS

1. TENDER NUMBER : **CL/07/15-16 dt: 29-02-2016**
2. NAME OF WORK : CONSTRUCTION OF BUILDING for 350 KW
TEST BED FOR PERMANENT MAGNET
TECHNOLOGY IN BHEL(R & D) LAB
COMPLEX.
3. ESTIMATED COST : Rs.137.00 Lakhs (Approx.)
4. EARNEST MONEY DEPOSIT : Rs. 2.00 Lakhs
5. COST OF TENDER DOCUMENT Rs . 500.00
6. COMPLETION TIME : 09 Months
7. MAINTENANCE PERIOD : 12(Twelve) months from the date of
completion of work.
8. LAST DATE AND TIME FOR : BEFORE 2:30 P.M ON 24-03-2016
THE SUBMISSION OF DULY
FILLED IN TENDER DOCUMENT
9. DATE AND TIME OF : ON 24-03-2016 AT 02:45 PM
TECHNICAL BID OPENING
10. PLACE OF SUBMISSION OF **CIVIL TENDER BOX AT SECURITY**
TENDER DOCUMENT **CONTROL ROOM**
(DONOT DROP IN PURCHASE TENDERBOX)
11. EARNEST MONEY
DEPOSIT(EMD) Rs.2,00,000/-

NOTE: The Tenderer shall return the duly filled in Tender document after affixing
Signatures on all pages and submit.

TO,
AGM /PROJECTS
BHEL (R&D) DIVISION
VIKASNAGAR, NEAR BALANAGAR
HYDERABAD. 500093.

CONTRACTOR

EMPLOYER

Bharat Heavy Electricals Limited
CORPORATE R&D DIVISION ,VIKASNAGAR
Hyderabad--500093

Tender Document

CONSTRUCTION OF BUILDING FOR 350KW TEST BED FOR
PERMANENT MAGNET TECHNOLOGY IN BHEL (R&D) LAB COMPLEX.

TECHNICAL BID

DATE OF OPENING :24-03-2016

Part . I	Technical cum Commercial Bid	0 0 0	Pg 1-48
	BHEL General Conditions of Contract	0 0 0 ..	Pg 49-89
	Drawings (Separate file)	0 0 0 ..	02 Page
Part . II	Price Bid (Schedule-A/Separate file)	0 0 0 ..	36 Pages

Schedule-B (pages 91-92) Schedule C (page-93)

Note: 1)Part . I: To be submitted in a separate sealed cover.

2)Part . II: To be submitted in a separate sealed cover.

3) **Earnest Money Deposit of Rs.2.00 Lakhs in the form of DD in favour of Accounts Office BHEL (R&D) Vikasnagar, Hyderabad-500 093.**

Tenders will be liable for rejection if the above is not submitted.

4) Part-I, Part-II & EMD sealed covers should be put in outer envelope and super scribing the Name of work and Name & Address of the Tenderer.

CONTRACTOR

EMPLOYER

BHARAT HEAVY ELECTRICALS LTD,CORPORATE R&D DIVN., HYDERABAD-93

CIVIL TENDER NOTICE .NO:CL/07/2015-16, Dt: 29/02/2016

PART-I: TECHNICAL-CUM-COMMERCIAL BID

(To be furnished by the Bidders)

01. NAME OF THE WORK :Construction of building for 350 KW test bed for Permanent
Magnet Technology in BHEL R&D Lab complex
02. APPROXIMATE ESTT.COST RS. : 137.00 Lakhs
03. COMPLETION PERIOD : 09 months (from the date of commencement of work)
4. NAME OF THE CONTRACTOR:
5. ADDRESS
- (A) OFFICE:.....
- E-mail
- TEL. PH. NO. :
- (B) RESIDENCE :
- TEL.PH NO :
- 06.STAFF STRENGTH :
- (A) TECHNICAL:
- (B) GENERAL:
07. PLANT/EQUIPMENT :List enclosed
08. a)SCOPE OF WORK : UNDERSTOOD
(As per schedule of items)
b) ACCEPT TO EXECUTE IN TOTAL : YES
09. PARTICULARS OF : Rs.500/-
(A) Tender document cost
DD/Cash) :
(B) EMD particulars (DD) : Rs.2,00,000/-
10. ACCEPTANCE :
(A) DRAWINGS : Acceptable
(B) DESIGNS : Acceptable
11. BHEL'S PAYMENT TERMS : ACCEPTABLE

CONTRACTOR

EMPLOYER

12. WHETHER AGREEABLE TO MAKE NECESSARY
STATUTORY COMPLIANCE AS PER BHEL R&D TERMS

13. CONSTITUTION OF FIRM

: YES

14. ELECTRONIC FUNDS TRANSFER (EFT) FORM ENCLOSED

15. COMPLETION PERIOD MENTIONED IN NIT

: INDIVIDUAL / SOLE PROPRIETORSHIP CONCERN /
PARTNERSHIP FIRM / PUBLIC LTD.
COMPANY/ PRIVATE LTD. COMPANY

: PLEASE FILL UP THE FORM IN ANNEXURE-III

: ACCEPTABLE

16. SECURITY DEPOSIT AS PER BHEL TERMS

: ACCEPTABLE

17.BHEL RESERVES THE RIGHT TO GO IN FOR REVERSE AUCTION: ACCEPTABLE

CONTRACTOR

EMPLOYER

ESSENTIAL CRITERIAS :

SNo	Particulars	To be filled by Bidder
1	Experience of having successfully completed similar works during last 7 years from the date of tender notice should be either of the following : a) Three similar completed works each costing not less than an amount equal to 40% of estimated value mentioned against each work in the tender notice OR b) Two similar completed works each costing not less than an amount equal to 50% estimated value Mentioned against each work in the tender notice. OR c) One similar completed works each costing not less than an amount equal to 80% estimated value Mentioned against each work in the tender notice. (Copy of completion/performance report from the organization where the work is executed is to be Enclosed. Submission of Work Order copy is not adequate)	
2	Average annual financial turn over during the last 3 years, ending 31st March of the previous financial year, should be 30% of the estimated cost As mentioned against each work in this notice.	Yes/ No
2.1	Turn over - Previous year	Rs.
2.2	Turn over - 1 year before previous year	Rs.
2.3	Turn over- 2 years before previous year	Rs.
3	Solvency shall be not less than 30% of the estimated Cost of this NIT. (Latest Certificate from the Bank shall be produced not older than one (1) year from the date of opening of tender.)	Furnished/ Not Furnished
4	Whether Registered with ESI / PF Authority	Yes/ No
4.1	If Yes, indicate PF Registration No. (Copy of latest contribution paid receipt to be enclosed)	Enclosed/ Not Enclosed
4.2	If yes, indicate ESI Registration No. (Copy of latest contribution paid receipt to be enclosed)	Enclosed/ Not Enclosed
5	PAN No.	
6	SERVICE TAX	
7	VAT / TIN	

Note: Offers of the Tenderers not meeting the above requirements are liable to be rejected.

CONTRACTOR

EMPLOYER

PART-II

Documents required to be submitted

- 1) Copy of PAN/GIR No. Registration Certificate issued by Income Tax Authority
- 2) Certificate of TIN / VAT / APGST Number
- 3) Service Tax Registration Certificate
- 4) Registration Certificate with ESI/PF Authority
- 5) Income Tax Returns for last Three years
- 6) Overdraft facilities available with the agencies
- 7) Balance Sheet and Profit & Loss Account for the last Three years
- 9) Annual Turnover for the last Three years duly certified by auditor
- 10) Civil Contractor Class / Registration with PWD/CPWD/ Railways / MES / Any Unit of BHEL and other PSU in Hyderabad.
- 11) Acceptance of Draft agreement copy.

Special Conditions:

- i) Successful Bidder should have their business office/Branch office at Hyderabad after awardal of work till the completion of the project.
- ii) Successful Bidder should establish their Site office at Construction site.
- iii) Bidders should require to study the prevailing market trend of construction materials/labourers/other relevant requirement before quote and submit the competitive price.
- iv) The bidders should carry out preliminary survey at proposed construction site before submission of offer to ensure the rate quoted for the relevant schedule of items are correct.
- v) **Contractors have to use only river sand as per tender specifications.**

CONTRACTOR

EMPLOYER

1. Tenders without PAN, PF No., APGST/VAT/TIN, Service Tax, etc will be rejected.
2. Technical-bids will be scrutinized on opening of Technical-bid. In case the agency has not satisfied all the above conditions with documentary proof the offer will be rejected and price-bid will not be opened.
3. In case of a registered firm, all the documents shall be in the name of the firm. However in case of sole proprietor or individuals, documents in favour of sole proprietor or individual is acceptable.
4. Tenderer presently working with BHEL R&D should submit requisite documents, even though such documents are submitted by them in previous contracts.
5. All the columns shall be filled with proper information.
6. The contractors are requested to sign on all pages in the documents.
7. BHEL R&D reserves the right to reject or cancel the tender at any stage of the tender process without assigning any reasons thereof.
8. **Penalty:** Time is the essence of the contract, if the contractor fails to complete the work within stipulated time; the contract is liable to pay at a rate of 0.50 % of the contract value per week, subject to a maximum penalty of 10% of the contract value.

We/ I agree to above conditions and certify that the particulars given are correct.

vi)

CONTRACTOR

EMPLOYER

Bharat Heavy Electricals Limited
CORPORATE R&D DIVISION
VIKASNAGAR, HYDERABAD-500093

INSTRUCTIONS TO TENDERER

1. Sealed Tender for the above noted work is hereby invited from Contractors experienced in works of similar kind and magnitude.
2. Tenders should be addressed to the AGM (Projects), BHEL R&D, Vikasnagar, Near Balanagar, Hyderabad-50093. In three separate sealed cover for:

 • Technical cum Commercial Bid, Price Bid and DD for EMD duly super scribed and put in a outer envelope, super scribing the Name of work and Name and address of the Tenderer.
- 3 The local address of the Contractors, the name of the person to whom all the Correspondence are to be addressed should be indicated, with telephone number (both office and residence).
- 4 All entries in tender documents should be in one ink (preferably blue ink) to the extent. Erasing and overwriting is not permitted. All corrections should be duly signed by tenderer concerned.

5 Tender opening

On the day of opening, only technical bids (first envelop) would be opened. The technical offers would be evaluated for compliance to technical requirements and terms and conditions of contract. Gaps if any would be clarified from the vendor during technical scrutiny. Un-acceptable offers would be rejected without any notice. On scrutiny and acceptance of the technical bids, price bids of accepted parties only, would be considered for opening. Date of opening of price-bids will be intimated to the qualified parties, separately.

The technical-bid consists of technical schedules requiring documentary proof. In case the contractor/agency has not satisfied all the conditions along with documentary proof, the tender will be rejected.

Technical and price bids must be in two separate covers, clearly marked as "Technical-bid" and "Price-Bid". The tender notice / item number for which offer is submitted shall also be clearly written on top of the covers. **Common or mixed tenders (with both technical and price bids in one envelop or technical-bid containing prices offered as in one part bid), if received will be rejected.** The technical-bid shall also include un-priced price-bid to indicate true style in which price-bid has been submitted. All pages of the price-bid document shall be signed and stamped by the tenderer at the bottom of the page.

CONTRACTOR

EMPLOYER

In case of tender application and tender documents downloaded from website, the tenderer shall pay cost of tender documents and EMD for item of work for which he is tendering, separately by means of **two separate Demand Drafts** (in favor of **Accounts Officer, BHEL R&D Vikasnagar, Hyderabad 500093**) one towards cost of tender documents and second towards EMD. Both DD's shall be enclosed along with the Technical-bid. Demand drafts issued, latest on last date of receipt of tenders will be accepted.

6 Tenderers shall fill in all the required particular in the blank space provided for this purpose in the tender documents and also sign in each and every page of the tender document including the drawings attached there to before submitting tender.

7 Unit rate should be quoted in figures as well as in words in Indian Currency only i.e. Rupees and Paisa with reference to each item and for the items shown in the attached schedule. These rates shall be for the finished work at site. The rate shall include all taxes and duties payable on account of Octroi, Sales Tax, tax on work contract etc., and also expenses towards PF and ESI contributions

(See clauses 8, 39 and Annexure -CØ). Amount of each item and total on each sheet as also the grand total amount of the whole contract shall be filled by the tenderers.

8.

- a. If, in the price structure quoted for the required goods/services/works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point, unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.
- b. If there is an error in a total corresponding to the additional or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- c. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.

CONTRACTOR

EMPLOYER

- d. If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date up to which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.
9. The rate to be quoted by the tenderer shall be firm and shall cover and include all statutory levies such as Octroi, sales tax, excise duty etc., arising from Act passed by Parliament or State Legislature and rules framed there under. The rates shall further be deemed to include statutory levies arising from such Acts, Central or State, which may come into force, subsequent to submission of tenders. The tenderer shall note that claim for variation of rates, on the ground that existing statutory levies have been increased/decreased or those new statutory levies have come into effect after tender, or on any other ground, will be entertained as applicable.
Service Tax to be quoted separately in Schedule A at the end.
8. (a) The rate quoted in the tender shall remain valid for a period of ~~SIX~~ MONTHS from the date of opening tender.
- (b) Tenderer shall not increase quoted rates, once the tenderer has submitted offers/quotation/price and during execution of contract in case tender is accepted.
- (c) Successful bidder should execute the work strictly in accordance with Tender schedule quoted rates as accepted by BHEL.
- (d) Price Variation Clause is not applicable in this contract.**
9. Quantities shown in the schedule are only approximate and are liable to variation to an extent of 20% (Twenty percent). Within this variation, the contractor is entitled for compensation.
10. Before tendering, the tenderer are advised to inspect the site of work and its environments and be well acquainted with the actual working and other prevailing conditions, position of material and Labour. They should be well versed with BHEL General Conditions of Contract instruction to the tenderers, drawing and specification and all other documents which form part of the agreement to be entered into subsequent to award of work. The tenderer should be specially note that it is tenderers responsibility to provide any items which is not specifically mentioned in the specifications and drawing, but which is necessary to complete the work.
11. Details and quantities of each item of work shown in the bill of quantities attached here to only approximate. They are given as a guide for the purpose of tendering only and are liable for variation and alteration at the discretion of the competent authority. The work under each item as executed shall be measured and price at the corresponding rates to be quoted by the Contractor in the bill of quantities attached hereto.

CONTRACTOR

EMPLOYER

13. Should a tenderer find discrepancies or omission in the drawing attached to the tender documents or should be in doubt as to their meaning he should at once address to the authority inviting the tender for clarifications. Every endeavor is made to avoid any error which can materially affect the basis of the tender but successful tenderer shall take upon himself to provide for the risk of any error which may be subsequently discovered and shall make no subsequent claim on account thereof.
14. In the event of the tender being submitted by a 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 firm concerned. In the later case, a copy of the power of Attorney duly attested by the Gazetted Officer must accompany the tender.
15. If in any case, the date of Tender Opening falls on holiday, the Tender will be opened on the next working day.
16. Every tender must be accompanied by Earnest Money Deposit. This earnest money will be refunded to the unsuccessful tenderer after finalization of the award of work. In the case of successful tenderer, the earnest money will be retained as a part of Security Deposit for satisfactory completion of the work in accordance with Clause-16 of BHEL General Conditions of the Contract. Tenders without Earnest Money Deposit receipt are liable to reject. No interest will be paid on the earnest money deposit.
17. The Earnest money deposit may be furnished in any of the following forms:
 - a) Pay order.
 - b) Demand Draft in favour of Accounts Officer, BHEL R&D, Vikasnagar, Hyderabad-500093.
18. For reimbursement of Earnest Money Deposit, the tenderer should fill the enclosed EFT form, obtain the Banker's signature and also enclose a photocopy of cancelled cheque leaf.

CONTRACTOR

EMPLOYER

19. **SECURITY DEPOSIT**

Upon acceptance of the tender, the successful tenderer shall remit the security deposit with Bharat Heavy Electricals Ltd within the time as specified in the Letter of Intent.

The rate of Security Deposit will be as below:

Up to Rs.10 Lakhs	- 10%
Above Rs.10 Lakhs up to Rs.50 Lakhs	- Rs .1 Lakhs + 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 contractor should submit the Security Deposit before the start of the work.

- i) Cash (as permissible under the income Tax Act).
- ii) Pay order, demand draft in favour of BHEL.
- iii) Securities available from Post Offices such as National Saving Certificates, Kisan Vikas Patras etc.,
(Certificate should be held in the name of contractor furnishing the security and duly pledged in favour of BHEL R&D and discharged on the back)
- iv) Bank Guarantee from scheduled Banks/Public financial Institutions as defined in the companies Act subject to a maximum of 50% of the total security deposit value. The balance 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL.
- v) 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.
- vi) 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 balance 50% may be recovered from the running bills.
- vii) EMD of the successful tenderer shall be converted and adjusted against the Security Deposit.
- viii) The Security Deposit shall not carry any interest.

NOTE: Accepting of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour on 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.

For extra items of work and deviated quantities, security deposit will be recovered at 10% of the value of deviated amount. The security deposit will be released as stipulated under clause 16(IV) of GCC.

CONTRACTOR

EMPLOYER

19. Unless the bidder whose tender is accepted signs contract agreement within fifteen days (15 days) of the date of the order directing to do so, the amount of Earnest Money already deposited by bidder will be forfeited and acceptance of the tender withdrawn.
20. If after opening of tenders a tenderer revokes the tender or increase of earlier quoted rates or after acceptance of his tender does not commence the work in accordance with the instruction of Engineer-in-charge, the Earnest Money Deposited by bidder will be forfeited and acceptance of bidder's tender withdrawn. If only a part of work included in the tender had been awarded to the tenderer, the amount of Earnest Money to be retained will be based on value of the contract so awarded.
21. The BHARAT HEAVY ELECTRICALS LIMITED reserve the right to reject any or all the tenders received or accept any tender or part thereof without assigning reason thereof. In the case of acceptance of a part of tender, the time for completion may also be reduced to the extent considered necessary by the accepting authority.
22. Conditional and Unsigned tenders, tenders which are incomplete or otherwise considered defective, tenders which are not in accordance with the tender conditions laid down by the accepting officer and tenders not submitted in the prescribed forms are liable to be rejected.
23. The tenderers should enclose relevant documents regarding constitution of firm i.e. Individual / Sole Proprietorship Concern / Partnership Firm / Public Limited Company / Private Limited Company to satisfy Clause 17(b) , Part 6I of NIT.
24. The tenders should be enclosed with a list of contracts already held by the tenderer at the time of submitting the tender and giving the following particulars:
 - a) Name of the work, value and address.
 - b) The balance work remaining to be done on the same.
25.
 - a) The filled in tender sealed cover should be dropped in the **Civil Tender box kept in the Security Control Room at BHEL R&D**, in case the sealed tender document is large and not possible to drop the same in the Tender box, it should be handed over at Security Control Room at BHEL R&D.
 - b) Tenders received after the due date & time of opening of tenders will be rejected.
26. The Contractors responsibility under this contract shall commence from date of receipt of the order or acceptance of tender.

CONTRACTOR

EMPLOYER

27. If proprietor or partner of a firm expires after the submission of tender or after the acceptance of tender,

BHEL reserves the right to cancel the contract if the character of the firm undergoes a substantial change.

28. THE BHARAT HEAVY ELECTRICALS LIMITED will not be bound by any power of Attorney granted by the tenderer or changes in the composition of firm made subsequent to signing of the contract. They may however recognize such power of Attorney and changes after obtaining proper legal advice.
29. If the tenderer deliberately gives wrong information on tender regarding past unsatisfactory performance with BHEL sister units, BHEL reserves the right to reject such tender at any stage including contract execution period.
30. Words imparting the singular number shall also be deemed to include the plural number and vice-versa where the context so require.
31. The General and Special Conditions are complementary to each other and where they are in conflict, the special condition shall prevail.
32. The expenses for completing the stamping agreement shall be paid by the contractor.
33. Unless or otherwise stated above tendered work includes supply, erection, testing and commissioning of equipment as agreed to in the contract.
34. Any covering letter and comments of the tenderer should be submitted along with the offer.
35. **Cement and steel for carrying out Civil Works will issued free of cost at BHEL stores.**
36. The Contractor shall provide all the materials needed for trial run, testing including chemicals, consumables etc. In quoting their rates, the Contractors are advised to take into account the cost of the above materials.
37. Should a tenderer or a contractor has a relative or in the case of firm or company, any of its share holders relative is employed in 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.
38. These ~~INSTRUCTIONS TO TENDERER~~ & GENERAL CONDITIONS OF CONTRACT OF BHEL shall be deemed to form an integral part of the Contract agreement for the work to be entered into. The Contractor has to scrutinize the same, and when submitting his tender, indicate his acceptance of both. In cases of variation between the two in any matter, the conditions in the ~~THE INSTRUCTIONS TO TENDERER~~ shall prevail. (Extracts of important clauses of BHEL GCC are enclosed).

CONTRACTOR

EMPLOY

40. All operations to be carried out by the Contractor during the execution of the contract such as Excavations, centering and shuttering, concreting, masonry work, painting, drilling, welding, erection etc., shall be done with proper equipment to be brought by the tenderer. Suitable power point will be provided and tapping from the power point equipment shall be done using proper size of cables equipment and after getting approval of connections from our Engineer-in-charge.
41. The Contractor shall comply with the provision of Employees Provident Fund and miscellaneous Provisions Act 1952 and rules, regulations and other orders issued there under. He as an employer shall be liable to pay employer's contribution/deductions towards PF under the PF Act in respect of all labour employed by him for the execution of the contract in accordance with the provisions of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 as amended from time to time. For this purpose he shall indicate the code number obtained from the Regional Provident Fund Commissioner or he should obtain a code number if he has not and produce the Photostat copy of the challan receipt of monthly remittance of the contribution made by him to the Commissioner. He shall also furnish such returns as are due, under the Act, to be sent to the appropriate authorities through the Principal Employer.
42. The Contractor should get himself registered with the E.S.I Authorities as an independent Employer, obtain a separate code number and remit the dues in respect of the Labour employed by him for the work and produce the challans/ receipts of remittance of the ESI contributions due under the E.S.I Act to the Company authorities. He shall also furnish such returns, as are due, under the Act, to be sent to the appropriate authorities through the Principal Employer. The contractor can remit their ESI & PF through a sub-agent who processes the ESI & PF code and agrees to enter an MOU with the contractor.
42. If any action is brought in by P.F. Commissioner/ESI authorities on BHEL for the work done by the Contractor for his labourers regarding PF/ESI amount due, short remittances, non-remittances etc., the Contractor shall defend the case on behalf of BHEL and / or reimburse BHEL the expenses so incurred.
43. The Contractor shall apply and obtain license under Contract Labour(R&A) Act 1970 and comply the relevant provisions of this Act in respect of the Labour employed by him for executing this contract. The contractor shall furnish necessary returns to the authority through the Principal Employer.
44. Contractor shall insure all his laborers and material. Any claim by his Employees for damages shall be settled by the Contractor even if action is against BHEL or to reimburse the legal expenses incurred by BHEL.

CONTRACTOR

EMPLOYEE

45. Any action brought in by anybody on BHEL regarding patent, right etc., used by Contractor in execution of work shall be defended by the Contractor and / or reimburse BHEL the cost of the same.
46. Contractor shall produce necessary records, documents; explanation whenever he is called upon to do by any Government Agencies.
47. Contractor should obtain Workmen Compensation Policy for their Employees.
48. LEAD, LIFT, DE-WATERING ETC.,
- a) Unless otherwise specified in the tender schedule, the rates for all items will be deemed to include all leads, lifts and descents involved in the work.
 - b) No separate payment will be made for dewatering (including seepage, surface drainage and monsoon water) de-sludging and allied operations at any stage of the work, and the cost of such operations will be deemed to be included in the contract rates.
 - c) No separate payment will be made for curing including pumping of curing water where ever necessary.
49. EXTRA ITEMS
- No extra items of work shall be carried out by the contractor other than those authorized to do so in writing by the Engineer. For any such items of work executed as per instructions of Engineer. The rates will be fixed on the basis indicated under clause 50 of BHEL GCC.
- The schedule of rates to be followed in this case will be CPWD schedule of rates.
50. REVERSE AUCTION/PRICE BID OPENING:
- BHEL reserves the right to go for reverse auction at any point of time before opening of Price Bid
 - Bids with non-acceptance of reverse auction will be liable for rejection.
 - Opening of Price Bid at discretion of BHEL.
 - BHEL shall be at liberty to cancel the tender at any time, before ordering, without assigning any reason.

CONTRACTOR

EMPLOYER

51. The Bidder along with its associate/collabrators/sub-contractors/Sub-Vendors/Consultants/service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <http://www.bhel.com> and Central Government Portal www.e-procure.gov.in shall immediately bring to the notice of BHEL Management about any fraudor suspected fraud as soon as it comes to their notice. Fraud prevention policy and list of Nodal officers shall be hosted on BHEL website, vendor portals of Units/Regions Internet.

52. SPECIAL CONDITIONS OF TENDER

- i. The successful bidder should open local office after awardal of work for Technical staff/Administrative group atHyderabad for easy interactions/ monitoring of work at site.
- ii. Tenderers should not disclose any price bid details/discounts in the technical bids.

53. The tenderer should submit the following within a week from the receipt of this order:

BAR/ chart for the execution of the work
Man power employed with designation
Week wise mobilization of material, and machinery
Weekly progress report along with consumption of material.

54. Rebate quoted on overall offer is liable for rejection.

55. Rates quoted shall be exclusive of applicable taxes, Octroi, transport etc.

56. BHEL's General Conditions of Contract as enclosed shall apply for this work.

57. Income Tax will be deducted as applicable.

58. Sales Tax will be deducted as applicable.

59. CESS or any other taxes at specified rates will be deducted as implemented by the State/Central Government from time to time.

60. Service tax, if applicable will be reimbursed on production of proof of payment.

ISSUING OFFICER

CONTRACTOR

EMPLOYEE



BHARAT HEAVY ELECTRICALS LTD
CORPORATE R&D, VIKASNAGAR,
HYDERABAD – 500 093.

TENDER NOTICE NO: CL/07/2015-16 Dt. 29/02/2016

Sealed Tenders are invited by the AGM (PROJ.) from the reputed contractors experienced in similar work having valid PF No., IT, Service Tax, VAT/TIN, ESI, Labour License and registered with local PWD, CPWD, Railways, MES, BHEL, for the following works to be taken up at BHEL, Corp. R&D, Division, Vikasnagar, Hyderabad-500 093, so as to reach the AGM (PROJ.) Office, BHEL R&D Division, Vikasnagar, Hyderabad-500 093 up to 14-30 hours on the date mentioned against the Tender which will be opened on the same day at 14-45 hours in the tender room (SANGAM) near CTS building.

S. No	Description of Work	Estimated Value (Approx. Rs. Lakhs)	EMD (Rs. lakhs)	Cost of Tender document Rs.	Period of sale of tender document	Date of tender opening	Period of completion
1	Construction of building for 350 KW test bed for Permanent Magnet Technology at BHEL R&D Lab complex	137.00	2.00	500/-	03/03/2016 to 23/03/2016	24/3/2016	9 Months
	Taxes as applicable						

Note:

1. Tenders received without EMD are liable for rejection.
2. Tender documents can be obtained, on the dates mentioned, from the office of the AGM (PROJ) BHEL (R&D), Vikasnagar, Near Balanagar, Hyderabad - 500 093 during office hours on submission of application with proof of experience and copies of registration certificates, PF No. ESI, Sales Tax, service tax registration etc. Labour license shall be available and shall be produced prior to contract agreement.
3. The cost of tender documents will not be refunded and tenders are not transferable under any circumstances.
4. The under signed reserves the right to reject any or all tenders or part thereof or to divide the work in to convenient group and award the work to more than one agency. The under signed also reserves the right to allow to Public Enterprises preference facilities as admissible under the existing policy.
5. **Crossed demand drafts/Cash** for issue of tender documents shall be sent to the **Accounts Officer, BHEL Corp. R&D Division, Vikasnagar, Hyderabad - 500093**. Cash may be remitted at our cash counter between 12.30 hours to 14.00 hours.
6. Contractors engaged at BHEL R&D shall pay Earnest Money Deposit. EMD will neither be adjusted against their pending bills nor be transferred from one work to the other.
7. The contract agreement will be in the form prescribed by BHEL R&D.
8. In case date of opening happens to be a holiday or Sunday, tenders will be received and opened on the next working day.

Sd/-
AGM (PROJECTS)

CONTRACTOR

EMPLOYER

BHARAT HEAVY ELECTRICALS LIMITED

**CORPORATE R&D DIVISION
VIKASNAGAR, HYDERABAD-500093**

GENERAL CONDITIONS OF CONTRACT/TECHNICAL SPECIFICATION

It is hereby agreed by me/us that the BHEL General Conditions of Contract including subsequent amendments/ additions/deletions to clauses if any, and conditions pertaining the settlement of disputes by Arbitration form an integral part of the tender documents and that the tender submitted by me/ us is subject to the aforesaid BHEL General Conditions of Contract/ Technical Specification for Civil works which has been read and accepted by me/us.

CONTRACTOR

EMPLOYER

SAFETY CODE
RESPONSIBILITIES OF THE CONTRACTOR IN RESPECT OF
SAFETY OF MEN, EQUIPMENT, MATERIAL AND ENVIRONMENT

1. Before commencing the work, contractor submits a "SAFETY PLAN" to the authorized BHEL Official. The "SAFETY PLAN" shall indicate in detail the measure that would be taken by the contractor to ensure safety of men, equipment, material and environment during execution of the work. The plan shall take care to satisfy all requirements specified hereunder. The contractor shall submit Safety Plan along with his offer. During negotiations before placing of work order and during execution of the contract BHEL shall have right to review and suggest modification in the Safety Plan. Contractor shall abide by BHEL decision in this respect.
2. The contractor shall take all necessary safety precautions and arrange for appropriate appliances as per direction of BHEL or its authorized officials to prevent loss of human lives, injuries to personnel engaged, and damage to property and environment.
3. The contractor shall provide to its work force and ensure the use of the following personal protective equipment as found necessary and as directed by the authorized BHEL officials:-Safety Helmets conforming to IS-2925: 1984.
 - (i) Safety Belts conforming to IS-3521: 1983.
 - (ii) Safety Shoes conforming to IS-1989: 1978.
 - (iii) Eye and Face protection devices conforming to IS-8520: 1977 and IS-8940: 1978.
 - (iv) Hand and body protection devices conforming to:
 - IS-2573: 1975
 - IS-6994: 1973
 - IS-8807: 1978
 - IS-8519: 1977

All tools, tackles, lifting appliances, material handling equipment scaffolds, cradles, safety nets, ladders, equipment etc. used by the contractor shall be of safe design and construction. These shall be tested and certificate of fitness obtained before putting them to use and from time to time as instructed by authorized BHEL official who shall have the right to ban the use of any item.

CONTRACTOR

EMPLOYER

All electrical equipment, connections and wiring for construction power, its distribution and use shall conform to the requirement of the Indian Electricity Act and Rules. Only electricians licensed by the appropriate statutory authority shall be employed by the contractor to carry out all types of electrical works. All electrical appliances including portable electric tools used by the contractor shall have safe plugging system to source of power and be appropriately earthed. The contractor shall not use any hand lamp energized by electric power with supply voltage of more than 24 volts. For work in confined space lighting shall be arranged with power sources of not more than 24 volts.

The Contractor shall adopt all fire safety measures as laid down in the Code for fire Safety at Construction Sites issued by the Safety Department of the Construction Management (HQ) of BHEL and as per directions of the authorized BHEL official. A copy of the above referred Code of Fire Safety at the Construction Sites shall be made available by BHEL to the contractor for reference, on demand by the contractor, during tendering stage itself.

Where it becomes necessary to provide and/or store petroleum Products, explosives, chemicals and liquid or gaseous fuel or any other substance that may cause fire or explosion, the contractor shall be responsible for carrying out such provisions and/or storage in accordance with the rules and regulations laid down in the relevant government acts, such as Petroleum Act, Explosives Act, Petroleum and Carbides of Calcium Manual of the Chief Controller of Explosives, Govt. of India. etc., prior approval to the authorized BHEL official at the site shall also be taken by the contractor in all such matters.

The contractor shall arrange at his cost (wherever not specified) appropriate illumination at all work spots for safe working when natural daylight may not be adequate for clear visibility.

The contractor shall be held responsible for any violation of statutory regulations local, state or central and BHEL instructions that may endanger safety of men, equipment, material and environment in his scope of work or another contractor or agencies. Cost of damages if any, to life and property arising out of such violation of statutory regulations and BHEL instructions shall be borne by the contractor.

In case of a fatal or disabling injury accident to any person at construction sites due to the lapses by the contractor, the victim and/or his/her dependents shall be compensated by the contractor as per statutory requirements. However, if considered necessary, BHEL shall have the right to impose appropriate financial penalty on the contractor and recover the same from payments due to the contractor for

CONTRACTOR

EMPLOYER

suitably compensating the victim and/or his/her dependents. Before imposing any such penalty, appropriate enquiry shall be held by BHEL giving opportunity to the contractor to present his case.

In case of any damage to property by the contractor, BHEL shall have the right to recover cost of such damages from payments from payments due to the contractor after holding an appropriate enquiry.

In case of any delay in the completion of a job due to mishaps attributable to lapses buy the contractor; BHEL shall have to recover cost of such delay from payments due to the contractor, after notifying suitably and giving him opportunity to present his case.

If the contractor fails to improve the standards of safety in its operation to the satisfaction of BHEL after being given a reasonable opportunity to do so; and/or if the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions regarding safety issued by the authorized BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the contractor after giving a notice of not less than seven days indicating the steps that would be taken by BHEL.

The contractor shall submit report of all accidents, fires and property damage, dangerous occurrence to the authorized BHEL official immediately after such occurrence, but in any case not later than twelve hours of the occurrence. Such reports shall be furnished in the manner prescribed by BHEL. In addition, the contractor to the authorized BHEL official shall also submit periodic reports on safety from time to time as prescribed.

Before commencing the work, the contractor shall appoint/nominate a responsible officer to supervise implementation of all safety measures and liaison with his counterpart of BHEL.

If safety record of the contractor in execution of the awarded job is to the satisfaction of Safety Department of BHEL, issue of an appropriate certificate to recognize the safety performance of the contractor may be considered by BHEL after completion the job.

CONTRACTOR

EMPLOYER

SPECIAL CONDITONS OF CONTRACT

1. GENERAL

The special conditions of contract and other contract documents are complimentary to each other and shall be read in conjunction with each other. In case of any conflict of meanings between the special conditions of contract and the BHEL General Conditions of Contract the provisions of the special conditions of contract shall override the corresponding provisions of the BHEL General Conditions of Contract.

2. SCOPE OF WORK

The scope of work includes for the full, final and entire completion of all Civil Engineering works as detailed in specifications and drawings, which forms part of this Contract. The scope of work also includes cleaning/removing all debris beyond 200 meters or as stipulated in the item schedule from building location and leveling the areas as per direction of the Engineer-in-charge.

The scope of work under this contract shall cover supply of all materials, labour, tools, and plants etc., unless otherwise specified in the specifications, descriptions of items or in foregoing clauses.

3. SITE CONDITIONS

- a) Before tendering the Contractor shall get themselves acquainted with site conditions such as the nature of soil likely to be encountered during the course of the work etc.,. The rates quoted by the contractor shall be deemed to have been quoted after getting acquainted with the prevailing site conditions. Initial jungle clearance, stripping of top soil etc., shall also be included in the quoted rates. No claims on the pretext of ignorance of site conditions shall be entertained.
- b) The site of work is as mentioned in the Tender document.

CONTRACTOR

EMPLOYER

4. **SITE FACILITIES: -**

A. LAND

The Employer will allot land as available free of cost to the contractor for his office stores. He must maintain the areas allotted to him in a neat and clean conditions as required by the Employer. The contractor shall provide adequate storage and office facilities with approval from the Engineer. The rate quoted by the contractor shall be deemed to include for these and no separate payment will be made towards these.

On completion of work, the site shall be cleaned by the contractor of all materials, temporary debris, rubbish plants and equipment, belonging to the contractor at no extra cost. The site and surroundings shall be handed over in a neat and clean condition. In case of any failure by the contractor, the employer will get inside cleared at risk and cost of the Contractor.

B. POWER AND WATER SUPPLY

Subject to availability water and electricity for the work may be provided by BHEL at one point and the contractor will have to make further arrangements for utilizing the supply from other points if required cost there of shall be recovered from the contractors from the bills due to them at the prevailing cost rates worked out by BHEL. At present, the cost rates of recovery by BHEL Rs.5.50 per unit of Electricity (as per tender schedule). BHEL is not responsible for any failure of water/electricity supply and the contractor will have to make his own arrangements for the same, without claiming any extra rate.

5. **MACHINERY**

The Contractor shall at his own expense, supply all tools, plant and equipment (hereinafter referred to as T & P) required for execution of contract, as specified in the tender documents.

No. P.O.L. can be supplied by the Employer.

- a) The whole of the works shall be executed in perfect conformity with the specifications and drawings. If contractor perform any works in a manner contrary to the specifications and drawings and without reference to the Engineer he shall bear all the costs arising or ensuring there from.

- b) All technical documents regarding the construction of works are given in the metric system and work should be carried out according to metric system.
- c) The work shall be carried out as per detailed drawings supplied by the employer. Only two copies of the working drawings shall be supplied progressively to the contractor free of cost. The contractor shall keep one set of drawings at his own expenses always available at site for reference of Engineer-in-charge and other representatives.
- d) In case the contractor desires to obtain additional copies of drawings, the same shall be supplied by the Employer on payment of charges as fixed by the Engineer-in-charge.
- e) The works shall be carried out as per detailed specifications enclosed with the tender. For items for which there is no mention in the drawings, detailed specification relevant IS specification (latest edition) shall be followed.
- f) The contractor shall submit to the Employer for their approval complete drawings, of all temporary works and staging which he may require for carrying out the works shown in the drawings. He shall at the same time if so required by the Employer submit his calculations relating to strength and anticipated deflection in respect of any aforesaid temporary works. He shall also submit for the approval of Employer drawings showing the methods he proposes to adopt for the erection of the various parts of the temporary works. Any modification to the drawings that may be required by the Employer shall be made by the contractor at his own cost. However, notwithstanding the approval of modification required for temporary works, the contractor shall be fully responsible for their efficiency, security and maintenance and for all obligations and risks in regard to such works, specified or implied in this contract and he shall reinstate the same at his own cost, should any mishap or accident occur causing damage or injury there from, subject however, to such clauses of the General conditions as may be applicable in such cases.

CONTRACTOR

EMPLOYER

6. BENCH MARKS AND REFERENCE POINTS

The contractor shall construct and maintain proper benchmarks and reference points of the inter section of all main walls, no separate payment shall be made for this and rates quoted deemed to include this cost.

7. SAFETY PRECAUTIONS

The contractor shall at times observe the safety code and make necessary action as required in the tender. In default thereof, the employer may get this done departmentally or through other agencies and recover the cost from the contractor.

The Contractors shall also abide by all the security regulations promulgated from time to time by employer.

8. RATES

The rates to be quoted are intended to provide for works duly and properly completed in accorded with the general and special conditions of contract and specifications and drawings together with such alteration and or conditions as may be required / ordered without prejudice to the generality thereof shall include for detail of construction which are obviously and fairly intended and which may not have been specifically referred in these documents and working drawings and but are essential for execution and satisfactory completion of work including those of minor nature and shall be deemed to include and cover internal the followings.

The cost of all superintendence and labour materials, tools, plants, equipment~~s~~, mobilizing and demobilizing equipment fuel lubricants, fixture, transport charges, temporary and permanent works and quarrying charges, testing, screening, washing, handling of materials, stacking and removal charges, of any rejected materials and water and power arrangements and satisfactory maintenance of the same satisfactory completion of the work intended.

All fees, duties, royalties, rent and compensation to owner for surface damage or taxes and impositions payable to local authorities, in respect of land an structure, for all materials supplied for the work or any other duties/expenses for which the contractor may become liable or may be put to under any provision of the law for the purpose of in connection with the execution of the contract including revise payable on the transactions. Watching and lighting arrangements as required for satisfactory performances.

Settings out of works profiles etc., and of construction repair and up-keep of all centre lines, bench marks and levels and page there of including provisions of masonry/concrete pillars showing the Centre line of structure/gridlines and levels and maintenance and protection of the some including Providing fencing etc., throughout the period of contract.

- a) Breaking, maintenance and removal of temporary works and buildings.
- b) Supply of required concrete, moulds, cost of testing of materials etc.
- c) Working in all conditions including in/under water liquid, conditions etc., and shall also include bailing or pumping out water from the foundations, basements or any other sources of whatsoever de-sludging and allied operation at any stage of work including all suspension period and delays whatsoever. Cost of curing including pumping and cost of water whatever necessary.
- d) In the interest of completion of work within the stipulated time, certain works are to be carried out during the monsoon period also. No separate payment will be made to the contractor for such works and it will be deemed to be included in the contract rates.
- e) Diversion and draining works, protection works, temporary facilities, bridges, gangway.
- f) Work at all depth in foundation below the ground level and in superstructure up to all heights above ground level including all lifts and distances involved at any other place of work and disposed/barrow areas.
- g) Unless otherwise specified in the specification schedule cost of all leads/lifts etc.
- h) Provision of centering, scaffolding, strutting props etc.,
- i) All materials and labour required for fencing in a protection against risk of accidents and for providing necessary/planking strutting with hand rails, gumboots, helmets, safety belts etc., during the progress o work.
- j) Prevention on trespassing by providing barrier arrangements for the safety of the public or employees during the provision of works.
- o) Works in all shapes include and curved all sizes as shown are as required.
- p) Cleaning the site after the completion of work all debris, left out construction materials machine equipments, temporary offices, stores, works shop etc., including dressing the area neat and clean shape.
- q) Such other incidental charges or contingencies as may have been provided for in the specifications.

9. LABOUR COLONIES:-

No labour camp will under any circumstance be permitted within the Factory premises.

10. QUANTITY

The probable quantities of the several items of work are furnished in the schedule of quantities. It must be clearly understood that neither the probable quantities nor the value of individual items nor the aggregate value of the entire work shall be binding on the Employer/Engineer does not in any way assure the contractor or Guarantee that the said probable quantities are correct or that the work will correspond to these. The Employer/Engineer reserve the right to omit, vary or add to the item/work described in the schedule, of quantities and no claim for compensation will be entertaining on this account.

CONTRACTOR

EMPLOYER

11. VARIATION/DEVIATION IN QUANTITIES

The contractor shall not make any alteration in addition to or omission from the work as described in the tender document except in pursuance of the written instructions of the Engineer-in-charge. No such deviation from the work described in the tender documents shall be valid unless the same has been specifically confirmed and accepted by the accepting officer in writing and incorporated in the contract.

The rates quoted are firm for deviation subject to minimum of (-) 20% and maximum (+) 20% of the total value of work awarded. Deviation beyond the above limits is subject to the standard terms and conditions of BHEL.

12. MATERIALS

BHEL will supply cement and steel at free of cost.

13. SUPPLY OF CEMENT AND STEEL IS TO BE MADE BY CONTRACTOR

14. SUPPLY BY CONTRACTOR

The work is for a completed job including labour and supply of all materials except those otherwise specified in the bid document.

All materials supplied by the contractor according to the contract conditions shall be subject to inspection and passing by the Engineer or his representatives from time to time, the contractor providing all facilities for such instruction free of cost. BHEL officers connected with the contract shall have the power at any time to inspect and examine any stores or materials intended to be used in or on the work, whether on the site or at any factory or workshop or other place where such stores or materials are being fabricated or manufactured or at any place the same are lying and the contractor shall give necessary facilities for such inspection and examination.

The Engineer-in-charge shall be entitled to have tests made of any stores or materials supplied by the contractor shall provide at his own expense all facilities which the Engineer-in-charge may require for this purpose. If at the discretion of the Engineer-in-charge an independent expert is employed to make any such tests his charges shall be borne by the contractor only if the tests disclosed that the said stores or materials are not in accordance with the provision of the contract.

Should the Senior Engineer/Civil consider at any time during the construction or reconstruction on prior to the expiry of the Maintenance Period that the stores or materials provided by the contractor are unsound or of quality inferior to that contracted for, or otherwise not in accordance with the contract (in respect where the decision of the Senior Engineer/Civil shall be final and conclusive) the contractor shall on demand, in writing from the Sr.Engineer-civil specifying the stores and demand or materials complained of, not with-standing that the same may have been inadvertently passed, certified that and paid forth with remove the stores or materials so specified and provide other and suitable stores or materials at his own expense, to the entire satisfaction of the Sr.Engineer/Civil Engineer/Civil and in the event of his failing to do so within a period to be specified by the Senior Engineer/C,E/C, in his demand aforesaid, the Sr.Engineer/Civil Engineer/Civil may replace within the other stores or materials complained of at the risk and expense in all respect of the contractor. The liability of the contractor under this conditions, shall not extended beyond the maintenance period aforesaid except as regards stores or materials which the Sr.Engineer/Civil Engineer/Civil shall have previously given notice to the contractor to replace (Maintenance, period for any work under this organisation will be twelve (12) months from the date of actual completion of the particular work and handing over to BHEL).

CONTRACTOR

EMPLOYER

15. INTERRUPTION TO THE WORKS: -

In quoting the rates/prices the Contractor should take in to account the fact that due to the design or other stipulations at site, or the necessity to follow a particular sequence of overall construction operation, or non-supply of particular drawings, or the connected work or other reasons, interruptions are likely to be encountered in a work of this nature and magnitude. No claims for such interruptions will be entertained on any account.

16. EXTENSION OF TIME OR PENALTY/LIQUIDATED DAMAGES

Extension of time or penalty/liquidated damages as the case may be will be determined as stipulated in clause 7, 9 and 41 of BHEL General Conditions of Contract.

17. COMPLETION OF WORK AND MEASUREMENT

- a) All work shall be carried out according to authorized dimensions and measurement will be restricted to those authorized dimension even though the Contractor may for convenience of this work exceed the authorized dimensions.
- b) All work shall be measured in accordance with the applicable standard method of measurements prescribed by the Indian Standard Institution (1200 latest edition) unless otherwise specified.
- c) The Contractor shall admit for technical inspection, works which are likely to be embedded or covered by other works and have the necessary measurement books and certificates to this effect duly signed by the Engineer before the works are covered.
- d) On completion of the work, the Contractor must submit to the Engineer the following documents for passing of works.
 - i) A copy of the working drawing showing thereon all addition and alterations in the process of execution.
 - ii) A certificate for embedded and covered up works as in sub-para (C) above
- e) The authorized Contractors representative and a representative of the Employer shall jointly sign a certificate of handing over any completed work and date of signature of that certificate will be that the date from which the maintenance period of that unit will reckoned.
- f) Notwithstanding the above insurance cover has to be taken by the contractor for the full value of work as also for the duration of the contract period.,50% of the Security Deposit shall be released only on the total completion of the building and handed over to BHEL to their satisfaction. Remaining 50% of Security Deposit shall be released subject to the stipulation in our GCC after 12 months from the date of completion of the building.

18. MAINTENANCE OF WORK

The contractor will be responsible for the maintenance of works during the period of construction until the various items are taken over, and for a further period of twelve months, from the date of taking over.

If the contractor fails to maintain the building satisfactorily, it will be got done by other agency and cost towards such maintenance together with departmental charges will be recovered from his bills/dues.

CONTRACTOR

EMPLOYER

20. RUNNING ACCOUNT PAYMENTS

During execution of work, monthly payments of all works in place will be made on the basic measurements recorded in measurement sheet/book in respect of items executed but no claim on the account will be entertained, if for any reason payments are not so made.

21. Statutory Deduction towards Income Tax will be made as per rules.

22. In respect of all labour directly or indirectly employed on the work by the Contractor, the Contractor shall comply with the provisions of the contract labour (Regulation and Abolition) Act 1970 or any amendment thereof and all legislations and rules of the State and or Central Government or other Authority, framed from time to time governing the protection of health, sanitary arrangements, wages, welfare and safety for labour employed on building and construction works. The rules and other statutory obligations with regard to fair wages, welfare and safety measures, maintenance of the register etc., will be deemed to be part of the contract.

CONTRACTOR

EMPLOYER

- 23 The Contractor is required to take insurance for all workers employed on works towards payment for workmen compensation. The insurance has to be taken out within 15 days of the award of work and has to be produced at the time of signing agreement. Half (½%) shall be deducted for every bill if the contractor fails to produce a proof of having taken such an insurance to cover his workmen.

However the contractor shall be fully responsible for all the consequences arising out of such default. This may also be read with clause 20 of BHEL GCC.

24 **TIME OF COMPLETION**

The date of commencement of work shall be counted from the date of handing over the site to the contractor. The contractor shall plan the work in such a manner that all roofs are laid before the start of the rainy season and the work is not hampered due to rain. It may be clearly understood that time is the essence of the contract and the entire work should be completed within the time imposed in the tender document letter of intent.

25. The Contractor has to pay the Works Contract Tax as per the prevailing rules of government on their own on Monthly basis.
26. The management of BHEL shall be at liberty to terminate the contract by issuing a month's notice to the contractor without assigning any reason what so ever. As regards unsatisfactory performance or non compliance with any of the terms & conditions of the contract by the contractor. The management of BHEL shall have the right to terminate the contractor forthwith without notice & rearrange the balance work through other agencies at the risk & cost of the contractor & under such circumstances; the Earnest Money Deposit / Security Deposit paid by the contractor shall stand forfeited.

SPECIAL CONDITIONS OF TENDER

- iv. **The successful bidder should open local office for Technical staff/Administrative group at Hyderabad City for easy interactions/ monitoring of work at site.**
- v. **Tenderers should not disclose any price bid details/discounts in the technical bids.**
- vi. **The successful bidder should construct site office in consultation with Engineer-in-charge.**

LIST OF INDIAN STANDARD

Following is the list of various Indian Standards,
Relevant to the Civil Engg., work

1. EARTH WORK

- i) IS 1200-1992, Method Part I Earthwork, Measurement of Building, and Civil Engineering works, and chapter No.2 of CPWD/specification 1977.

2. MORTAR (PLASTERING)

- 1) IS 2394-1984: Code of practice for application of lime plasters finish.
- 2) IS 1661-1972: Code of practice for application of cement lime plasters finish.
- 3) IS 2402-1963: Code of practice for external rendered finishes.

3. CONCRETE WORK & RCC WORK

- 1) IS 456-2000: Code of practice for plain and reinforced concrete.
- 2) IS 432(part 1) 1982(Third Revision): Mild steel and medium tensile steel bars
- 3) IS 1766-1998: Cold twisted steel bars for concrete reinforcement.

4. BRICK WORK

- 1) IS 2212-1991: Code of practice for brick work.

5. STONE WORK

- 1) IS 1597-1992 (Part 1 & II): Code of practice for construction of stone masonry.

6. MARBLE WORK

- 1) IS 1124-1974: Methods of test for water absorption of natural building works.

7. STEEL WORK

- 1) IS 800-2007(Third Revision): Code of practice for use of structural Steel in general building construction.
- 2) IS 1308-1984: Steels doors, windows and ventilators
- 3) IS 1081-1960: Code of practice for fixing glazing of metal (steel &aluminium doors, windows& ventilators)
- 4) IS 1161-1998: Steel tubes for structural purposes.
- 5) IS 4351-2003: Steel doorframes.
- 6) IS-6245-5245-1971: Metal rolling shutters and rolling grills.

CONTRACTOR

EMPLOYER

8. FLOORING

- 1) IS 2114-1984: Code of practice for laying in situ terrazzo floor finish.
- 2) IS 2571-1970: Code of practice for in situ cement concrete flooring.
- 3) IS 5318-1969: Code of practice of laying of flexible P.V.C. sheet & tiles flooring.

9. ROOFING

- 1) IS 3007(pt-I)-1999: Code of practice of laying of corrugated cement sheets.

10. FINISHING

- 1) IS 133-2004: Enamel, Interior (a) under coating (b) Finishing colour as required.
- 2) IS 348-1968: French Polish.
- 3) IS 427-2005: Distemper, dry colour as required.
- 4) IS 425-1969: Distemper, oil emulsion as required.
- 5) IS 5410-1992: Cement paint, Colour as required.
- 6) IS 5411 (pt.1)-1974: Plastic emulsion paint for interior use.
- 7) IS 6278-1971: Code of practice for white washing & colour washing.

11. DEMOLITION AND DISMANTLING.

- 1) IS 1200 (pt 18)-1974: Method of measurements of demolition and dismantling.

12. SAFETY CODE

- 1) IS 5916-1970: Safety code for construction including use of hot bituminous materials.
- 2) IS 4130-1991: Safety code for demolition of building.
- 3) IS 3754-1966: Safety code for excavation works.
- 4) IS 3696(Pt-1)-1987: Safety code for Scaffolds.

CONTRACTOR

EMPLOYER

LIST OF MATERIALS OF APPROVED BRAND OF MANUFACTURERS

- | | |
|---|---|
| 1. G.I Pipes | : TATA, Jindal, Zenith |
| 2. P.V.C. PIPES/P.V.C. FITTINGS | : Prince, Premier, Finolex, Supreme |
| 3. Sanitary Fittings-Chrome plated | : ESS ESS, Jaguar, Hindware, Cera/Parry ware, |
| 4. Gun Metal Valves | : Leader,zoloto |
| 5. Door Shutters (Wood & P.V.C.) | : Rajshree, Greenply, Centuryply,Kutty,
Fenesta, NCL, Duroplast, Aparna, Durian. |
| 6. Aluminium Sections | : Indal, Jindal, Hindalco, Galco Aluminium, Balco, Nalco |
| 7. Cement | : Zuari, ACC, Coromandel, Ultratech, Birla, JK Cement,
CCI, JSW. |
| 8. Reinforcement Steel | : TATA, SAIL, Vizag. |
| 9. Sanitary Fittings | : Hindware, Jaguar, Parryware, Johnson, Cera |
| 10. Ceramic Tiles | : Nitco, Somany, Kajaria, Johnson, RAK, Simpolo |
| 11. Vitrified Tiles | : Nitco, Somany, Kajaria, Johnson, Simpolo, RAK |
| 12. Paints
(Primer/ Enamel/ Distemper/ Emulsion) | : Asian Paints, Berger, Johnson &Nicolson,British paints,
Nerolac, Nippon paint. |
| 13. Particle Board/ Plywood Board | : Novapan, Ecoboard, Bhutan Board,
Archid Ply, action TESA |
| 14. Water Proof Cement Paint | : Snowcem, Asian Paints |

CONTRACTOR

EMPLOYER

FORM OF TENDER

Having examined the invitation to bid, Instructions to Bidder, General conditions of contract, special conditions, specifications tender schedule, contract drawings and other documents for the above work, we the undersigned, offer to construct, erect complete and maintain the whole of the said in conformity with the said bid documents on the terms and conditions and under the provisions set out or called for in the contract documents at the rates listed in the schedule of unit prices or else wherein the contract documents.

We undertake if our bid is accepted, to commence the works within 7 days from the date of issue of award and to complete and delivery the whole of the works comprised in the contract as per the time schedule agreed to the contract document.

We agree to abide by this bid for the period of three months from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before expiry of the period.

Until and unless a formal agreement is prepared and executed this bid, together with your award thereof shall constitute a binding contract between us.

CONTRACTOR

EMPLOYER

TENDERER AND CONTRACTOR'S CERTIFICATE

I / WE hereby declare that I have pursued in detail and examined closely the Central Public Works Department Detailed Standard Specifications and its addenda volume and also the BHEL General Conditions of Contract, I / WE agree to be bound by and comply with all specifications contained in CPWD Standard Specifications and BHEL General Conditions of Contract, for the various items of work specified in the "SCHEDULE - A" and the work as a whole.

I / WE hereby declare that I / WE shall pay the statutory minimum wages to my workers as applicable from time to time. I shall also adhere to all the statutory obligations under Contract labour (Regulation and Abolition) Act 1971 and Rules framed there under with subsequent revisions if any.

SIGNATURE OF CONTRACTOR(S)

Date:

SEAL:

CONTRACTOR

EMPLOYER

DIRECTIONS TO PARTIES TENDERING

1. A list of materials proposed to be supplied by the BHEL along with the place and the prices at which they are proposed to be supplied is given in Schedule-B. TENDERER MUST ACCEPT THESE MATERIALS AT THE SPECIFIED PRICES AND QUOTE FOR FINISHED WORK ACCORDINGLY.
2. Any variation in market prices for these materials shall not change the agreed contract value.
3. In event of issue of materials, other than those specified in contract, by BHEL (for unforeseen reasons) at the request of the contractor for completion of the work, the materials would be charged at prevailing market value or at procurement price plus 12.5% handling charges whichever is higher.
4. The tenderer shall examine carefully the CPWD Detailed Standard Specifications and also the relevant clauses of the Standard Preliminary Specifications, available at office of AGM (PROJ), before submitting his tender unit rates for finished work in situ. The contractor is advised to purchase a book of CPWD Detailed Standard Specification for his reference. He shall also carefully study the drawings, additional specifications and all other documents which form part of the contract agreement.
5. Each tenderer must submit Annual IT -Return from income tax authority for past three years. In the case of proprietary or partnership firm it will be necessary to produce this certificate for the proprietor/s and for each of the partners as the case may be. All tenders received without a certificate as aforementioned will be summarily rejected.
6. Tenderer is expected to satisfy himself about the expected work, quantity and quality before quoting his rates by inspecting the site of the proposed work. He should also inspect the quarries and availability of materials. The best class of materials shall be used in proposed work. In every case, the materials must comply with the relevant standard specification. Samples of materials as called for in the standard specifications or in the tender notice or as required by the AGM (PROJ) shall be arranged by the tenderer. The material should be supplied to site after obtaining the approval from the Engineer In-charge. Attention of the contractor is directed towards the Standard 'Preliminary Specification' regarding payment of seignior age, tools etc.
7. Time shall be considered as essence of the contract. The rate of progress as submitted shall be maintained. Date of commencement of this programme will be the date on which the site (or premises) is handed over to the contractor.
8. The tenderer should quote his minimum rates for each item of the schedule (in Rupees and paisa). Specific rate for each item shall be offered. The rates shall not be mixed or compounded. The units and rates should be written both in words and figures. In case of differences between quoted rate in figures and words, the lowest rate will be considered.
9. The enclosures/schedule accompanying the tender shall be written legibly, in English. No over writing, correction shall be made on documents. Unavoidable correction should be made by crossing out the wrong information the corrections shall be endorsed and dated. Alteration without authentication by the tenderer in (i) the agreement form; (ii) the conditions of agreement and (iii) the drawing or specifications accompanying the same will not be recognized if corrected without endorsement. Any such alterations found in the tender shall disqualify the tender for acceptance.

CONTRACTOR

EMPLOYER

10. The Tenderer shall not include any additional condition.
11. The Tenderer shall sign on each page of the tender schedule.
12. Rates quoted shall be firm throughout the period of contract.
13. Sub-contracting the work as a whole is not permitted.
14. The contractor should ensure HSE management and qualified, experienced site staffs are available at all times during working hours for proper supervision to maintain the quality.
15. The tenderer should submit the following within a week from the receipt of this order:
 - a) BAR/ chart for the execution of the work
 - b) Man power employed with designation
 - c) Week wise mobilization of material, and machinery
 - d) Weekly progress report along with consumption of material.
16. Rebate quoted on overall offer is liable for rejection.
17. Rates quoted shall be exclusive of applicable taxes, octroi, transport etc.
18. ALL taxes, octroi charges, transport etc shall be quoted separately.
19. BHEL's General Conditions of Contract as enclosed shall apply for this work.
20. Income Tax will be deducted as applicable.
21. Sales Tax will be deducted as applicable.
22. CESS or any other taxes at specified rates will be deducted as implemented by the State/Central Government from time to time.
23. Service tax, if applicable will be reimbursed on production of proof of payment.

ISSUING OFFICER

I/We agree to above term and conditions.

CONTRACTOR

DATE:

SEAL:

CONTRACTOR

EMPLOYER

TENDER FOR THE WORK

I/We

Do hereby tender to execute works of the under mentioned description and in accordance with the conditions noted below in consideration of payment being made for the quantity of work actually executed at the respective rates specified in Schedule 'A' hereto.

I/We hereby distinctly and expressly declare and acknowledge that before the submission of my/our tender I/We have carefully followed the instructions in the tender notice as available in the website along with addendum and have read the CPWD Detailed Standard Specifications and the clauses of the Preliminary Specifications/BHEL General Conditions of Contract and that I/We have made such examination of the contract documents and of the specifications, etc and of the location where the said work is to be done and such investigation of the work required to be done, and in regard to the material required to be furnished as to enable me/us thoroughly understand the intention of the same and the requirements, convenient agreements, stipulations and restrictions; and distinctly agree that I/We will not hereafter make any claim or demand upon the BHEL, based upon or arising out of any alleged misunderstanding or misconception or mistake on my/our part of the said requirements, convenient, agreements, stipulations, restrictions and conditions”.

I/We enclose an income tax verification certificate_____

_____/_____

_____ I /We have already produced an income tax verification certificate during the current calendar year in respect of (here particular of the previous occasion on which the certificate was produced should be given).

I/We agree to keep the tender open for acceptance for Ninety (90) days from the date of submission thereof and not to make any modifications in its terms and conditions which are not acceptable to BHEL.

After the tender is accepted, if I/We fail to commence the execution of the works as provided in the conditions, I/We agree that BHEL shall without prejudice to any of their right or remedy, be at liberty to forfeit the said earnest money.

Signature of Contractor (S)

Address:

DATE :

SEAL:

CONTRACTOR

EMPLOYER

AGREEMENT

M/s Bharat Heavy Electricals Limited (a Government of India Undertaking) a Company incorporated under the Companies Act.1956, having its Registered Office at BHEL House, Siri Fort, New Delhi-110 049 through its Unit/Division at Corporate Research & Development Division, Vikasnagar, Hyderabad-500 093 hereinafter called "the Company" (which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and assigns herein after called First Party) of one part and M/s _____ situated at _____ (here after called the contractor) of second part.

Whereas M/s Bharat Heavy Electricals Limited having placed Work order, vide LOI No. _____ (hereinafter called "Contract") for the work _____ at BHEL R&D Lab complex site at Vikasnagar, Hyderabad-93 of Bharat Heavy Electricals Limited, Corporate Research and Development Division, situated approx 9 KMs west of Secunderabad City, more particularly described in the schedule including drawings and specifications attached herewith on M/s _____ (hereinafter called the "Contractor") and the said contract made for the above said work.

AND WHEREAS the contract interalia provides that the contractor furnish to the Company a sum of Rs. _____ (Rupees _____ only) towards Security Deposit for due and faithful performance of the contract in the form and manner specified therein.

And whereas the contractor has agreed to the retention by the first party of the Security Deposit of Rs. _____ (Rs. _____ only) paid by him when he submitted his tender as part of the security for the due fulfillments of the contract to the satisfaction of the first party.

And whereas the contractor has also perused the copy of the Central Public Works Department Standard Specifications and addenda volume, BHEL General Conditions of contract maintained in the Senior Engineer/Manager (Civil)'s office and is bound by all the standard specifications for items of work described by a standard specifications numbers in "Schedule-A" and by all the conditions and clauses of the standard preliminary specifications detailed in the agreement.

And whereas the contractor has agreed to execute upon and subject to the conditions set forth in standard specification indicated in Schedule-A and in the standard preliminary specifications and such other conditions as are contained in all the specifications forming part of this contract (hereinafter referred to as the said conditions), the work shown upon the drawings and described in the said specifications and set forth in Schedule-A as the probable quantities and comply with the rate of progress as submitted.

Now these presents witness that in consideration of the "Schedule- A" as also of agreement of good and faithfully service to be rendered and performed by the contractor in the execution of the said work, subject to the stipulations hereinafter expressed.

CONTRACTOR

EMPLOYER

Now it is hereby agreed as follows:

1. That the contract shall come into force with effect from _____ the date on which the site or premises was handed over to the contractor.
2. That it is agreed between the parties that the non-exercise of any of the powers conferred on the authorities of the first party, will not in any manner constitute waiver of the conditions hereto contained in these presents and the liability of the contractor either of part or future compensation shall remain unaffected.
3. That notwithstanding any thing mentioned earlier by either party, only the conditions included in the NIT and Agreement shall prevail.
4. That the expenses of completing and stamping the agreement shall be paid by the contractor.
5. The decision of the Company whether any default has been occurred or has been committed by the contractor in the performance, observance or discharge of any of the terms, conditions, stipulations or undertakings or any one of them as contained in the contract and/or to the extent of loss, damage, costs, charges and expenses caused to or suffered by the company by reason of the contractor making any default in the performance, observance or discharge of any of the terms, conditions, stipulations or undertakings or any one of them shall be conclusive and binding on, irrespective of the fact whether the contractor admits or denies the default or questions the correctness of any demand made by the company in any court, Tribunal or Arbitration proceedings or before any other Authority. In addition, the Contractor is also liable for legal action by the company for civil and or criminal consequences.
6. For Violation of terms and conditions of contract, 30 days notice will be given for termination of contract.
7. In the event of any dispute or difference between the parties while executing the contract, the same will be referred to the Arbitrator agreed upon by the both parties.
8. The award given by the arbitrator is binding on both parties.
9. The jurisdiction of courts for any claims is within in Hyderabad/Secunderabad.
10. The contractor will be responsible for complying with all the relevant statutory provisions under various Labour Laws viz, Contract Labour (Regulation & Abolition) Act 1970 Minimum Wage Act 1948, Employees Provident Funds and Misc. Provisions Act 1952, ESI Act 1948, Payment of Bonus Act, 1965, Workmen's Compensation Act 1923 and other relevant Acts. Further in case BHEL R&D as principal employer has to pay any amount to any agency for non-fulfillment of any of the provisions of the above referred Act, I/We authorize BHEL R&D to deduct the amount from my/our bills or I/We, will pay the amount of BHEL R&D.

SIGNATURE OF CONTRACTOR

DATE :

SEAL:

WITNESSES: 1. 2.

for and on behalf of,
Bharat Heavy Electricals Limited

ACCEPTING OFFICER

CONTRACTOR

EMPLOYER

HEALTH, SAFETY & ENVIRONMENTAL POLICY

The Management is committed to be an environmentally sound company in its activities, products, services and to provide safe and healthy working environment covering its employees, products & services as an integral part of business performance through :

- Compliance with applicable Legislation and Regulation
- Setting objectives and targets to eliminate/control/minimize environmental pollution, risks due to Occupational Health and Safety Hazards.
- Promotion of activities for conservation of resources by environmental management with focus on oil, electrical energy and chemicals.
- Enhancement of Environmental, Safety and Occupational Health awareness amongst employees, customers, suppliers, contractors by proactive communication.
- Regular evaluation and pro-active measures for prevention & control of Environmental pollution/accidents/occupational diseases.
- Appropriate training of employees and interested parties on Health, Safety & Environmental (HSE) aspects.
- Formulation and maintenance of HSE Management Programs for continual improvement.
- Periodic review & audit of HSE Management System to ensure its continuing suitability, adequacy and effectiveness.
- Communication of HSE Policy to all employees and interested parties.
- Co-operation with concerned agencies/regulatory bodies engaged in HSE activities.

CONTRACTOR

EMPLOYER

EXPERIENCE / WORK EXECUTED

Sl. No.	Name of project executed/ under execution during last seven years	Short description of work under progress/ completed	Name & address of the client	Value of work	Stipulated time of completion	Actual time of completion

(Signature of the Tenderer with Official Seal)

CONTRACTOR

EMPLOYER

ANNEXURE-II
GUIDELINES FOR REVERSE AUCTION PROCEDURE

Terms & Conditions of Reverse Auction

Against this Tender Notice CL/07/2015-16 dt.29-02-2016 the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL may resort to "REVERSE AUCTION PROCEDURE" i.e.,

ONLINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender notice No.CL/07/2015-16 dt.29-02-2016 will have to necessarily submit "online sealed bid" in the Reverse Auction. Non-submission of "online sealed bid" by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
3. 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.
4. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
5. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
6. Bidders have to fax the Compliance form before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
7. In line with the NIT terms, BHEL will provide the calculation sheet (e.g. EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
8. Reverse auction will be conducted on scheduled date & time.
9. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.

CONTRACTOR

EMPLOYER

10. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, as provided on case-to-case basis to Service provider within two working days of Auction without fail.

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. Bidders shall be required to read the "Terms and Conditions" section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the "Business Rules of Reverse Auction", which will be communicated before the Reverse Auction.

13. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines, shall be initiated by BHEL and the results of the RA scrapped/ aborted.

14. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.

15. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.

CONTRACTOR

EMPLOYER

ANNEXURE –III
ELECTRONIC FUNDS TRANSFER (EFT) OR
PAYLINK DIRECT CREDIT

FORM Please Fill Up the form in CAPITAL LETTERS only:

TYPE OF REQUEST (Tick one): CREATE _____ CHANGE: _____

BHEL Vendor/Supplier Code:

Company Name:

Permanent account Number(PAN):

Address:

City: _____

PINCODE

--

--

STATE

Contact Person(s)

Telephone No:

Fax No:

E-Mail-Id:

1.Bank Name:

2.Bank Address:

3.Bank Telephone No:

4.Bank Account no:

5.Account Type: Saving/Cash Credit

6.9Digit Code Number of Bank and
Appearing on MICR cheque issued by

7.Bank Swift Code (applicable for EFT

8.Bank IFSC Code(applicable for RTGS)

9.Bank IFSC Code (applicable for NEFT)

branch
Bank
only)

CONTRACTOR

EMPLOYER

I here certify that the particulars given above are true, correct and complete and that I, as a representative for the above named Company, hereby authorize BHEL(R&D)Vikasnagar to electronically deposit payments to the designated bank account. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold BHEL/Transferring Bank responsible. This authority remains in full force until BHEL (R&D) Vikas nagar receives written notification requesting a change or cancellation.

I have read the contents of the covering letter and agree to discharge the responsibility expected of me as a participant under ECS/EFT.

Date:

Authorized Signatory:

Designation:

Telephone No. with STD Code

Company seal

BANK CERTIFICATE

We certify that _____ has an Account No _____ with us and we confirm that the bank details given above are correct as per our records.

Date:

Place:

(í í í í í í í í í í)

Signature

Please return completed from along with a blank cancelled cheque or photocopy thereof to: Bharat Heavy Electricals Ltd.,

Attn:

BHEL(R&D) Vikasnagar
Balanagar Hyderabad-93

CONTRACTOR

EMPLOYER

ANNEXURE IV

Ref.
Date:

SITE INSPECTION CERTIFICATE

This is to Certify that, I/
Weí ..
í . had
inspected the proposed construction site thoroughly and
understood the scope of works to be carried out in line with
construction drawings / designs / data / Bill of
quantities/schedule of items /specifications as brought out in
the Tender as desires by BHEL.

Agreeable to all Terms & Conditions of Contract and assure
to complete the work within the stipulation time frame.

Signature of the
contractor

Name :
Seal

**BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE R&D DIVISION, VIKASNAGAR
NEAR BALANAGAR, HYDERABAD - 500093**

**GENERAL CONDITIONS OF CONTRACT
FOR
LUMP-SUM, ITEM-RATE AND PERCENTAGE CONTRACT**

CONTRACTOR

EMPLOYER

CONTENTS

Condition Number	Description
---------------------	-------------

CHAPTER –I

1. Definitions

CHAPTER-II

2. Heading to the contractor
3. Contract documents
4. Works to be carried out
5. Provisional items
6. Deviations
7. Time
8. Stores & materials
9. Delay & Extension of time
10. Patent Rights
11. Octroi & other duties
12. Royalties
13. Plant & Equipment
14. Assignment or Transfer of contract
 - a) Sub -contract
15. Compliance to Regulations and Bye laws

CHAPTER –III

16. Security deposit
17. Orders under the contract
18. Admission to site
19. Contractor's Supervision
20. Labour
21. Water
22. Temporary Workshops, stores etc.,
23. Stores & materials-on-site etc.
24. Tools & plant on site
25. Statement of Hire charges
26. Precautions against Risks
27. Notices & Fees
28. Setting out of the works and protecting & maintaining signal marks
29. Site drainage
30. Excavations, reliefs, etc.,
31. Foundations
32. Covering in work
33. Approval of works by stages
34. Execution of works
35. Day work
36. Inspection of the work
37. Responsibility for building
38. Insurance of works against damage and loss, due to fire, tempest, floods etc.
39. Damage or loss to private property and injury to workman.
40. Completion
41. Compensation for delay

CONTRACTOR

EMPLOYER

- 42. Laws governing the content.
- 43. Cancellation of contract for corrupt act.
- 44. Cancellation of contract for insolvency, assignment or sub-letting of contract
- 45. Cancellation of contract for default.
- 46. Termination of contract for death.
- 47. Special powers or determination.
- 48. Fair wage.

CHAPTER-IV

- 49. Records and measurements.
- 50. Valuation of deviations.
- 51. Reimbursement / refund on variation in price.
- 52. Advances on account.
- 53. Final bill.
- 54. Payment of bills.
- 55. Recovery from contractor.
- 56. Post-technical audit of work and bills.
- 57. Refund of security deposit.

Annexure- 'A'

BHEL contractor's Labour Regulation and BHEL safety code (See Condition 20)

1. DEFINITIONS

In these general conditions of contract, the following terms shall have the meaning hereby assigned to them except where the context otherwise requires:

- a) The "CONTRACT" means the documents forming the tender and acceptance thereof, together with all the document referred therein including general and Special Conditions of Contract, Schedules A, B, C, D, E and/or General Summary attached to the form of tender, the C. P.W.D. Schedule of Rates as amended up to 2012 the specifications and the Drawings. All these documents as applicable taken together shall be deemed to form one contract and shall be complementary to one another.
- b) The "TENDER DOCUMENTS" means the form of tender, the applicable schedules A, B, C, D, E and/or General and Special conditions of contract and the specifications and / or drawings as given to contractors on payment for the purpose of preparing their tenders
- c) The "WORK" means the work described in the tender documents, in individual work orders and/or accompanying drawings and specifications as may be issued from time to time to the Contractor by the Senior Engineer (Civil) deputy manager (projects) or the Engineer-in-charge within the powers conferred upon them, including all modified or additional works and obligations to be carried out either at the site or at any Factory workshop or other place as required for the performance of the contract.
- d) The "SITE" means the land and /or other places on, in, into or through which the work is to be executed under the contract or any adjacent land, path or street which may be allotted to or used for the purpose of carrying out the contract.
- e) The "CONTRACTOR" means the individual, firm or company, whether incorporated or not, undertaking the work and shall include the legal personal representatives of such individuals or the persons composing the firm or company, or the successors of the firm or Company and the permitted assigns of such individual or the firm or company.
- f) The abbreviations DGM/P, Sr. M/P, S.E/C means Dy. General Manager /Projects, Senior Manager / Projects, and Senior Engineer / Civil respectively, who direct the contract and the letters E/C means Engineer / Civil in-charge of the particular work pertaining to the contract.
- g) The "Engineer in charge" means the Engineer / Civil deputed by Senior / Civil to supervise the work, or part of the work.
- h) "APPROVED" and "DIRECTED" means the approval or direction of the DGM/P, Sr. M/P, or S.E/C. or person deputed by them for the particular purpose.
- i) "BHARAT HEAVY ELECTRICALS LIMITED" hereinafter referred to as BHEL SHALL mean the board of directors, Resident Director, General Manager/ Project Administrator or other Administrative Officers, of the said company including the project officer, Sr. Manager / Projects, or Senior Engineer / Civil, Engineer/ Civil authorized to invite tenders and enter into the contracts for works on behalf of Bharat Heavy Electrical Limited, Corporate R&D Division, Vikasnagar, Hyderabad-500093
- j) In the case of lump sum contracts, "CONTRACTOR'S PERCENTAGE" means the percentage offered by the contractor as addition to or deduction from the cost of buildings, or other works listed in schedule, to provide a lump sum quotation for performance of the contract inclusive of all extra costs, profit, establishment charges, carriage, insurance etc., complete.

In the case of percentage rate contracts, "Contractor's percentage" shall, if the context so permits, mean the uniform percentage tendered by the contractor and accepted by the Accepting Officer, and the expression "CONTRACT RATE" shall likewise mean the rates in the C.P.W.D. schedule of rate as amended up to 2012 as adjusted by the said Contractor's percentage, if any.

- k) The "CONTRACTOR SUM" means the sum accepted, or the sum calculated in accordance with the prices accepted in the tender and / or the contract rates as payable to the Contractor for the entire execution and full completion of the work.
 - l) The "FINAL SUM" means the actual amount payable under the contract by BHEL, to the Contractor for the entire execution and full completion of the work.
 - m) The "DATE OF COMPLETION" is the date or dates for completion of the whole or any part of the work as set out in or ascertained in accordance with the individual work orders or the tender documents, or any subsequent agreed amendment thereto.
 - n) A "WEEK" means seven days without regard to the number of hours worked or not worked in any day in that week.
 - o) A "DAY" means a day of 24 (Twenty four) hours irrespective of number of hours worked or not in that day A "WORKING DAY" means any day other than that prescribed by the Negotiable instruments ACT as being a holiday, consists of the number of hours of labour as commonly recognized by good employers in the trade in the District where the work is carried out or as laid down in the BHEL Regulation.
 - p) "DEVIATION ORDER" means any an order given by the Senior Engineer/Civil or Engineer-in-charge to effect an alteration, addition or deduction, which does not radically affect the scope of nature of the contract.
 - q) "EMERGENCY WORK" means any urgent measures which, in the opinion of the Engineer-in-charge, become necessary during the progress of the work to obviate any risk of accident or failure or which become necessary for security.
 - r) "PROVISIONAL SUM" or "PROVISIONAL LUMPSUM" means a lump-sum include by the BHEL in the tender documents and represent the estimated value of work for which details are not available at the time of inviting the tender.
 - s) "PROVISIONAL ITEMS" means items for which approximate quantities have been included in the tender documents.
 - t) "DAY WORK" means on item of work requiring the employment of labour with or without materials as the case may be, which, in the opinion of the Senior Engineer /Civil-in-charge, is not capable of being evaluated by the accepted methods of measurement or assessment and is paid for on the basis of the actual labour and materials utilised on the particular item of work referred to.
-

CHAPTER-II

SCOPE OF CONTRACT

2. HEADING TO THE CONTRACT

The heading to these conditions shall not affect the interpretation thereof

3. CONTRACT DOCUMENTS:

The accepting officers shall furnish to the Contractor on demand ~~øFREE OF COST~~ three copies of signed Drawing and one copy of the signed agreement comprising of preamble to Agreement, General and Special Specifications, Schedules ~~À~~~~Ø~~ ~~À~~~~Ø~~ ~~À~~~~Ø~~ ~~À~~~~Ø~~ and ~~À~~~~Ø~~ etc., (but excluding General Conditions of Contract and Drawing) and three copies of all further drawings issued during the progress of work.

However, for any additional copies of the agreement or drawings required by the Contractor, the same will be supplied on payment the Specified Cost.

The contractor shall keep one copy of all the drawings and of the specifications on the site and the Engineer-in-charge or his representative shall at all reasonable times have access to them.

4. WORK TO BE CAREED OUT :

The Contract shall, expect as provide under Schedules ~~À~~~~Ø~~ and ~~À~~~~Ø~~ include all labour , materials, tools, plant , equipment and transport which may be required in preparation for , and in the execution and full completion of the work. Schedule ~~À~~~~Ø~~ shall be deemed to have been prepared in accordance with good practice and recognized principles and unless otherwise stated , the descriptions given therein shall be held to include waste on materials, carriage and cartage, lead ,return of empties , hosting, setting, fitting in position and all other labour necessary in and for the entire execution and full completion aforesaid. Any error in description or quantity in Schedule ~~À~~~~Ø~~ or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the work comprised therein according to the drawings and specifications, or from any of his obligations under the contract. The insertion of the name of any firm of suppliers in the Tender Document is for the purpose of obtaining a particular class or quantity of materials or workmanship but the articles or materials specified may be obtained from any other firm subject to the prior written approval of the Senior Engineer / Civil / Engineer/Civil.

In the case of a discrepancy between Schedule ~~À~~~~Ø~~ the Specifications and/or the drawings, the accepting officer shall be the sole deciding authority as to which shall prevail and his decision shall be final and conclusive. If neither drawings nor specifications contain any mention of minor details of construction, which in the opinion of the Accepting Officer whose decision shall be final and conclusive, are responsible and obvious and fairly intended for the satisfactory completion of the work, such details shall be provide by the Contractor without any extra cost as if they were specially mentioned and shall be deemed to be included in the contract.

The Contractor will be deemed to have satisfied himself as to the nature of the site, local facilities of access and all matters affecting the execution and completion of the work. No extra charges consequent on any misunderstanding in this respect or otherwise will be allowed.

5. PROVISIONAL ITEMS:

The full amount of provisional lump-sum and the value annexed to each provisional item inserted in the Tender documents shall be deducted from the contract sum and the value of work ordered and executed there under shall be ascertained by measurement or valuation as for deviations.

No work under these items is to be begun without instructions in writing from the Engineer- in ócharge.

The extend of quantities or items described as ~~ø~~ provisional ~~ø~~ shall not be held to guarantee or limit the amount and description of the work to be executed by the Contractor either respect of the item concerned or the work as a whole.

No addition or deduction shall be made by the Contractor to the amount of the provisional lump-sums as included in the tender documents.

6. DEVIATIONS:

The contractor shall not make any alteration to or omission from the work as described in the tender documents except in pursuance of the written instruction of the Engineer in charge. No such deviation from the work described in the tender documents shall be valid unless the same has been specifically confirmed and accepted by the Accepting Officer in writing and incorporated in the contract.

The accepting Officer may deviate, either by way of addition or deduction, from the work so described, provided that the contractor sum be not thereby varied on the whole by more than the percentage set out in the tender documents. The value of all additions and deductions will be added to, or deducted from the contract sum. Whenever the Accepting Officer intends to exercise such a right, his intention shall specify the deviation which are to be made, the lump-sum assessment or the proposed basis of payment, the extra time allowed, if, any and the date for completion of the entire contract.

Any objection by the Contractor to any matter concerning the order shall be notified by him in writing to the Senior Engineer (Civil) / Engineer-in-charge within SEVEN DAYS from the date of such order, but under no circumstances shall the work be stopped (unless so order by the Senior Engineer/Civil /E/C owing to differences or controversy that may arise from such an objection. In the absence of such a notification of objection, by the contractor, he will be deemed to have accepted the ordered and the conditions stated therein. In the event of the contractor, failing to agree with the Senior Engineer/ Civil /E/C regarding the terms of the proposed deviation, the objection shall be referred to the DGM/P/Sr.M/P, whose decision shall be final, conclusive and binding on the Contractor.

7. TIME:

Time is the essence of the contract and is specified in the tender document or in each individual work order.

As soon as possible after the contract is let or any substantial work order is placed and before work under it is begun, the Senior Engineer/Civil or Engineer-in-charge and the contractor shall (if so required by the Sr. E/C) agree to a time and Progress chart. The chart shall be prepared direct relation to the time stated in the tender documents or the Work Order for the completion of the individual items thereof, and/or the contract or Orders a whole. It shall indicate the forecast of the dates for the commencement and completion of the various trade processes or sequences of the work, and shall be amended as may be required by agreement between the Sr. E/C or Engineer-in-charge, and the contractor within the limitation of the time imposed in the tender documents or ORDER.

In the absence of any specific Time and Progress Chart to be agreed to between the Contractor and the Sr. E/C. or Engineer in-charge, the contractor shall ensure and maintain uninterrupted progress of the work such that the entire work shall be completed within the time imposed in the tender document or order and that the proportion of work completed up to any time in relation to the entire work to be done under the Contract or Order shall not be less than the proportion that the time elapsed bears to total time of completion provided in the tender Document or Order.

The Contractor shall suspend the execution of the work, or any part or parts thereof whenever called upon in writing by the Engineer in charge to be so, and shall not resume work there on unit so directed in writing by the Engineer in charge. The Contractor will be allowed an extension of time for completion not less than the period of suspension but no other claim in this respect for completion or otherwise howsoever will be admitted. This may also be extended to allow for alteration of work made by the deviation order.

8. STORES AND MATERIALS:

The contractor shall, at his own expense, supply all stores and materials required for the contract, other than those listed in Schedule -B which may be provided by Bharat Heavy Electricals Limited at the rates detailed therein subject to their availability at the place of issue indicated therein. All stores and materials to be supplied by the Contractor shall be of the best kind as described in the Specifications and the Contractor shall,

if required by the Engineer in-charge furnish him with proof to his satisfaction that the store and materials so comply with the specifications.

The contractor shall, at his own expense and without delay, supply samples of stores and materials proposed to be used in the execution of the work for the approval of the Engineer-in charge, who may reject all stores and materials not corresponding either in quality or character to the approved samples.

In the case of stores provided under Schedule -B the Contractor shall bear the cost of loading, transporting to site, unloading, storing under cover as required, assembling & jointing the several parts together as necessary and incorporating & fixing these stores & materials in the work, including all preparatory work of whatever description that may be required, and closing, preparing, loading and returning empty cases or containers to the place of issue without any extra charges.

9. DELAY AND EXTENSION OF TIME:

If, in the opinion of senior Engineer/Civil/engineer/Civil the work is delayed:

- i) by reason of abnormally bad weather, or
- ii) by reason of serious loss or damage by fire, or
- iii) by reason of civil commotion, local combination of workmen, strike or lockout, affecting any of the trades employed on the work, or
- iv) by delay on the part of the agency or tradesman engaged by BHEL in executing work not forming part of this contract, or
- v) by reason of any other cause which in the absolute discretion of the Sr. M/P. Sr. E/C. or E/C is (when he is the Accepting Officer of the Contract) beyond the contractors control, then in any such case, the Accepting Officer, on the recommendation of the Sr. E/C., E/C (or higher authority) may make fair and reasonable extension in the completion dates of the individual items of work or the contract as a whole. Such extension which will be communicated to the contractor by the Sr. E/C. /E/C. in writing shall be final and binding on the contractor. No other claim in this respect for compensation or otherwise howsoever is admissible. Upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Sr. E/C/E/C but shall do all that may reasonably be required to the satisfaction of the Sr. E/C/E/C to proceed with the work.

10. PATENT RIGHTS:

The contractor shall fully indemnify BHEL, or the agent, servant, or employee of BHEL, against any action, claim or proceeding relating to infringement or the use of any patent or design or any alleged patent or design rights, and shall pay any royalties which may be payable in respect of any article/ or part thereof included in the contract.

In the event of any claims being made or action brought against BHEL, or any agent, or servant or employee of BHEL., in respect of any of the matters aforesaid, the contractor shall not apply when such increment has taken place in complying with the specific directions issued by the BHEL but the contractor shall pay any royalties payable in respect of any such use.

11. OCTROI AND OTHER DUTIES:

All charges on account of Octroi, Terminal or Sales Tax and / or other duties on materials obtained for the work (excluding materials provided by BHEL, on payment) shall be borne by the contractor.

12. ROYALTIES:

Royalties fixed from time to time as per prevalent local rules will be recovered for materials, which the contractor may be allowed to remove from quarries situated on land which is in charge of the BHEL, authorities.

13. PLANT AND EQUIPMENT:

The contractor, shall at his own expenses, supply all tools, plant and equipment (herein-after referred to as T & P) required for the execution of the contract, as specified in the tender documents.

14. ASSIGNMENT OR TRANSFER OF CONTRACT:

The contract shall not, without the prior written approval of the Accepting Officer, assign or transfer the contract or any part thereof, or any share, or interest therein to any other person. No sum of money which may become payable under the contract shall be payable to any person other than the contractor unless the prior written approval of the Accepting Officer to the assignment or transfer of such money is given.

a) SUB-CONTRACT:

The contractor shall not sub-let any portion of the contract without the prior written approval of the Accepting Officer

15. COMPLIANCE TO REGULATION AND BYE-LAWS :

The contractor shall conform to the provisions of any statute relating to the work and regulations and bye-law of any local authority and water and of any water and lighting Companies or Under takings with those systems the works is proposed to be connected. He shall before making any variation from the drawings or the specification that may be necessitated for such connection give the Senior Engineer /civil /E/C notice, specifying the variation proposed to be made and the reason therefore and shall not vary out any such variation until he has received instructions from the Senior Engineer/ Civil /E/C in respect thereof. The contractor shall be bound to give all notices required by statute regulations or bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

CHAPTER-III

PERFORMANCE OF THE CONTRACT

16. SECURITY DEPOSIT

Upon acceptance of the tender, the successful tenderer shall remit the security deposit with Bharat Heavy Electricals Ltd within the time as specified in the Letter of Intent.

The rate of Security Deposit will be as below:

Up to Rs.10 Lakhs	10%
Above Rs. 10 Lakhs up to Rs.50lakhs	Rs .1 Lakhs + 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 contractor should submit the Security Deposit before the start of the work.

- 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.
- iv) Securities available from Post Offices such as National Saving Certificates, Kisan Vikas Patras etc.,
(Certificate 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 subject to a maximum of 50% of the total security deposit value. The balance 50% has to be remitted either by cash or in the other form of security. 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 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: Accepting of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour on 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.

For extra items of work and deviated quantities, security deposit will be recovered at 10% of the value of deviated amount. The security deposit will be released as stipulated under clause 16(IV) of GCC.

17. ORDERS UNDER THE CONTRACT:

All orders, notices etc. to be given under the contract shall be in writing, type script of printed and if sent by registered post to the address given in the tender of the contractor , shall be deemed to have been served on the date when in the ordinary course they would have been delivered to him.

The contractor shall carry out without delay all orders given to him.

18. ADMISSION TO SITE:

The contractor shall not enter on (other than inspection purposes) or take possession of the site unless permitted to do so by the Senior Engineer/Civil/E/C. The portion of the site to be occupied by the Contractor will be clearly defined and marked on the site plan, and the contractor will on no account be allowed to extend his operations beyond these areas.

The Contractor shall provide, if necessary, or required at the site, temporary access thereto and shall alter, modify and maintain the same as required from time to time. He shall take out and clear away the access route when no longer required restoring the area to its original conditions.

The Senior Engineer/Civil/E/C shall have power to execute other works (whether or not connected with the work in the contract agreement) in the site contemporaneously with the execution of the original work and contractor shall give reasonable facilities for this purpose.

BHEL, reserves the right of taking over, at any time, and portion of the site which they may require and the contractor shall at his own expense clear such portion forthwith. No photographs of the site or of the work or any part thereof shall be taken, published or otherwise circulated, without the prior approval of the Senior Engineer/Civil/E/C.

No such approval shall however exempt the contractor from complying with any statutory provisions in regard to the taking and publication of such photographs.

BHEL officials connected with the contract shall have the right of entry to the site at all times.

Senior Engineer/Civil/E/C shall have the power to exclude from the site any person whose admission thereto may, in his opinion, be undesirable for any reason whatsoever.

19. CONTRACTOR'S SUPERVISION:

The Contractor shall either himself supervise the execution of the Contract or shall appoint a competent Agent approved by the senior Engineer/Civil/E/C to act in his stead.

The contractor shall employ on Engineer/Agent having at least a -Degree of Bachelor of Civil Engineeringøfrom a recognised University/on any work with a Contract value exceeding rupees two lakhs and having at least a -Diploma in Civil Engineeringøfrom a recognised college on work with a contract value exceeding Rs. 50,000/- but not exceeding rupees two lakhs.

The employment of an Engineer/Agent as aforesaid, the Senior Engineer/Civil/E/C capable possession of a recognised technical qualification and is in opinion of the Senior Engineer/Civil/E/C capable of receiving instructions of the Engineer-in-charge and of executing the work to the satisfaction of the Engineer-in-charge.

If the contractor fails to appoint a suitable Engineer/Agent as aforesaid, the Senior Engineer/Civil/E/C shall have full powers to suspend the execution of work and stop payment of any advances that may have become due until such date as a suitable Engineer/Agent is appointed and the contractor shall be held responsible for the delay caused to the work and no extension of time on this account shall be given to him as stipulated in condition (9) above.

Orders given to the contractors Agent/Engineer shall be considered to have the same force as if they had been given to the contractor himself.

The contractor or his agent shall be in attendance at the site during all working hours and shall superintended the execution of work with such additional assistance in each trade as the Senior Engineer/Civil/E/C may consider necessary.

The contractor or his accredited agent shall attend, when required and without making any claim for doing so, either the Office of the Engineer-in-charge or the work-site to receive instructions.

The Senior Engineer/Civil/E/C shall have full powers, and without assigning any reason, to require the contractor immediately to cease to employ in connection with this contract any agent, servant or employee whose continued employment is, in his opinion, undesirable.

The contractor shall not be allowed any compensation on this account.

20. LABOUR:

The contractor shall employ labour in sufficient numbers either directly or through sub-contractors to maintain the required date of progress and of quality to ensure workmanship of the degree specified in the contract and to the satisfaction of the Engineer-in-charge. The contractor shall not employ in connection with the works any person who has not completed his fifteen years of age.

The contractor shall furnish to the Engineer-in-charge at the intervals specified by him, a distribution return of the number and description by trades of the work people employed on the works. The contractor shall also submit on the 4th and 19th of every month to the Engineer-in charge a true statement showing in respect of the second half of the preceding month and the first half of the current month (i) the accident that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (ii) the number of female workers who have been allowed maternity benefit as provided in the maternity benefit Act, 1961 or Rules made there under and the amount paid to them.

The contractor shall pay to labour employed by him either directly or through sub-contractors wages not less than fair wages as defined in the contractor's labour regulations.

The contractor shall in respect of labour employed by him either directly or through sub-contractors comply with or cause to be complied with contractors Labour Regulations in regard to all matters provided therein.

The contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employers Liability Act 1938, Workman's Compensation Act, 1923, industrial Disputes Act, 1947, Maternity Benefit Act, 1961 and Mines Act 1952 or any other law relating thereto and rules and there under from time to time.

The contractor shall be liable to pay his contribution and the employees' contribution to the State Insurance Scheme in respect of all labour employed by him for the execution of the contract, in accordance with the provision of the Employees' State Insurance Act, 1948 as amended from time to time. In case the contractor fails to submit full details of his account of labour employed and the contribution payable, the Engineer-in-charge shall recover from the running bills of contractor an account of contribution as assessed by him. The amount so recovered shall be adjusted against the actual contribution payable for employees' State Insurance.

The Engineer-in-charge shall on a report having been made by an inspecting Officer as defined in the contractors labour regulations have the power to deduct from the moneys due to the Contractor any sum required or estimated to be required for making good the loss suffered by a workers by reason of non-fulfillment of the conditions of the contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the contract or non-observance of the contractors labour Regulations.

The contractor shall indemnify the BHEL against any payments to be made under for observances of the Regulations aforesaid without prejudice to his right to claim indemnify from this sub-contractors.

In the event of the Contractor committing a default or breach of any of the provisions of the aforesaid Contractors Labour Regulations, as amended from time to time or furnishing any information or submitting or filling any form/Resister/Slip under the provisions of these regulations which is materially incorrect then on the report of the Inspecting Officers as defined in the Contractors Labour Regulation, the contractor shall without prejudice to any other liability pay to the BHEL a sum not exceeding to Rs.50/- as liquidated damages for every default breach or furnishing, making, submitting, filling materially incorrect statement as may be fixed by the Engineer-in-charge and in the event of the contractors default continuing in this respect, the liquidated damages may be enhanced to Rs. 50/- per day for each day of default subject to a maximum percent of the estimated cost of works put to tender.

The Engineer-in-charge shall deduct such amount from bills or security deposit of the contractors and credit the same to the Welfare fund constituted under Regulations. The decision of the Engineer-in-charge in this respect shall be final and binding.

MODEL RULES FOR LABOUR WELFARE:

The contractor shall at his own expense comply with or cause to be complied with model Rules for Labour Welfare as appended to these conditions as rules framed by Government from time to time for the protection of health and for making sanitary arrangements for workers employed directly or indirectly on the works. In case the contractor fails to make arrangements as aforesaid, the Engineer-in-charge shall be entitled to do so and recover the cost thereof from the Contractor.

SAFETY CODE:

The contractor shall at his own expense arrange for the safety provisions as appended to these conditions or as required by the Engineer-in-charge, in respect of all labour directly or indirectly employed for performance of the works and shall provide all facilities in connection therewith. In case the contractor fails to make arrangements and provide necessary facilities as aforesaid, the Engineer-in-charge shall be entitled to do so and recover the cost thereof from the contractor.

Failure to comply with model Rules for Labour Welfare, Safety Code, or of the provisions relating to report on accidents and to grant of maternity benefits to female workers shall make the Contractor liable to pay to the BHEL as liquidated damages an amount not exceeding Rs 50/- for each default or materially incorrect statement. The decision of the Engineer-in-charge in such matters based on reports from the Inspecting Officers as defined in the contractors Labour Regulation as appended to these conditions shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the Contractor.

21. WATER :

The contractor shall allow in his tender and provide at his cost all water required for the work or his employees on the work, together with all pipes and fittings or other means that may be necessary or required to ensure a proper and ample supply of water for all purpose connected with the work.

In the event of a provision existing in the Tender documents for supply of water on payment by Bharat Heavy Electricals Limited, water will be supplied from the BHEL supply System, or other sources at any points fixed by the Senior Engineer/Civil on the site of work. The contractor shall make necessary arrangement for lifting, pumping, carrying or conveying the water as required at his own cost. The levy of water charges to be borne by the Contractor in such case shall be specifically mentioned in the Tender documents.

22. TEMPORARY WORKSHOPS, STORES ETC :

The Contractor shall, during the progress of the work provide, erect and maintain at his own expenses all necessary temporary workshops, store, offices etc., required for the proper and efficient execution of the work. The planning, siting and erection of these bldgs. shall have the approval of the Engineer-in-charge and the Contractor shall at all times keep them tidy and in a clean and sanitary condition to the entire satisfaction of the Engineer-in-charge.

On completion of the work all such temporary buildings shall be cleared away and the site restored and left in a clean and tidy condition to the entire satisfaction of the Engineer-in-charge.

23. STORES AND MATERIALS ON SITE :

All stores and materials required for the work are to be deposited by the Contractor only in places to be indicated by the Engineer-in-charge.

Where in accordance with the contract stipulations certain Stores and Materials (for incorporation in the work) are to be issued to the Contractor by the BHEL as detailed under Schedule -Eø such times will be so issued only to the extent required for the actual completion of the work as stipulated in the Contract. The decision of the Senior Engineer/Civil/E/C regarding the quantities to be issued as above shall be final and binding on the Contractor. For any excess quantities consumed on the work their cost will be recovered from the Contractor at punitive rates which will be 100% (hundred percent) more than the issue rates of the BHEL.

In regard to the materials and stores which may be issued to the contractor by BHEL the Contractor shall give the Engineer-in-charge reasonable notice in writing of his requirements of such stores and materials and on the approval of his demand being notified to him, he shall make immediate arrangements for drawing the same. Such stores and materials shall be transported by Contractor at his own expenses direct from the place of issue to the site of the work, unless prior written approval is obtained from the Engineer-in-charge to take them to a store or workshop elsewhere.

The Contractor shall have to build a weather-proof shed for the storage of cement required for 15 days consumption of the work.

BHEL officers connected with the Contract shall have the power at any time to inspect and examine any stores or materials indented to be used in or on the work, whether on the site or at any place where the same are lying and the contractor shall give necessary facilities for such inspection and examination.

The Engineer-in-charge shall be entitled to have tests made of any stores or materials supplied by the Contractor who shall provide at his own expense all facilities which the Engineer-in-charge may require for this purpose. If at the discretion of the Engineer-in-charge an independent expert is employed to make any such tests his charges shall be borne by the contractor only if the test discloses that the said stores or materials are not in accordance with the provisions of the contract.

Should the Senior Engineer/Civil/E/C consider at any time during the construction or re-construction, on prior to the expiry of the -MAINTENANCE PERIODø that the stores or materials provided by the Contractor are unsound or of a quality inferior to that contract for, or otherwise not in accordance with the Contract, (in respect whereof the decision of the Senior Engineer/Civil/E/C shall be final and conclusive) the contractor shall on demand, in writing from the Sr. E/C. E/C specifying the stores or materials complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith remove the stores or materials so specified and provide other proper and suitable store or materials at his own expense; to the entire satisfaction of the Sr. E/C. E/C and in the event of his failing to do so within a period to be specified by the Sr. E/C. E/C in his demand aforesaid, the Sr. E/C.E/C may replace within others the stores or materials complained of at the risk and expense in all respects of the Contractor. The liability of the contractor under this condition shall not extend beyond the maintenance period aforesaid except as regards stores or materials, which the Sr. E/C.E/C shall have previously given notice of to the contractor to replace. (Maintenance period for any work under this organization will be six months from the date of actual completion of the particular work and handing over to BHEL).

All stores and materials brought to the site shall become and remains the property of BHEL and shall not be removed from the site without the prior written approval if the Senior Engineer/Civil/E/C. However, when the work is finally completed the Contractor shall at his own expense forthwith remove from the site all surplus stores and materials originally supplied by him and upon such removal; the same shall rest in and become the property of contractor. All BHEL stores and materials issued to Contractor for incorporation or fixing in the work and which, making due allowance for reasonable wear and tear/or waste, have not on completion of the work been so incorporated or fixed, shall be returned by the Contractor at his own expense to the place of issue.

Credit for surplus and/or materials returned by the contractor to BHEL will be given to him at a price based on the prevailing market rate but not exceeding that at which the said stores and materials were originally issued to him but due consideration shall be given to the allowance claimed by BHEL in respect of any depreciation or damages suffered by the stores and/or materials whilst in the custody of the contractor regarding which the decision of Sr. E/C/E/C shall be final and conclusive.

CONTRACTOR

EMPLOYER

If , in the opinion of the Sr. E/C/E/C (which shall be final and conclusive) any stores supplied by BHEL have either during currency of the work or after completion of the work whilst under the custody of the contractor, become damaged to such an extent that they cannot be usefully utilized, either in the same work or in other works, the Sr. E/C.E/C shall not accept the stores and in the extent of his rejecting , the Contractor shall be charged for the said stores at a rate fixed by the Accepting Officer. The Contractor shall not be entitled to any claim what-so-ever on this account.

23a. DEFECTS LIABILITY PERIOD:

the contractor shall be responsible to make good and remedy at his own expenses within such period as may be stipulated by the Engineer-in-charge, any defect which may develop or may be noticed before the expiry of the maintenance period of six months hereto from the certified date of completion and intimation f which has been sent to the contractor within seven days of the expiry of the said period by a letter sent by hand delivery or by registered post.

24. TOOLS AND PLANT ON SITE :

All tools, plant and equipment brought to the site shall become the property of BHEL and shall not be removed from the site without the prior written approval of the Senior Engineer/Civil/E/C. When the work is finally completed or the Contractor is determined for reasons other than the defaults of the contract, he shall forthwith remove from the site all tools, plants, equipment etc., (other than those as may have been provided by BHEL) and upon such removal, the same shall revert in, and become the property of the contractor.

25. STATEMENT OF HIRE CHARGES :

Monthly detailed statement of the hire charges incurred in respect of BHEL tools, plants, equipment etc., shall be given to the contractor by the Engineer-in-charge.

26. PRECAUTIONS AGAINST RISKS :

The contractor shall be responsible for providing at his own expense, for all precautions to prevent loss or damage from any and all risks and to minimize the amount of any such loss or damage and for the necessary steps to be taken for the said purpose until the works have been handed over complete in all respect to the Engineer-in-charge.

The contractor shall provide all watchmen necessary, for the protection of the site, the work, the materials, the tools, plant, equipment and anything else lying on the site during the progress of the work. He shall solely be responsible for and shall take all reasonable and proper steps for protecting, securing , lighting and watching all places on or about the work and the site which may be dangerous to any person whom so ever.

27. NOTICES AND FEES :

The contractor shall give all notices required by any statutory provision or by the regulations and/ or bye-laws of any local authority and / or of any Public Service, Company or Authority affected by the work or with whose system the same area or will be connected. The contractor shall pay and indemnify BHEL against any fees and charges, demandable by law under such Acts, Regulations and/ or bye-laws in respect of the work and shall make and supply all drawings and plans required in connection with any such notice.

28. SETTING OUT OF THE WORKS AND PROTECTIVE AND MAINTAINING SIGNALS AND WORKS :

The engineer-in-charge shall supply dimensioned drawing, levels and other information necessary to enable the contractor to set out the work. The contractor shall at his own expense set out accurately according to the drawing and figured dimension thereon, all the work comprised in the contract and any extras or additions thereto and shall be solely responsible for their being so set out the executed.

All bench marks, pegs, signals, on the surface, alignment stones, milestones and all similar marks weather put in by BHEL Authority for the purpose of checking the contractors work or in the nature of permanent survey marks will during the tender of the contract, be under the care of the contractor who shall, at his own expense, take all proper and reasonable precautions and care to preserve and maintain them in their true position. In event of these marks being disturbed or obliterated by accident or due to any other cause whatsoever, the same may, if deemed necessary to be replaced by the Sr.E/C/. E/C at contractors expense and the cost thereof deducted from any money then or thereafter becoming due to the contractor.

Where requested by the contractor, the level marks center line and chainage pegs corresponding to those shown on the drawing will be pointed out to the contractor on the ground but all bench marks or chainage pegs additional to those shown on the drawing will be set out by BHEL authorities.

29. SITE DRAINAGE :

All water that may accumulate on the site during the process of the work, or in trenches and excavations shall be removed to the entire satisfaction of the Engineer-in-charge and at Contractors expense.

30. EXCAVATIONS, RELICS ETC :

Material of any kind obtained from excavation on the site shall remain the property of BHEL and shall be disposed off as the Engineer-in-charge directs.

All gold, silver, oil and other materials of any description and all precious stones, coins, treasured, relics, antiquities and other similar items which may be found in or upon the site shall be the property of Bharat Heavy Electricals Limited and Contractor shall duly preserve the same to the satisfaction of the BHEL and shall from time to time deliver the same to such person or person as the Bharat Heavy Electricals Limited, may appoint to receive the same.

31. FOUNDATIONS :

The contractor shall not lay any foundations until the excavations for the same have been examined and approved in writing by the Engineer-in-charge.

32. COVERING-IN WORK :

The contractor shall give reasonable notice in writing to the Engineer-in-charge whenever any work is to be permanently covered up or concealed, whether by earth or other means so that it can finally be inspected or measured, if necessary. In default of so doing, the contractor shall, if required by the Engineer-in-charge uncover such work at his own expense.

33. APPROVAL OF WORKS BY STAGES :

All work embracing more than one process shall be subject to examination and approval at each stage thereof and the contractor shall give due notice in writing to the Engineer-in-charge when each stage is ready. In default of such notice being received, the Engineer-in-charge shall be entitled to approve the quality and extent thereof at any time he may choose and in the event of any dispute, the decision of the Senior Engineer/Civil thereon shall be final and conclusive.

34. EXECUTION OF THE WORK :

The work shall be executed in a workman-like manner and to the satisfaction in all respects of the Engineer-in-charge.

The Engineer-in-charge will communicate or confirm his instructions to the Contractor in respect to the execution of the work in a work Site Order Book maintained at his office and contractor shall visit this office daily and shall confirm receipt of such instructions by signing the relevant entries in this book. Such entries will rank as order or notices in writing within the intent and meaning of these conditions.

35. DAY WORK :

No day-work shall be performed without the prior written instructions of the Accepting Officer.

The Contractor shall give to the Engineer-in-charge reasonable notice of the start of any work ordered to be executed by day-work and shall deliver to the Senior Engineer/Civil-in-charge/E/C within two days of end of each pay-week return in duplicate giving full detailed accounts of labour and materials for that pay week. One copy of each of these returns, if found correct, will be certified by the Engineer-in-charge and returned to the contractor and must be produced at the time of adjustment of accounts.

An invoice in duplicate signed by the Contractor or his agent shall be sent with each delivery of materials for day-work and the contractor will be furnished with a receipt signed by the Engineer-in-charge specifying the description, quantities weight or measurement (as the case may be) of the articles approved, reference will be made in this receipt in the return aforesaid and the receipt itself is to be produced in support of the Contractors bill.

In the case of Lump-sum contracts, the rates to be changed and the percentage addition for profit and establishment charges, etc, will be agreed upon between the Accepting Officer and the Contractor prior to the execution of the work.

36. INSPECTION OF THE WORK :

BHEL Offers concerned with the Contractor shall have power at any time to inspect and examine any part of the work and the contractor shall give such facilities as may be required to given for such inspection and examination.

Should E/C/E/C consider at any time during the expiry of maintenance period, that any work has been executed with unsound, imperfect or unskilled workmanship or of quality inferior to that contracted for or not otherwise in accordance with contract [in respect whereof the decision of the sir. E/C. shall be final and conclusive] the contractor shall, on demand in writing from the Sr. E/C.E/C specifying the fault notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct the work of specified, in whole or in part as the case may be require at his own expense to the entire satisfaction of the Sr. E/C. E/C in his demand aforesaid, the Sr. E/C. may carry out the work by other means at the risk and expense in all respect of the contractor. However, the liability of the contractor under this condition shall not extend beyond the maintenance period except as regard workmanship which the Sr. E/C .E/C shall have previously given notice of to contractor to rectify.

37. RESPONSIBILITY FOR BUILDING :

In the event of any building ,or part of any building being handed over to the Contractor for the execution of work thereto under the provisions of the Contract, he shall give a written receipt for all fixtures, glass etc., and he shall be required make good at his own expense all damages resulting any cause whatsoever while in his charge and on completion of the work to deliver up the said building or part thereof a clean state complete in every particular to the entire satisfaction of the Engineer-in-charge.

38. INSURANCE OF WORKS AGAINST DAMAGE AND LOSS DUE TO FIRE, TEMPEST, FLOODS, EARTHQUAKE, RIOT AND AGAINST DAMAGE BY AIR-CRAFT.

The contractor shall, within one month after the date of acceptance of the contract, insure the work against loss and damage approved by the Senior Engineer/Civil/E/C. in an insurance office and shall be for the full value of the work and shall be for the receipt of the premiums the work as certified for such ins

CLAUSE 38 - DELETED

If the contractor fails to comply with the terms of this condition that the Accepting Officer may insure the work and material at his discretion or may at his discretion refer the work to the Senior Engineer/Civil Engineer for his consideration and may be retained by the BHEL until the work is finally completed and shall then be credited to the contractor in the final statement of accounts in the event of his contract not having been previously cancelled under these conditions.

Such insurance liability and Engineer/Civil Engineer for his consideration

In case of such

CLAUSE 38 - DELETED

tor or may at his discretion with the terms

mit or bar to the by the Senior

shall be received

39. DAMAGE AND LOSS TO PRIVATE PROPERTY & INJURY TO WORKMAN :

The contractor shall at his own expense reinstate and make good to the satisfaction of the Sr. E/C/E/C and pay compensation for any injury, loss or damage occasioned to any property or rights whatever including property and rights of BHEL, (or Agents, servants or employees of BHEL) the injury loss or damage arising out of or in any way in-connection with the execution of purported execution of the contract and further the contractor shall indemnify BHEL against all claims enforceable against BHEL (or any agent, servant or employee of BHEL or which would be so enforceable against BHEL) where a private person, in respect of any such injury (including injury resulting in death loss or damage to any person) whatsoever or property, including all claims which may arise under the workman's Compensation Act or otherwise.

40. COMPLETION:

The works shall be completed to the entire satisfaction of the Engineer-in-charge and in accordance with the Contractor's forecast of Time and Progress where operative, and all unused stores and materials, tools plant, equipment, temporary buildings, and things shall be removed and the site cleared of rubbish and all waste materials and delivered up clean and tidy to the satisfaction of the Engineer-in-charge at the Contractor's expense on or before the Scheduled date of completion.

The BHEL shall have power to take over from the Contractor from time to time such sections of the work as have been completed to the satisfaction of the Engineer-in-charge.

The Senior Engineer /Civil/E/C shall certify to the Contractor the date on which the work is completed and the state thereof.

The Senior Engineer/Civil/E/C shall also certify, to the Contractor the state of the work at the end of the maintenance period, where applicable.

41. COMPENSATION FOR DELAY:

If the contractor fails to maintain the required progress in terms of condition 7 or to complete the work and clear the site on or before the contracted or extended the period of completion, he shall, without prejudice to any other right or remedy of the BHEL on account of such breach, pay as agreed compensation an amount calculated as stipulated below or such smaller amount as may be fixed by the BHEL on the contract value of the work for every week that the progress remains below that specified in condition 7 or that the work remains incomplete.

CONTRACTOR

EMPLOYER

44. CANCELLATION OF CONTRACT FOR INSOLVENCY, ASSIGNMENT OR TRANSFER OR SUB LETTING OF CONTRACT :

The Accepting Officer, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to BHEL shall cancel the contract in any of the following cases:-

If the contractor:

- a) Being an individual, or if a firm any partner thereof, shall at any time be adjusted bankrupt or have a receiving order or orders for administration of his Estate made against him or shall take any proceeding, for liquidation or composition under Bankruptcy Act for the time being in force or make any conveyance or assignment of his effects of composition or arrangements for the benefit of his creditor or purport to do so, or if any application be made under any Bankruptcy Act for the time being in force for the sequestration of his estate or if a trust deed be granted by him on behalf of his creditor;
OR
- b) Being a company, shall pass a resolution or the court shall make an order for the liquidation of its affairs, or a Receiver or a Manager or behalf of the departures holders shall be appointed or circumstances shall arise which entitle the court or debenture holders to appoint a Receiver or
Manager; OR
- c) Assigns, transfers, sub-let or attempt to assign transfer or sub-let any portion of the work without the prior return approval of the Accepting Officer.

Whenever the Accepting Officer exercise his authority to cancel the contract under this condition he may complete the work by any means at the contractor risk and expense provided always that in the event of the cost of completion (as certified by Sr. E/C/E/C which is the final and conclusive) being less than the contract cost, the advantage shall accrue to the BHEL and that if the cost of completion exceeds the moneys due to the contractor under the contract, the contractor shall either pay the excess amount ordered by Sr. E/C/E/C or the same shall be recovered from the contractor by other means.

In case of BHEL completes the work under the provisions of this condition of cost of such completion to be taken into account in determining the excess cost to be charged to the contractor under this condition shall consist of this cost of material purchased and /or labour provided by the BHEL with an addition of such percentage to cover superintendence and establishment charges as may be decided by the Sr. Manager (P) Sr. E/C/E/C whose decision shall be final and conclusive.

45. CANCELLATION OF CONTRACT IN PART OR IN FULL FOR CONTRACTORS DEFAULT :

If the contractor;

- a) Makes default in commencing the work within reasonable time form date of handing over of the site and continuous in that state after a reasonable notice from senior/Engineer /Civil E/C;
OR
- b) In the opinion of the Sr. E/C/E/C at any time, whether before or after the date or extended date for completion, make default in proceeding with the work, with due diligence and continues in that state after a reasonable notice from Sr.E/C/E/C.
- c) Fails of comply with any of terms and conditions of the contract or after reasonable notice in writing with orders properly issued there under :
- d) Fails to complete the work, work order and items of work with individual dates for completion and clear the site on or before the date of completion, or fails to achieve the progress as set out under clause 7 of these General Conditions of Contract.

The Accepting Officer may, without prejudice to any other rights or remedies which shall have accrued or shall accrue thereafter to BHEL cancel the contract as a whole or in part thereof or only such work order or items of work in default from the contract. Whenever the Accepting Officer exercises his authority to cancel the contract as a whole or in part under this condition he may complete the work at the contractor risk and cost, provided always that in the events of the cost of completion (has certified by Sr. E/C/E/C which is final and conclusive) being less than the contract cost, the advantage shall accrue to the BHEL if the cost of the excess amount ordered by Sr. M.P./Sr. E/C/E/C or the same shall be received from the contractor by other means.

In case of BHEL completes the work or any part thereof under the provisions of this condition the cost of such completion to be taken into account in determining the excess cost to be charged to the contractor under this condition shall consist of the cost of the material purchased and /or labour provided by the BHEL with an addition of such percentage to cover superintendence and establishment charges as may be decided by the Sr. M.P. /Sr. E/C/E/C. whose decision shall be final and conclusive.

46. TERMINATION OF CONTRACT OF DEATH :

Without prejudice to any of the rights or remedies under this contract, if the contractor dies, Accepting Officer shall have the opinion of terminating the contract without compensation to the contractor.

47. SPECIAL POWER OF DETERMINATION:

If at any time after the Acceptance of the tender, BHEL shall for any reason whatsoever not required the whole or any part of the work, to be carried out, the Sr. M.P./Sr. E/C/E/C shall give notice in writing of the fact to the contractor who shall have no claim to any payment of compensation or otherwise howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the force closing of the work.

He shall be paid at Contact rate, for the full amount of the work executed including such additional works, e.g. clearing of site, etc., as may be rendered necessary by the said fore-closing. He shall also be allowed reasonable payment (as decided by the Accepting Officer) for any expenses sustained on account of labour and materials collected but which could not be utilised on the work, as verified the Sr. E/C Neither shall the contractor has any claim for compensation on account of any alterations having been made in the original specifications drawings, designs and instructions, involving any curtailment of the work as originally contemplated.

48. FAIR WAGE :

- a) The Contractor shall pay not less than the Fair Wage to labourers engaged by him on the work.
Fair Wage means wage whether for time or piece work notified at the time of inviting tenders for the work and where such wages have not been notified, the wages prescribed by the Sr. Manager/Projects/Sr.E/C/E/C for the stations at which the work is done.
- b) The contractor shall, notwithstanding the provision of any contract to the contrary, cause to be paid a Fair Wage to labourers indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labourers had been directly employed by him.
- c) In respect of all labours directly or indirectly employed on the work for the performance of the contractors part of this Agreement, the contractor shall comply with or cause to be complied with the BHEL contractor's labour Regulations (appended hereto as Annexure A to these conditions) in regard to payment of wages, wage period, deductions from wages, recovery of wages, not paid and deductions, unauthorisedly made, maintenance of wage book, wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of a like nature.

- d) The Senior Engineer /Civil/E/C concerned shall have the right to deduct from the moneys due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the condition of the contract for the benefit of the workers, non-payment of wages or of deductions made from this or their wages which are not justified by the terms of the contract or non-observance of the regulations.
- e) Vis-à-vis BHEL the Contractor shall be liable primarily for all payments to be made under the contract and for the observances of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractorø.
- f) The regulations aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

CHAPTER-IV

VALUATION AND PAYMENT

49. RECORDS AND MEASUREMENTS :

All items having a financial value shall be entered in the BHEL Measurement Book so that a complete record is obtained of all works performed under the contract.

Building etc. priced in schedule as a unit lump-sum will be entered by number at the unit lump-sum.

Work carried out for agreed lump-sums will be described and similarly recorded.

Lump-sum omissions will be entered for deduction. Measurement shall be restricted to that required to ascertain the financial liability of BHEL under the contract.

Work which fails to be measured in detail shall be measured physically, without reference to any local custom that may obtain excepting where it may otherwise be directed in the tender documents. The measurements shall be taken jointly by any person duly authorised on the part of the BHEL and by the contractor. The Engineer-in-charge shall give reasonable notice in writing to the Contractor of appointment for measurement.

The contractor shall, without extra charge, provide assistance with appliances and other things necessary for measurement.

The Contractor shall bear all the cost of measurement of his work.

Measurement shall be entered in the BHEL Measurement book and signed and dated by both parties each day at the site on completion of measurement. If the contractor objects to any of the measurement recorded on behalf of the BHEL a note that effect will be made in the BHEL measurement book or against the item or items objected to; and such note shall be signed and dated by both the parties engaged in taking the measurement.

If, as a result of such objection, it becomes necessary to re-measure the work wholly or in part, the expense of such re-measurement shall be borne by the party requiring the measurement to be re-taken provided that a net error is found by this re-measurement to amount to less than 5% (five percent) of the value as recorded by the first measurement. But, where the net errors amount to 5% and over of the said value, then the cost is to be borne by the other party. If any case, of the net value of errors found exceeds Rs. 500/- the expense of re-measurement is to be borne by the other party.

If the Contractor's representative fails to attend when required, the Engineer-in-charge shall have power to proceed by himself to take measurements and in that case these measurements shall be accepted by the Contractor as final.

The contractor shall, once every month submit to the Senior Engineer/Civil/E/C with a copy to the Sr. M/P/details of his claims for the work done by him up to and including the previous months which are not covered by his contract Agreement in any of the following respects.

- a) Deviation from the items and Specifications provided in the contract documents.
- b) Extra items/New items of work.
- c) Quantities in excess of those provided in the contract schedule.



- d) Items in respect of which rates have not been settled. He should, in addition, furnish a clear certificate to the effect that the claims submitted by him as aforesaid cover all his claims and that no further claims shall be raised by him in respect of the work done upto and including the period under report.

50. VALUATION OF DEVIATIONS :

Rate for deviated items of work will be fixed as follows:

- I. For any item of work required to be carried out after the contract has been awarded and which is not covered by Contractors Schedule but is covered by C.P.W.D. schedule of rates the rate payable for such a fresh item will be derived from C.P.W.D. Schedule by the method of proportion as follows:
 - a) IN the same proportion to the rate in C.P.W.D. Schedule of Rates as the tendered rate for the nearest analogous items of work in Contractors Schedule bears to the rate for the particular analogous item or work in C.P.W.D. schedule of Rates.
 - b) If a single appropriate analogous item of work is not available in both Schedule Contractor's and K.P.W.D. Schedule then the method of proportion will be applied to the nearest analogous group of items available in both the Schedules referred i.e. in the same proportion as the total tendered cost of that particular group of items (the sum of the products of the tendered rates and the quantities for which orders are placed) bears to the total cost of the same items and quantities at the C.P.W.D. Schedule of Rates.
 - c) If even an appropriate analogous group of items is not available in Contractor's Schedule and C.P.W.D. Schedule, then the methods of proportion will be applied to all those items of the whole work, which are available in both the Schedules and for which orders have been placed on the Contractor, i.e., In the same proportion as the total cost of all these items of work (the sum of the products of the tendered rates and the quantities for which orders are placed) bears to the total cost of the same items and quantities at the C.P.W.D. Schedule of Rates.
- II. If any work not covered by any of the foregoing is ordered on the Contractor, the basis of payment shall be decided by the Accepting Officer whose decision shall be final and conclusive and binding on the parties.

The selection of analogous item or analogue group of items referred to above shall be done by the Sr. E/C./E/C. Where the rates for deviated items or new items of work can be derived by the selection of different analogous items or analogous group of items, the lowest of all such derived rates shall be taken as the correct rate.

In the case of the contracts for which the Sr. E/C./E/C is the Accepting Officer, all disputes regarding the settlement of rates of deviated or new items of work shall to the Sr. M/P. whose decision shall be final and conclusive.

51. REIMBURSEMENT/REFUND ON VARIATION IN PRICE, MATERIALS :

In after submission of the tender and/or during the progress of the works, the price of any materials (not being a material supplied from the BHEL, stores in accordance with the Conditions of the Contract) is increased or decreased by an Act of Legislature (Central or state) and /or any notification there under or on account of new duties or levies such as Octroi or on account of increase or decrease in such duties affecting the price of materials required for incorporation in the works or the price of any item to be incorporated in the works and made from materials of which the price has increased or decreased as aforesaid and the Contractor has thereupon to pay in respect of such material or item a price which is higher or lower than the price of that material or item as prevailing immediately before the passing of such Act or levying, increasing/decreasing of such duty, the BHEL., shall in case of increase in price or the duty reimburse the Contractor the increase in price or additional increased duty paid by the Contractor and in case of decrease I price, the BHEL shall be entitled to a refund of the reduction in duty. Provide however no reimbursement or refund shall be made if the increase /decrease is not more than plus 10% of the said price, the reimbursement or refund shall be made only on the excess over 10% provided always that any such increase shall not payable if, in the opinion of the Sr. M/P whose decision shall be final and conclusive the increase is attributable to the delay in the execution of the contract within the control of the Contract, or that any such increase has become operative after the contracted/or extended date completion of the work or items of work in question.

The Contractor shall, for the propose of this condition, keep such books of account and other document as are necessary to show the account of any increase claimed or any reduction available and shall allow inspection of the same by any duly authorised representative of the BHEL and further shall at the request of the Sr. E/C/E/C. furnish for verification such other information of the Sr. E/C/E/C may require.

The contractor shall within a reasonable time of his becoming aware of any alteration in the prices of any such materials, give notice thereof in writing to the Sr. E/C.E/C stating that the rate is submitted in pursuance to this condition together with all information relating thereto which he may be in a position to supply.

52. ADVANCES ON ACCOUNT :

No payment shall be made for work estimated to cost less than Rupees One Thousand till after the whole of the work shall have been completed and a certificate of completion given by the Competent authority.

In the case of work estimated to cost more than Rupees One Thousand the contractor may at intervals of not less than one month or as otherwise provided for in the Contract documents, counting from the date on which order to the commence work given by Sr. E/C.E/C submit claims on BHEL forms for payment of advance on account of work done and of materials delivered in connection with the Contract.

The Contractor shall be paid in respect of such claims to the extent approved and passed by the Sr. E/C.E/C subject a maximum of 90% o the value of the work actually executed in site provided the work has been executed to the satisfaction of the Engineer-in-charge. The certificate of the Sr. E/C. E/C regarding such approval and passing of the sums so payable shall be final and conclusive against the Contractor.

After the full amount of Security Deposit is made up through the 10% deductions from :On Account bills, 100% of all subsequent bills may be made to the Contractor.

The Contractor may also be paid during the progress of the work 75% of the value of any materials which are in the opinion of the Engineer-in-charge in accordance with contract, and are actually required for incorporation in the work and which have reasonably been brought to the site in-connection therewith and are adequate stored an/or protected against damage by weather or other causes, but which have not at the time of payment of the advance been incorporated in the work. Payment of such advances however shall be purely at the discretion of the Sr. M/P/Sr.E/C./E/C provided always that payments shall not be made under these periodical certificates in respect of perishable materials like lime, cement, timber, sand kankar etc.

Any sums/due from the Contractor on account of tools and plant, stores or any other items provided by BHEL shall be deducted from the respective advances.

The Senior Engineer/Civil/E/C shall from time to time certify the sums payable to the Contractor after retaining the reserves.

Any certificate relating to work done or materials delivered may be modified or corrected by any subsequent interim certificate or by the final certificate and no certificate of the Sr. E/C/E/C supporting an advance payment shall itself be conclusive evidence that any work or materials to which it relates are in accordance with the contract. All such intermediate payments shall be regarded as advances against the final payment only and shall not be considered as an admission of the due performance of the contract or any part thereof in respect or the accruing of any claim whatsoever. Such intermediate payments shall not conclude, determine or effect in any way the powers of the Sr. E/C/E/C as to the final settlement and adjustment of the account or otherwise, or in any way vary or affect the Contract.

53. FINAL BILL :

As soon as possible after the completion of the work to the satisfaction of the Engineer-in-charge, the contractor shall forward a certified final account on BHEL forms, in duplicate. It shall be accompanied by all abstracts, vouchers etc., in support thereof and shall be prepared in the manner prescribed by the Senior Engineer /Civil/E/C. No claim will be entertained after the receipt of the final bill.

The contractor shall be entitled to be paid the final sum less the value of payments already made on account, subject to certification of the final bill by the Sr. E/C/E/C any sums due from the contractor on account Tools and plant, Stores or any other items provided by BHEL not yet recovered from the contractor shall be deducted from the final sum aforesaid.

No charge shall be allowed to the contractor on account of the preparation of the final bill.

54. PAYMENT OF BILLS :

All payments to be made to the Contractor under this contract shall be by "Crossed Cheque" marked "Payee only" (within a reasonable time after the certification by the Sr. E/C/E/C at the place of the Contractor located in the station where either the work is executed or service rendered or at their branch nearest to the station where the Office of the Senior Engineer/Civil/E/C is located.)

55. RECOVERY FROM CONTRACTOR :

Whenever under the contract any sum of money shall be recoverable from or payable by the contractor the same may be deducted from any sum then due or which at any time thereafter may become due to the contractor under the contract or under any other contract with BHEL or from his Security Deposit or he shall pay the claim on demand.

56. POST TECHNICAL AUDIT OF WORK AND BILLS :

BHEL reserve the right to carry out a post-payment audit and technical examination of the work and final bill including all supporting vouchers, abstract etc., and to enforce recovery of any sums becoming due as a result thereof in the manner provided in the proceeding sub-paragraphs provided however that no such recovery shall be enforced after three years of passing the final bill.

57. REFUND OF SECURITY DEPOSIT :

50% of the Security Deposit mentioned in condition 16 above, may be refunded to the contractor in respect all contract on completion of work and after payment of final bill and the balance 50% on expiry of the maintenance period, (Described under clause 23) provided the contractor shall have rendered a "No Demand Certificate." In case of works where maintenance period is not involved 100% of the security deposit may be refunded after payment of final bill provided that the contractor shall have rendered a "No Demand Certificate."

58. ARBITRATION :

Except where otherwise provided for in the contract all question and disputes relating to the meaning of the specifications, design, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or has been other questions, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, design, drawing, specification, estimate, instruction, orders or these conditions or otherwise concerning the works of the execution of failure to execute the same whether arising during the program of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the Managing Director/Chief Engineer of BHEL and if the Managing Director/Chief Engineer is enable or unwilling to Act, to a sole arbitration of some other person appointed by the Managing Director/General Manager/Chief Engineer, willing to Act s such arbitrator. The cases referred to arbitration shall be other than those for which the decision of the Sr. M/P./D.C.E/Sr.E/C. is expressed in the contract to be final and conclusive. There will be no objection if the arbitrator so appointed is an employee of BHEL and that he had deal with the matters to which the contracts relates and that in the course of his duties such he had expressed views of on all or any of the matters in dispute or difference. The arbitrator to whom to matter is originally referred being transferred by vacating his office or being enable to act for any reason, such Managing Director/ General Manager/Chief Engineer as aforesaid at the time of such transfer, vacation of office or inability to act, shall account another person to act as arbitrator in accordance with the terms of the contract, such person shall be entitled to proceed with the reference from the state at which it was left by his predecessor.

Subject as aforesaid the provision of the Arbitration Act, 1940 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is a term of contract that the party involving arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute.

The arbitrator (s) may from time to time with consent of the parties enlarge the time, for making and publishing the awards.

The work under the contract shall, if reasonable possible, continue during the arbitration proceedings and no payment due to payable to the contractor shall be withheld on account of such proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issue notice to both the parties fixing the date of the first hearing.

The Arbitrator shall give a separate award in respect of each dispute or difference refereed to him. The

venue of arbitration shall be such place as may be fixed by the arbitration in his sole discretion. The

award of the arbitrator shall be final, conclusive and binding all parties to this contract.

ANNEXURE- 'A'

BHEL CONTRACTOR'S LABOUR REGULATIONS. (See condition 20)

1. DEFINITION:

In these regulations, unless otherwise expressed or indicated, the following words and expressions shall have the meaning hereby assigned to them.

- a) "Labour" means workers employed by a contractor directly or indirectly through a sub-contractor, or by an agent on his behalf on a payment not exceeding Rs. 500/- per month.
- b) "Fair Wage" means wages, which shall include wages for weekly day of rest and other allowances, whether for time or piece work, after taking in to consideration prevailing market rates for similar employment in the neighborhood but shall not be less than the minimum rates of wages fixed under the Minimum wages Act.
- c) "Contractor" for the purpose of these Regulations shall include an agent or sub-contractor employing labour on the work taken on contractor.
- d) "Inspecting Officer" means any Labour Enforcement Officer or Assistant Labour Commissioner of the Chief Labour Commissioner's organisation.
- e) "Form" means a form appended to these Regulations.

2. NOTICE OF COMMENCEMENT:

The contractor shall, within seven days of commencement of the work, furnish in writing to the Inspecting Officer of the area concerned the following information, with copy to the Engineer- in charge.

- a) Name and situation of the work.
- b) Contractor's name and address.
- c) Particulars of the Department for which the work is undertaken.
- d) Name and address of the sub-contractors as and when they are pointed.
- e) Commencement and probable duration of the work.
- f) Number of workers employed and likely to be employed.
- g) "Fair Wages" for different categories of workers.

3. I) Number of hours which shall constitute a normal working day. The number of hours which shall constitute a normal working day for an adult shall be NINE hours. The working day of an adult worker shall be so arranged that of intervals, if any for rest it shall not spread over more than 12 hours on any day, when an adult worker is made to work for more than NINE hours on any day or for more than 48 hours in any week he shall in respect of overtime work, be paid wages at double the ordinary rate of wages.

II) Weekly day of rest: Every worker shall be given a weekly day of rest, which shall

be fixed and notified at least 10 days in advance. A worker shall not be required or allowed to work on the weekly rest day unless he has or will have a substitution rest day, on one of the five days immediately before or after the rest day, provided that no substitution shall be made which will result in the worker working for more than 10 days consecutively without a rest day for a whole day.

Where in accordance with the foregoing provisions a worker works on the rest day and has been given a substituted rest day he shall be paid wages for the work done on the weekly rest day at the overtime rate of wages.

NOTE: The expression "Ordinary rate of wages" means the fair wage the worker is entitled to.

CONTRACTOR

EMPLOYER

4. DISPLAY OF NOTICE REGARDING WAGES, WEEKLY DAY OFF REST ETC.

The Contractor shall before he commences his work on contract display and correctly maintain and continue to display and correctly maintain in a clean legible condition in conspicuous places on the works, notice in English and in the local Indian languages, spoken by majority of workers, giving the rate of fair wages, the hours of work for which such wages are payable, the weekly rest days workers are entitled to and name and address of the Inspecting Officer. The Contractor shall send a copy of each of such notice to the Inspecting Officers and the Engineerø in charge.

5. FIXATION OF WAGE PEIODS:

The contractor shall fix wage periods in respect of which wages shall be payable. No wage period shall normally exceed one work.

6. PAYMENT OF WAGES:

- i) Wages due to every worker shall be paid to him direct. All wages shall be paid in current coins or currency or in both.
- ii) Wages of every worker employed on the contractor shall be paid where the wages period is one week, within three days from the end of the wage period, and in any other case before the expiry of the 7th day or 10th day from the end of the wage period according as the number of workers does not exceed 1,000 in exceeds 1000.
- iii) When employment of any worker is terminated by or on behalf of the contractor, the wages earned by him shall be paid before expiry of the day succeeding the one on which his employment is terminated.
- iv) Payment of wages shall be made at the work site on a working day except when the work is completed before expiry of the wage period, in which case final payment shall be made at the work site within 48 hours of the wage period, in which case final payment shall be made at the work site within 48 hours of the last working day and during normal working time.

Note:

The term òworking dayö means a day on which the work, on which labour is employed, is in progress.

7. REGISTER OF WORKMEN:

A register of workmen shall be maintained in the form appended to these regulations and kept at the work site or as near to it as possible, and the relevant particulars of every work men shall be entered therein within 3 days of his employment.

8. EMPLOYMENT CARD:

The contractor shall issue an employment card in the form appended to these regulations to each worker on the day of work or entry into his employment. If a worker has already any such card with him issued by the previous employer the contractor shall merely endorse that employment card with relevant entries. On termination of employment the employment card shall again be endorsed by the contractor and returned to the worker.

9. REGISTER OF WAGES ETC:

- i) A register of wages- cum-muster roll in the form appended to these regulations shall be maintained and kept at the work site or as near to it as possible.
- ii) A wage slip in the form appended to these regulations shall be issued to every worker employed by the contractor at least a day prior to disbursement of wages.

10. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES:

- i) Wages of worker shall be paid to him without any deductions of any kind except the following:
 - a) Fines.
 - b) Deductions for absence from duty, i.e. from the place or the places where by the terms office employment is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
 - c) Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for less of money which he is required to account for, where such damage or loss is directly attributable to his neglect or default ;
 - d) Deduction for recovery of advances or for adjustment of over payment of wages. Advances granted shall be entered in a register ; and
 - e) Any other deduction which the BHEL may from time to time allow.
- ii) No fines shall be imposed on a worker save in respect of such acts and omissions on his part as have been approved by the chief Labour Commissioner.
- iii) No fines shall be imposed on a worker and no deductions for damage for loss shall be made from his wages until the worker has been given an opportunity of showing ó cause against such fines or deductions.
- iv) The total amount of fines which may be imposed in any one wage period on a worker shall not exceed an amount equal to three Paise in rupee of the wages payable to him in respect of that wage period.
- v) No fine imposed on a worker shall be recovered from him in installments, or after expiry of sixty days from the date on which it was imposed. Every fine shall be deemed to have been imposed on the day of the act or omission in respect which it was imposed.
- vi) The contractor shall maintain both in English and the local Indian language a list, approved by the Chief labour Commissioner, clearly stating the acts and omissions for which penalty or fine may be imposed on a workman and display it in good condition a conspicuous place on the work site.
- vii) The contractor shall maintain a register of deductions for damage or loss in the forms appended to these regulations which should be kept at the place of work.
 - a) Full particulars of the labourers who met with the accident.
 - b) Sex.
 - c) Age.
 - d) Rates of wages.
 - e) Nature of accident and cause of accident.
 - f) Time and date of accident.
 - g) Date and time when admitted in hospital.
 - h) Date of discharge from the hospital.
 - i) Period of treatment and result of treatment.
 - j) Percentage of loss of earning capacity and disability as assessed by Medical officer.
 - k) Claim required to be paid under Workmen Compensation Act.

- l) Date of payment of compensation.
- m) Amount paid with details of the person to whom the same was paid.
- n) Authority by whom the compensation was assessed.
- o) Remarks.

11. REGISTER OF ACCIDENTS:

The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars :-

12. PRESERVATION OF REGISTERS:

The register of workmen and the Register of wages-Cum-Muster Roll required to be maintained under these Regulations shall be preserved for 3 years after the date on which the last entry is made therein.

13. ENFORCEMENT:

The Inspecting Officer shall either on his own motion or on a complaint received by him carry out investigations and send a report to the Engineer-in-charge specifying the amount representing / workers dues and amount of penalty to be imposed on the contractor for breach of these regulations, that have to be recovered from the contractor, indicating full details of the recoveries proposed and the reasons, there for. It shall be obligatory of the part of the Engineer-in-charge on receipt of such a report to deduct such amounts from payments due to the contractor.

14. DISPOSAL OF AMOUNTS RECOVERED FROM THE CONTRACTORS:

The engineer in charge shall arrange payment to workers concerned within 45 days from receipt of a report from the Inspecting Officer except in cases where the contractor had made an appeal under regulation, 16 of these regulations. In cases where there is an appeal, payment of worker dues would be arranged by the Engineer in charge, wherever such payments arise, within 30 days from the date of receipt of the decision of the Regional Labour Commissioner (RLC).

15. WELFARE FUND:

All moneys that are recovered by the Engineer-in-charge by way of workers due which could not be disbursed to workers within the time-limit prescribed above, due to reasons such as where about or workers not being known, death of a worker, etc., and also amounts recovered as penalty, shall be credited a fund to be kept under the custody or BHEL for such benefits and welfare of work man employed by the contractors.

16. APPEAL AGAINST DECISION OF INSPECTING OFFICER:

Any person aggrieved by a decision of the Inspecting Officer may appeal against such decision to the Regional Labour Commissioner concerned within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Engineer-in-charge. The decision of the Regional Labour Commissioner Shall be final and binding upon the contractor and the work men.

17. REPRESENTATION OF PARTIES:

- i) A workmen shall be entitled to be represented in any investigation or enquiry under these Regulations by an officer of a registered trade union of which the said trade union is affiliated or where the work man is not a member of any registered trade union, by an officer of a registered trade union, connected with, or any other workmen employed in, the industry in which the worker is employed.

- ii) A contractor shall be entitled to be represented in any investigation of enquiry under these Regulation by an officer of an association of contractors of which he is member or by an officer of a Federation of associations of contractors to which the said association is affiliated or where the contractor is not a member of any association of employers, connected with, or by any other employer engaged in the industry in which the contractor is engaged.
- iii) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these Regulations.

18. INSPECTION OF BOOKS AND OTHER DOCUMENTS:

The contractor shall allow Inspection of the registers and other documents prescribed under these regulations by inspecting officers and the Engineer-in-charge or his authorized representative at any time and by the worker or his agent on receipt of due notice at convenient time.

19. INTERPRETATION ETC:

On any question as to the application, interpretation or effect of these Regulations, the decision of the Chief Labour Commissioner or Deputy Chief Labour Commissioner (Central) shall be final and binding.

20. AMENDMENTS:

Central Government may, some time to time, add to or amend the Contractors Labour Regulations and issue such directions as it may consider necessary for the proper implementation of the Contractors Labour Regulations for the purpose of removing any difficulty which may arise in the administration thereof, based on which the BHEL Contractors Labour Regulation here in contained shall be subject to revision.

BHEL SAFETY CODE (See condition 20)

- i) Suitable scaffolds shall be provided for workmen for all work that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used one extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1 ($\frac{1}{4}$ horizontal and 1 vertical).
- ii) Scaffolding or staging more than 3.25 meters above the ground or floor, swing or suspended from an overhead support or erected with stationery support, shall have a guard rail properly attached, bolted, braced and otherwise secured at least 1 meter high above the floor or platform of such scaffolding or staging and extending along with the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery or materials, such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- iii) Working platform, gangways and stairways shall be so constructed that they do not sag unduly or unequally, and if height of a platform or gangway or stairway is more than 3.25 meters above ground level it shall be closely boarded, have adequate width and be suitably fenced, as described in 2 above.
- iv) Every opening in floor of a building or in a working platform shall be provided with suitable means to prevent fall of persons or materials by providing suitable fencing or failing with a minimum height of 1 meter.
- v) Safe means of access shall be provided to all working platform and other working places, every ladder shall be securely fixed. No portable single ladder shall be over 9 meters in length. Width between side rails in a rung ladder shall in no case be less than 30cm. For ladders up to and including 3 meters in length. Uniform step spacing shall not exceed 30 cm.

Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect public from accidents and shall be bound to bear expenses of defense of every suit action or other proceedings at law that may be brought by any person for injury sustaining owing to every suit action or other proceedings at law that may be brought by any person for injury sustaining owing to neglect of the above precautions, and pay any damages and costs which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the contractor be paid to compromise any claim by any such person.

6. EXCAVATION AND TRENCHING:

All trenches, 1.5 meters or more in depth, shall at all times be supplied with at least one ladder for each 30 m length or fraction thereof. Ladder shall to be extended from bottom of trench to at least, 1 meter above surface of the ground. Sides of a trench 1.5 meters or more in depth shall be stepped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of sides collapsing. Excavated materials shall not be placed within 1.5 meters of the edge of trench or half the depth of trench, whichever is more. Cutting shall be done from top to bottom. Under no circumstances shall undermining or undercutting be done.

7. DEMOLITION:

Before any demolition work is commenced and also during the process of the work.

- a) All roads and open areas adjacent to the work site shall either be enclosed or suitably protected;
- b) No electric cable or apparatus which is liable to be source of danger over a cable or apparatus used by operator shall remain electrically charged.
- c) All present steps shall be taken to prevent danger to persons employed, from risk of fire or explosion or No floor, roof or other part of a building shall be so overloaded with debris or materials as to render it unsafe.

8. All necessary personal safety equipment as considered adequate by the Engineer-in-charge shall be available for use of persons employed on the site and maintained in a condition suitable for immediate use and the contractor shall take adequate steps to ensure proper use of equipment by those concerned.

- a) Workers employed on mixing asphaltic materials cement and lime mortars/concrete shall be provided with protective footwear and protective goggles.
- b) Those engaged in handling any materials which is injurious to the eye shall be provided with protective goggles.
- c) Those engaged in welding works shall be provided with welder's protective eye shields.
- d) Store breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- e) When workers are employed in sewer and manholes which are in use, the contractor shall ensure that manholes covers are opened and manholes are ventilated at least for an hour before workers are allowed to get in to them. Manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to public.
- f) The contractor shall not employ men below the age of 18 and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 or employed on the work of lead painting the following precautions shall be taken.
 - i) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
 - ii) Suitable face masks shall be supplied by the contractor for use by workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
 - iii) Overalls shall be supplied by the Contractor to workmen and adequate facilities shall be provided to enable working painters to wash during and cessation of work.

9. When work is done near any where there is risk of drowning, all necessary equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
10. Use of hoisting machine and tackles including their attachments, encourage and supports shall conform to the following:
 - a)
 - i) These shall be of good mechanical construction, sound material an adequate strength and free from defects and adequate strength, and free from defects.
 - ii) Every rope used in hoisting or lowering materials or as a means of suspension shall be durable quality and adequate strength, and free from defects.
 - b) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years shall be in-charge of any hoisting machine including any scaffolding winch or give signals to operator.
 - c) In case of every hoisting machine and of every chain, ring, hook, shackle, swivel and pulley block used in hoisting, or lowering or as means of suspension safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall have the safe working load plainly marked thereon. In case of a hoisting machine having a variable safe working load, each safe working load, and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - d) In case of departmental machine, safe working load shall be notified by the Engineer-in-charge. As regards contractors machines the contractor shall notify safe working load of each machine to the Engineer-in-charge wherever he brings it to site of work and get it verified by the Engineer-in-charge.
11. Motors gearing, transmission, electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguards, hoisting appliances shall be provided with such means as will reduce to the minimum risk of accidental descent of load. Adequate precautions shall be taken to reduce to the minimum risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energised, insulating mats, working apparel such as gloves, sleeves, and boots, as may be necessary shall be provided. Workers shall not wear any rings; watches carry keys or other materials which are good conductors of electrically.
12. All scaffolding, ladders and other safety devices mentioned or described herein shall be maintained in a safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near the places of work.
13. These safety provisions shall be brought to the notice of all concerned by display on a notice board at a prominent place at the work spot. Persons responsible for ensuring compliance with the safety code shall be named there on by the contractor.
14. To ensure effective enforcement of the rules and regulations relating to safety precautions, arrangements made by the contractor shall be open to inspection by the Engineer-in-charge or his representative and the inspection officers as defined in the contractor's Labour Regulations.
15. Notwithstanding the above conditions 1 to 14, the Contractor is not exempted from the operation of any other Act or Rule in force.

FORM OF REGISTER OF WORKMEN
(Regulation 7)

- (i) Name and address of the contractor: í .
- (ii) Number and date of the contract agreement/work order: í .
- (iii) Name and address of the department awarding the contract: í .
- (iv) Nature of the contract and location of the work: í .
- (v) Duration of the contract: í ..

[illegible]

CONTRACTOR

EMPLOYER

FORM OF EMPLOYMENT CARD (Regulation 8)

- (i) Name and sex of the worker:í
(ii) Father's/Husband's Name:í
(iii) Address:í
(iv) Age or date of birth:í
(v) Identification marks:í í

Particulars of next of kin (wife/husband and children, if any, or/dependent next of kin in case of the worker has no wife/husband or child):

Name:
Full address of dependents:(Specify village, Dist., and State)

[illegible]

N.B: For the worker employed at one time one piece-work basis and at another on daily wages, relevant entries in respect of each type of employment should be made separately.

CONTRACTOR

EMPLOYER

FORM OF WAGE SLIP
(REGULATION 9)

(i) Name of the contractorí .

(ii) Placeí .

-
- 1. Name of the workers with fatherø/husbandø Name :
 - 2. Nature of employment :
 - 3. Wage period :
 - 4. Rate of wages payable :
 - 5. Total attendance/unit of Work done :
 - 6. Dates on which overtime worked. :
 - 7. Overtime wages. :
 - 8. Gross Wages, payable :
 - 9. Total deductions (indicating nature of deduction). :
 - 10. Net Wages Payable :
-

CONTRACTORøS SIGNATURE/
THUMB IMPRESSION.

EMPLOYEES SIGNATURE/
THUMB IMPRESSION.

**FORM OF REGISTER OF WAGES-CUM-MUSTER
ROLL (Regulation 9)**

- (vi) Name and address of the contractor:í .
- (vii) No. & Date of the contract agreement/work order:í ..
- (viii) Name and address of the dept. awarding the contract:í .
- (ix) Nature of the contract and location of the work:í .
- (x) Duration of the contract:í . (xi)
- Wage period:í .

							Fair wages payable.		Wages paid.		Overtime worked.				Deduction from wages.								
<i>Serial Number</i>	<i>No. and Surname of the worker.</i>	<i>Father 's/husband 's Name</i>	<i>Sex</i>	<i>Designation nature of work.</i>	<i>Daily attendance (No.of units worked).</i>	<i>Total attendance units.</i>	<i>Basic</i>	<i>D.A and other allowances</i>	<i>Basic</i>	<i>D.A and other allowances</i>	<i>Date</i>	<i>No. of hours.</i>	<i>Over time wages earned.</i>	<i>Total wages paid</i>	<i>Fine</i>	<i>Deduction for damage/loss</i>	<i>House rent.</i>	<i>Revenue of advances.</i>	<i>Other deductions</i>	<i>Net wages payable.</i>	<i>Date of payment</i>	<i>Signature or thumb impression of the worker.</i>	<i>Remarks.</i>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

CONTRACTOR

EMPLOYER

BHEL THE CAUSE OF LOSS OR DAMAGE FOR REGISTERED PERSONS EMPLOYED THEREIN
 DEDUCTIONS
 RM BY
 NEGLIGENCE (vii) 10. No Regulation

		Sl.No.
		Name
		Father's/ Husband's Name.
		Sex
		Dept.
		Damage or loss caused with date
		Whether worker showed cause against deduction if so, enter date.
		Date and amount of deduction imposed.
		Number of in statement if any
		Date on which total amount realised

1
2
3
4
5
6
7
8
9
10

CONTRACTOR

EMPLOYER

11	Remarks.
----	----------

CONTRACTOR

EMPLOYER

	1	Sl.No.
	2	Name
	3	Fatherø/ Husbandø Name.
	4	Sex.
	5	Dept.
	6	Nature and date of the offence for which fine imposed
	7	Whether workman showed cause against fine or not, enter date.
	8	Date of wages.
	9	Date and amount of fine imposed.
	10	Date on which fine released.
	11	Remarks.

CONTRACTOR

EMPLOYER

PART -II : PRICE BID

NAME OF THE WORK:

Construction of building for 350 KW test bed for permanent magnet technology in BHEL R&D Lab complex.

TOTAL PAGES: Schedule A is 36 pages (Separate file)

Schedule B 2 pages

Schedule C 1 page

CONTRACTOR

ACCEPTING OFFICER

ISSUE OF STORES TO THE CONTRACTOR

SNo	Particulars	Unit	Issue Rate
			Rupees
1.	Cement non-refundable bags	M.T.	FREE
2.	Mild steel rounds all diameters	M.T.	FREE
3.	Tor steel/Ribbed steel all diameters	M.T.	FREE

- A. The materials listed above will be issued from BHEL/R&D/Stores. It will be the responsibility of the contractor to submit his demand for stores in writing at least seven days in advance of the actual requirement.
- B. Issue of all stores is subject to the extent of their availability at the place of issue noted above. The Contractor should make his own arrangements for any or all of the materials shown above in case the BHEL desires so. The contractor shall not be entitled to any claim or compensation for non-supply of the materials or delay in the supply of stores under any circumstances.
- C. The materials will be issued only during the working hours on Tuesday and Friday. The Contractors shall have to transport them to site of work at his own cost as soon as these are issued to him.
- D. Where cost of stores issued, if any, is recoverable from the contractor, recoveries will be made from the running bills for the gross quantity issued and not on actual consumption on the basis of the net measured quantity on finished work.
- E. The contractor shall, from time to time, render proper accounts of all materials issued to him by BHEL. If contractor fails to do so, no further issued of the materials will be made to him and he shall be held responsible for any delay in the execution of the work which may occur on this account.
- F. Only Cement, Mild Steel & Tor-Steel 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 part or whole of the item issued to him as above.
- G. All surplus materials whether issued free of cost or on cost or on cost recovery basis are to be returned to the BHEL stores in good Condition. Quantities of materials consumed in excess of the actual requirement shall be charged for at punitive rates as listed below.

The decision of the Sr. Engineer/Manager (Civil) as to the extent to which materials have been rendered surplus have been consumed in excess of the actual requirements shall be final and binding on the contractor.

H. **CEMENT:**

For the purpose of determining the actual requirement of cement, the theoretical consumption of cement as per CPWD norms shall be considered by the Sr. Engineer/Manager (Civil). As per CPWD norms the following are the variation allowed in Cement consumption.

A > Work costing upto Rs. 2,00,000-00 : +/-5%

B > Work Costing from Rs. 2,00,000-00 to Rs.5,00,000-00 : +/-4%

C > Work costing above Rs. 5,00,000-00 : +/-3%

STEEL:

Steel will be issued by weight duly weighing at Store as stocked by Bharat Heavy Electricals Ltd., The surplus steel is represented by the difference between the quantity received and the quantity required and utilised on the work with an allowance of 5% towards scrap. The contractor will be responsible for removal of scrap from the site in good time as Directed by the Sr. Engineer/Manager (Civil). The cut pieces retained as scrap shall be short than one metre in length.

Any variation in weight of steel issued should be brought to the notice of the Engineer/Manager (Civil) without any delay in writing for consideration.

PUNITIVE RATE FOR EXCESS / SHORT CONSUMPTION

1. CEMENT	Rs. 7,500-00 per M.T
2. MILD STEEL	Rs. 75,000-00 per M.T
3. TOR STEEL	Rs. 75,000-00 per M.T

SIGNATURE OF CONTRACTOR(S)

ACCEPTING OFFICER

SERVICES VIZ, WATER & LIGHTING TO THE CONTRACTOR**1. WATER:**

Water required for construction purpose shall be supplied by Bharat Heavy Electricals Limited. The supply will be made at convenient point to be determined by the AGM (PROJ) and contractor has to make his own arrangements to distribute the water to places where required including cost of providing and fixing water meters. The charges for the consumption of water will be as under, where meters could not be provided by the contractor and prior permission for the same was obtained in writing from Manager (Civil).

- | | |
|---|-------|
| i) On the water consumed items of the work of periodical maintenance of buildings | 0.25% |
| ii) On the water consumed items of the road works | 0.75% |
| iii) On the water consumed items of the other Civil Works | 0.50% |

2. POWER:

Electric power, if required, will be supplied at a convenient metered point, to be selected by Engineer-in-Charge. Any extensions required will have to be arranged by the contractor himself. Energy consumed will be metered and charged at Rs.5.50 (Rupees Five and paise fifty only per unit).

SIGNATURE OF CONTRACTOR(S)**ACCEPTING OFFICER**

Construction of bldg for 350 KW test bed for permanent magnet technology

Schedule A

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Rs.	Ps.
1	Surface dressing of the ground including removing vegetation and inequalities not exceeding 150 mm deep and disposal of rubbish, lead upto 50m. and lift upto 1.5m. in all kinds of soils .(1) without cost of Cement/steel(0.00)	1282	Sq.m						
2	Earth work excavation in foundation trenches or drains not exceeding 1.50 m in width or 10 sq.m on plan including dressing of the sides and ramming of bottoms, lift upto 1.50 m including getting out the excavated soil and disposal of surplus soil as directed within a lead of 50m in all kinds of soils.(2) without cost of Cement/steel(0.00)	864.18	Cu.m						
3	Extra for excavating in foundations, trenches , or drains not exceeding 1.5 m in width or 10 Sq.m on plan including dressing of sides and ramming of bottom , lift Exceeding 1.5m but not exceeding 3.0M including getting out the excavated soil and disposal of surplus earth as directed with in a lead of 50M in kinds of soil(15). without cost of Cement/steel(0.00)	220.28	Cu.m						
4	Excavation in hard rock or breaking of boulders by only chiselling using necessary machinery / plant required in all depths (payment will be made on the basis of stack measurement duly deducting 40% voids.)(3) without cost of Cement/steel(0.00)	2	Cu.m						
5	Felling of trees of girth (measured at a height of 1m above ground level including cutting of trunks and branches removing the roots and staking of serviceable meterial and disposal of unserviceable material and including burnig etc cmlplete beyond 60 cm girth up to and including 120 cm girth.(6) without cost of Cement/steel(0.00)	40	Each						

CONTRACTOR

EMPLOYEE

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
6	Supplying & filling with sand under floors & plinths in layers not exceeding 200mm including watering and ramming each deposited layer.(10) without cost of Cement/steel	23.54	Cu.m						
7	Supply and filling with morrum brought from outside including Laying in layers not exceeding 200mm in depth, watering and ramming and consolidating each deposited layer.(11) without cost of Cement/steel(0.00)	283.66	Cu.m						
8	Filling with available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc.in layers not exceeding 200mm in depth, consolidating each deposited layer by ramming and watering lead up to 50m and lift up to 1.5m.(9) without cost of Cement/steel(0.00)	648.14	Cu.m						
9	Disposal of building rubbish /malba/ similar unserviceable dismantled or waste materials by Inter carting by mec-hanical means including loading un loading transporting, spreading as directed etc, complete for all leads including all lifts.	243.75	Cu.m						
10	Supplying and stacking of Chloropyri-phos/Lindane emulsifiable concen-trate of 20% in sealed containers to the site .(16) without cost of Cement/steel(0.00)	400	litre						
11	Diluting & injecting chemical emulsion for PRE-CONSTRUCTIONAL anti termite treatment &creating chemical barrier under & around the column pits, top surface of plinth filling, junction of wall and floor, expansion joints, surroundings of pipe and conduits etc, complete (plinth area of building at ground floor only shall be measured) with chlorpyriphos emulsifiable concentrate 20% with 1% concentration . (14) without cost of Cement/steel(0.00)	424.11	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
12	Providing and laying in position cement concrete of mix 1:4:8(1 cement: 4 coarse sand: 8 graded stone aggregate 40mm nominal size) excluding the cost of centering , shuttering all works up to plinth level. Cement will be FREE supply(19) without cost of Cement/steel(170.00)	147.19	Cu.m						
13	Providing and laying cement concrete in mix 1:2:4 (1 cement:2 coarse sand :4 graded stone aggregate 20 mm nominal size) up to floor five level in retaining walls, return walls, walls including attached pilasters, columns piers , abutments , pillars , posts, buttresses, strings or lacing courses parapets, copings, bed blocks, anchor blocks , plain window sills fillets etc.excluding the cost of centering, shuttering and finishing . Cement will be FREE supply.(17) without cost of Cement/steel(320.00)	4.15	Cu.m						
14	Providing and Laying M-20 grade Reinforced cement concrete in position machine mixed and machine vibrated design mix cement concrete for reinforced cement concrete elements, excluding the cost of centering , shuttering, finishing and reinforcement. Including cost of admixtures in recommended proportions (As per IS 9103) to accelerate, retard setting time of concrete,improve workability & Water proofing of the structure with out impairing strength and durability as per direction of Engineer -in-charge in Footings ,bases of coloums, up to plinth levels.Cement will be free supply.(21) without cost of Cement/steel(400)	272.82	Cu.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
15	Providing and laying M20 grade Reinforced cement concrete in position machine mixed and machined vibrated design mix cement concrete for reinforced cement concrete elements ,excluding the cost of centering , shuttering, finishing and reinforcement ,including cost of admixtures in recommended proportions (As per IS 9103) to accelerate, retard setting time of concrete, improve workability & water proofing of the structure with out impairing strength and durability as per directions of Engineer in charge in Walls ,Coloumns,pillars, posts and struts etc., complete in all floors Cement will be free supply. (23). without cost of Cement/ steel(400.00)	78.16	Cu.m						
16	Providing and Laying M-20 grade Reinforced cement concrete in position machine mixed and machine vibrated design mix cement concrete for reinforced cement concrete elements ,excluding the cost of centering, shuttering, finishing, and reinforcement ,including cost of admixtures in recommended proportions (As per IS 9103 to accelerate, retard setting time of concrete, improve workability & Water proofing of the structure with out impairing strength and durability as per directions of Engineer in charge in Beams, Plinth beams,Cantilevers, Suspended floors, lintels , Chajjas , stair cases and shelves etc complete in all floors. Cement will be FREE supply.(24) without cost of Cement/steel(400)	227.96	Cu.m						
17	Reinforced Cement Concrete work in SHELVES excluding the cost of Centring and shuttering and Reinforcement with 1:2:4 (1 Cement : 2 Coarse sand :4 graded stone aggregate 12mm nominal size . Cement will be FREE supply.(25). without cost of Cement/steel(380.00)	6.15	Cu.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Ps.	
18	Providing centring and shuttering including strutting, propping,etc.& removal of form work after the specified time as directed by the engineer-in-charge only with steel shuttering (the extent possible usage of wood has to be avoided in construction activities) for raft slab and footings and Machine foundations.(27) without cost of Cement/ steel(0.00)	184.25	Sq.m						
19	Providing centring and shuttering including strutting, propping,etc. & and removal of form work after a specified time as directed by the engineer-in-charge (extent possigle usage of wood has to be avoided in construction activities) only using using only steel shuttering for columns,pillars,posts and struts in all floors.(28) without cost of Cement/steel(0.00)	769.90	Sq.m						
20	Providing centring and shuttering including strutting,propping etc.and removal of form work after a specified time as directed by the engineer-in-charge (extent possible usage of wood has to be avoided in the construction activities) only with steel shuttering for lintels ,beams, plinth beams,girders, bressummers and cantilevers in all floors. (29) without cost of Cement/steel(0.00)	1539.12	Sq.m						
21	Providing centring and shuttering including propping,strutting,etc,and removal of form work after a specified time as directed by the engineer-incharge (extent possible usage of wood has to be avoided in construction activities)only steel shuttering for suspended floors,roofs,landings and balconies in all floors.(31) without cost of Cement/steel(0.00)	860.92	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Ps.	
22	Extra for additional height in centering ,shuttering wherever required with adequate bracing,propping etc., including cost of de-shuttering and de centering at all levels over a height of 3.5 M for every additional height of 1 metre of part thereof (plan area to be measured) in Suspended floors, Roofs, Landings, Beams balconies.(34) without cost of Cement/ steel(0.00)	904.92	Sq.m						
23	Providing centering and shuttering including propping, strutting, etc., and removal of form work after a specified period as directed by the engineer-in-charge (extent possible usage of wood has to be avoided in construction activities).using only steel shuttering for weather shade,chajjas, corebels etc., including edges.(33) without cost of Cement/ steel(0.00)	81.56	Sq.m						
24	Providing centring and shuttering including strutting ,propping, etc.and removal of form work after a specified time as directed by the eng ineer-in-charge (extent possible us age of wood has to be avoided in construction activities) using only steel shuttering for stair-case (excluding landing) except spiral staircase.(30) without cost of Cement/steel(0.00)	32.64	Sq.m						
25	Providing centring and shuttering including strutting and propping,etc and removal of form work after a specified time as directed by the engineer-in-charge(extent possible usage of wood has to avoided in construction activities) using only steel shuttering for pockets in machine foundations.(35) without cost of Cement/steel(0.00)	31.96	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Rs.	Ps.
26	Reinforcement for RCC work including fabrication, cutting, bending binding and placing steel in position etc, including the cost of 18 gauge MS annealed binding wire in all floors. The steel required will be supplied FREE at Central Stores. MILD STEEL(36) without cost of Cement/steel(1.00)	500.00	kg						
27	Reinforcement for RCC work including fabrication ,cutting,bending, binding and placing in position etc, including cost of 18 gauge MS annealed binding wire in all floors. The steel required will supplied FREE of cost at Central Stores. TOR / COLD TWISTED BARS.(37) without cost of Cement/steel(1.00)	45257.52	kg						
28	Coursed rubble stone masonry (second sort) with hard stone in layers with suitable bond stone at 1 m intervals in each coarse in cement mortar 1:6 (1 cement:6 coarse sand) in basement or super-structure. Cement will be FREE supply.(38) without cost of Cement/steel(75.00)	166.91	Cu.m						
29	Providing and Laying autoclaved aerated cement blocks masonry with 230mm thick blocks in cement mortar 1:4(1 Cement: 4 sand) with mixing of plasticiser all as directed by the engineer in charge with Providing 2 nos 6mm dia MS reinforcement at every third course of masonry work all as per the recommendations and directions of engineer in charge etc complete in all floors (Cement & Steel are FREE issue) (39) without cost of Cement/steel(57)	101.68	Cu.m						
30	Brick masonry in cement mortar 1:6(1 cement: 6 coarse sand) using of Machine moulded brick displayed in office or equivalent quality as directed by the engineer-in-charge in all floors and basement. Cement will be FREE supply.(40) without cost of Cement/steel(62.50)	40.73	Cu.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
31	Half brick masonry in cement mortar 1:4 (1 cement: 4 coarse sand) with machine moulded bricks displayed in office or equivalent as directed by the engineer-in-charge with 2 nos.of m. s. rods of 6mm dia.for every 5th coarse etc, but excluding the cost of M.S. rods including the cost and conveyance of materials and labour charges in all floors. Cement will be FREE supply.(41) without cost of Cement/steel(10.64)	205.37	Sq.m						
32	Providing wood work in frames of doors, windows & clerestory windows and other frames,wrought framed and fixed in position in second class indian teak wood.(43) without cost of Cement/steel(0.00)	0.438	Cu.m						
33	Providing and fixing 35mm thick moulded skin door shutter with non decorative type with inside frame of 1st class hard wood at out side with approved design the shutter has to be fixed with 1 No. Aluminium powder coated handle, 1 No. tower bolt ISI mark stainless steel butt hinges 100x58x1.9 mm 3 nos. To each shutter fitted with suitable nettle fold screws etc complete for single door shutter.(240)	17.94	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
34	Providing and fixing galvansed steel sheet conforming to IS 277 (latest edition) door frame produced from 1 mm (20 guage minimum) thick single rebate profile steel frames (without threshold) of size 75mmx45mm. The frame will be provided with 3 nos. Anchor bolts, fasteners on each vertical jamb to fix to wall surface. Frames will have 3mm thick plate with pre-punched cut-outs and will be pre-drilled to receive hinges for screw mounted fixing. Frames are to be pressure grouted with concrete slurry after installation through pre-punched holes on the frame. Holes will have to be closed with nylon plugs after grouting. 32 mm thick steel door shutter with 0.7 mm galvanised sheet press formed double skin fully flush with Lock seam joints at stile edges and prepared with suitable reinforcement to receive approved hardware fittings. Shutters will have pre drilled hinge plates with hinge guard covered. Shutter in fill has to be provided with resin bonded honey comb Kraft paper infill and shutter has to be finished with polyurethane coating of approved colour. Each door shutter has to be provided with SS ball bearing butt hinges 3mm thick fixed flush to the frame and shutter, mortise steel lock with lever handles mortise deed bolt, mortise latch has to be provided. For double door concealed extended level action flush bolts are to be provided on the top of the door to the leading stile edge. steel lock with lever handles mortise deed bolt, mortise latch has to be provided. For double door concealed extended level action flush bolts are to be provided on the top of the door to the leading stile edge.	2.88	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Ps.	
35	Providing & fixing main entrance door all as per the drawing with following specification. All the partition box sections are made of 101 x 44 x 3 mm thick Aluminum sections powder coated with approved colour and shade. Door verticals will be with 47 x 44.5 x 3 mm door top & bottom will be with 95 x 44.5 x 3 mm. All the glass in partition will be provide with 5mm th. clear glass and door shutte r glass has to be fitted with 8 mm th glass, has to be fitted with around rubber beading and heavy type aluminum powder coated clip beading on both and heavy type aluminium powder coated clip beading on both sides of glass,door shutter has to be fitted with 2 Nos of approved make floor springs with ISI mark, Door handles of approved desing & made Door stoppers, Concealed tower bolts, concealed Mortise lock of approved make and PVC beading around the door frame. Threaded Galvanized MS rod with bolt and nuts has to be provided inside the door members. (246)	10.80	Sq.m						
36	Supplying and fixing of 12mm toughened glass doors to the door frame with door hardwares with DORMA make floor springs, patch fittings ,bottom locks "D" handles etc complete.The glass shall be provided with required size and design of frosted film (Birla 3M make)/etching .this inculdes alignment of existing door frame suitable to the glass door.(264)	12.00	Sq.m						
37	Providing and fixing 40x5 mm flat iron hold fast 400mm long including fixing with 10mm dia. bolts , nutts and wooden plugs embedding in cement cocrete block 30 x 10 x 15cm 1:3:6 (1 cement : 3 coarse sand :6 stone aggregate 20mm nominal size).47) Cement will be free supply. without cost of Cement/steel(1.10)	66.00	Each						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Ps.	
38	Providing & fixing aluminium sliding door bolt anodised transparent / dyed to required colour / shade with required no. of nettle fold screws etc. size 300mm long x 16 mm dia. (48) without cost of Cement/steel (0.00)	11.00	Each						
39	Providing and fixing aluminium tower bolts anodised transparent or dyed to required colour or shade with necessary screws etc, complete. size 200mm long x 10mm diameter. (49) without cost of Cement/steel (0.00)	22.00	Each						
40	Providing & fixing aluminium handles anodised transparent/dyed to required colour/ shade with necessary screws, complete of size 125mm. (50) without cost of Cement/steel (0.00)	22.00	Each						
41	Providing and fixing aluminium hanging floor door stopper anodised transparent / dyed to required colour and shade with necessary screws etc, complete Twin rubber stopper. (51) without cost of Cement/steel (0.00)	22.00	Each						
42	Providing and Fixing Two track Aluminium sliding window with mat finish exterior grade of polyester powder coating with approved colour. Aluminium extrusions for two track windows are of JINDAL make sections No-8732, 61.85 x 45.5 X 1.3mm as bottom track with gutter provision for rain water drain. Section no-8931 61.85 X 31.75 X 1.5 mm as top and side track, section No-8820 40 X 18 X 1.5mm as shutter bottom and top, section NO-8821 40 X 26.7 X 1.5mm as shutter interlock and section no-8822 40 X 18 X 1.5mm as shutter handle side. Sliding panels are to be fitted with Tinted glass of 4mm thick necessary rubber beading etc complete. All the gaps around the windows are to be closed with silicon sealant. (55) without cost of Cement/steel (0.00)	129.60	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Ps.	
43	Providing and fixing Fixed glazed casement made out of Exterior grade Polyster powder coated aluminium of required colour box section of size 63.5mmx 38.1mm x1.95mm (jindal or equivalent make) as verticals and horizontals spaced as per the drawing as directed and jointed with cleats and screws.The Window has to be fixed to top and sides of the structures with coach screws & plugs firmly .The Window has to be fitted with 5mm thick clear glass with rubber beading alround the glass and heavy type clip beading both sides of the glass with out cost of cement/steel.	108.00	Sq.m						
44	Providing and fixing M.S Grills of required pattern in frames 25 windows etc. With M.S flats, square or round bars, etc. including priming coat with approved steel primer all complete. Fixed to openings/ Wooden frames with rawl plugs screws etc. (67)	2308.50	Kg						
45	Providing and fabricating and installing the façade structural glazing for the the façade structural glazing for the flat, curved, and sloping surfaces with approved colour, polyester powder coated heavy duty aluminium extrusions of Jindal sections 64x57x2mm [with a flange of 15 mm]. This box section has to be used for both the mullion and the transum of the structural glazing system. Fixing of 6mm thick reflective glass of approved shade and make to frame with ultra glaze SSG 4000 of GE silicons or equaivalent sealant including the providing polyethylene cross link foam spacer. The grooves between the glass panels are to be filled with weather sealant of silpruf black RTV silicon of GE silicons or equivalent make to make it air tight water tight and dust free including cost of scaffolding, materials, labour etc. complete.(249)	18.00	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
46	Providing & fixing Aluminium ventilator with mat finish exterior grade polyester powder coating of approved colour with aluminium box section of 63x37x2mm for the outer frame.4mm thick pin headed glass has to be fixed with 'U'shape beading for louvers.The ventilator has to be fixed with coach screws and plugs etc., complete.	6.30	Sq.m						
47	Filling the gap in between aluminium frame & adjacent RCC/Brick/Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-Charge complete : Upto 5 mm depth and 5 mm width.	479.40	Rm						
48	Providing and Laying 8-10 mm thick Double charged Vertified ceramic tile flooring of size 600x600mm laid on 20mm thick cement mortar (1:4) 1 cement and 4 coarse of sand including skirting and grouting the joints with matching tile mate of required color. Cleaning the finished surface with acid wash, etc., complete. (78) Cement will be free issue. without cost of Cement/steel(12.42)	245.07	Sq.m						
49	Providing and Fixing 18-20 mm thick mirror polished granite slab flooring of approved color on a cement mortar of 20 mm thick 1:4 (1 Cement: 4 Coarse sand) including skirting laid as specified & jointed with matching tile mate of approved brand and shade including smoothening of edges etc complete .Cement will be FREE supply.(73). without cost of Cement/steel(12.42)	38.69	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Rs.	Ps.
50	Providing and Fixing 18-20 mm thick mirror polished granite slab flooring of approved color on Staircase steps and Risers on a cement mortar of 20 mm thick 1:4 (1 Cement: 4 Coarse sand)laid as specified & jointed with matching tile mate of approved brand and shade including smoothening of edges etc complete .Cement will be FREE supply.(73). without cost of Cement/steel(12.42)	47.11	Sq.m						
51	Providing edge moulding to 18 mm thick Granite stone for staircase steps including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge .	124.10	Rm						
52	Providing and Laying 10 mm thick antiskid Vertified ceramic tile flooring laid on 20mm thick cement mortar (1:4) 1 cement and 4 coarse of sand including skirting and grouting the joints with matching tile mate of required color. Cleaning the finished surface with acid wash, etc., complete. (77) Cement will be free issue. without cost of Cement/steel(12.42)(Basic cost of tile considered 80/sft)	71.71	Sq.m						
53	Providing cement concrete flooring mix.1:2:4 (1cement: 2coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement including slurry,rounding of edges and strips etc, complete of 40mm thick flooring. Cement will be FREE supply.(69) without cost of Cement/steel(17.00)	143.25	Sq.m						
54	Dry stone pitching 22.5 cm thick including supply of stone and preparing the surface etc complete.(116) without cost of Cement/steel(0.00)	167.20	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
55	Providing cement concrete flooring mix.1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement including slurry, rounding of edges and strips etc, complete of 100mm thick flooring.Cement will be FREE supply.(250)	219.09	Sq.m						
56	Providing and laying vaccum de-watered flooring to required level, surface vibration and vaccum de-watering using suction mats attached to vaccum pumps. The floor has to be finished by mechanical floating and trowelling operation to required level, cutting of grooves at intervals as required with mechanised diamond wheel to create stress release joint including cost of machinery, transportation, labour charges etc complete.(251)	206.21	Sq.m						
57	Providing and fixing 8mm thick 12"x24" of size ceramic tile with Antistain property ceramic tile (Jhonsons make or equivalent make) on wall face on cement plaster of 12 mm thick cement mortar 1:3 (1 cement : 3 fine sand) and applying a cement slurry of 3.3 Kg/Sq.m for fixing the tiles. All the joints are to be grouted with matching color grout of approved make. The final finished tile surface has to be cleaned with approved cleaning agents (Cement will be supplied by department at free of cost) etc complete.(75).Without cost of Cement/steel (Basic cost of tile considered 90/sft)	185.19	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Rs.	Ps.
58	Providing and laying 16mm thick Antiskid Vitrified Ceramic tiles flooring for Parking , laid over 40mm thick cement mortar 1:6 (1cement : 6 Coarse sand)and applying a cement slurry of 3.3kg/Sq.m fixing the tiles to the base mortar. All the joints are to be grouted with matching colour grout of approved make. Flooring has to be maintained zero level . The final finished tile surface has to be cleaned with approved cleaning agents including cost of all the material (cement will be free Issue).l(Basic cost of tile considered 90/sft)	40.00	Sq.m						
59	18mm thick cement plaster in two coats under layer 12mm thick cement plaster 1:5(1 Cement :5 Coarse sand) and a top layer 6mm thick cement plaster 1:3 (Cement : 3 Fine sand) Including cost of scaffolding etc complete.(Cement will be Free supply) (81) without cost of Cement/steel(8.13)	4602.63	Sq.m						
60	Providing 20 mm thick Impervious Plaster with Cement mortar 1:3 (1 cement : 3 fine sand) finished with a floating coating of neat cement finish including mixing of Approved make liquid integral water proofing compound This has to be added 200 ml for bag of cement or as per the manufacturers instuctions.Applying a coat of approved SBR sterene butadine rubber liquid of approved brand with water 1:1 And added with plain cement 2Parts and brush applied on the concrete surface before impervious plaster. All the corners of slab columns & parapet are to be rounded In all floors.Cement will be Free supply(82). Without cost of cement/steel.(13.62)	251.40	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
61	Providing and supplying white cement based wall putty two or more coats of approved brand and manufacturer over plastered wall surface to make the surface even and smooth complete including applying a primer coat etc., complete.(88)	1132.29	Sq.m						
62	18 mm thick sunk/raised mortar bands in cement mortar 1:4(1 cement:4 fine sand).Cement will be FREE supply.(87) without cost of Cement/steel(0.07)	153.85	Rm						
63	Applying and painting with plastic emulsion paint of approved brand & shade to give an even shade on new work two or more coats over a coat of cement primer of approved brand.(93) without cost of Cement/steel(0.00)	1089.55	Sq.m						
64	Applying Two or more coats of delux Multisurface paint system "Uni gloss" of Snow cem india or equivalent make paint for Interiors & Exteriors over and including one coat of Primer (Snowcem plus or Equivalent) all as per manufacturers specifications including cost of all materials, labour scaffolding etc complete(96) without cost of Cement/steel(0.00)	2446.02	Sq.m						
65	Providing and applying polymer based Texture for Exterior wall finish of approved design & make to the Exterior surface of the building all as per the manufactures instructions over final coat of plastering, including applying approved colour/ Chemical coating. Cost will including all materials scaffolding scrapping or cleaning, finishing etc., complete. (260)	269.06	Sq.m						
66	Finishing the internal wall with ROYAL PLAY(Non metallic) paint system(Asian paints) or Equivalent paint system using two or more coats of base coat of approved design and colour .After drying the base coat applying final approved design and colour with required tool etc complete including cost of all materials ,scaffolding, tools etc complete.	24.23	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
67	Providing and Fixing Stainless steel Railing all as per drawing including grouting with epoxy grout etc complete. Cement will be FREE supply (198). without cost of Cement/steel(0.00	308.00	Kg						
68	Reinforced cement concrete 1:4:8 (1 cement : 4 coarse sand ; 8 graded stone aggregate 20mm nominal size) excluding cost of centring and shuttering and reinforcement in columns(239)	2.07	Cu.m						
69	Applying & finishing with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade,two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.(92) without cost of Cement/steel(0.00)	277.92	Sq.m						
70	Providing and fixing in position 12 mm thick bitumen impregnated fibre board conforming to IS : 1838 , including cost of primer, sealing compound in expansion joints.(258)	24.50	Sq.m						
71	Providing and fixing Mortise lock of approved make & designed (241)	2.00	Each						
72	Providing and fixing double action hydraulic floor sping of approved brand and manufacture as per IS 6315 marked , for doorsincluding cost of cutting, floors as required embedding in floors and cover plates withbrass pivot and single piece MS sheet outerbox with slide plate etc complete as pe r the direction of Engineer in charge with stainless steel cover plate.(243)	2.00	each						
73	Providing and fixing Mild steel round Holding down bolts with nuts and washers plates anf anchor plate or rod welded at bottom of the bolt all as per direction of engineer in charge.	280.00	kg						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
74	Supply and Spreading of POP(Plaster of pairs)material on the vitrified and granite flooring for protection of the vitrified and granite flooring for layers. After applying first layer thin plastic sheet has to be laid and after completion of all works entireb POP has to be removed. Floor has to be cleaned with approved detergents.(235)	257.96	Sq.m						
75	Providing and fixing approved quality of glass mosaic tiles of size 20mm x20mm with 4mm thick varying size and colour of brillante 1 series of palladio or equivalent on wall / columns / fixed to cured, and plastered surface, with approved tile adhesive, in pattern as per the architectural drawing or as directed by Engineer - in - charge.Tiles are to be grouted with matching colour approved ready made Epoxy based grout, cured, etc. all complete at all height and lead complete. Sample of the tiles for shade and finish to be approved. Tile work shall be carried out as per approved pattern with glass mosaic tiles blend(Random mix). The work shall be measured and paid on sqm basis to the actual area executed .	31.50	Sq.m						
76	Providing and fixing hydraulic door closer of approved make with two speed adjustments 90 deg. hold open feature. It should hold a a maximum door weight of 80 Kg etc., complete.(244)	7.00	Each						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Rs.	Ps.
77	Supply, fabrication and erection of Steel work as per the drawings and specifications of bulding structure consisting of Beams, Channels, Equal & unequal angles of different size, plates of different thickness, Round pipes of different dia Square pipes of different dia of approved make & standar. All member sizes are as per the drawing for trusses, purlins, girders, rafters, bracings, struts, wind ties, trench covers, including supporting structure for platforms, sag rods and structural members all as per detailed drawings and design at all heights including welding witth edge preparation, grinding, drilling, bolting, fixing of baseplates, shrin plates gusset plates batten plates, cleats of specified size with bots, nuts, including washers etc complete. making the structure in line and level and plumb, or as per the shape shown in the drawing. preparing th surface suitably for painting the steel structures by cleaning, chipping the lflux, wire brushing, and applying a priming coats of of approved steel primer , labour scaffolding, transport etc complete.	11288.31	kg						
78	Providing and fixing pre-coated 30 mm thick sandwich PUF panels for roofing purpose of approved make and shade manufactured with colour coated galvalume profiles sheet comprising 0.5mm thick (+0.05%) and will have substrate of galvalume 150 Az & yield strength 280 mpa (m/a). Coating shall be polyester type on both external and internal steel wall facing of 25 micron finish. The void between sheets will be CFC freepoly - urethrene foam of density 40kg/cu.m. and thermal conductivity of 0.024 W/moK. The thickness of panel shall form 30 mm outer to outer excluding the profile. Locking system should be tongue and groove system. The panel joints should be sealed with silicon sealant of approved make. The puf panels supplied shall have guard film protection on all exposed surfaces.	286.00	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Rs.	Ps.
79	Providing and fixing pre-coated Ridges for roofing purpose of approved make and shade manufactured with colour coated galvalume profiles sheet comprising 0.5mm thick (+0.05%) and will have substrate of galvalume 150 Az & yield strength 280 mpa (m/a). Coating shall be polyester type on both external and internal steel wall facing of 25 micron finish. The panel should match the profile of roof panels and the joints are to be sealed with silicon sealant of approved make. The supplied shall have guard film protection on all exposed surfaces.	26.00	Rm						
80	Supply and application of 2mm thick self levelled Epoxy flooring of approved colour over Cementitious substrates. Surface has to be dry it should be free from grease ,oil or any other contamination it has to be cleaned by wire brushing or mechanical means .One coat of primer has to be applied by brush or roller on prepared surface throughly in a thin continious film before applying epoxy Flooring (252)	150.70	Sq.m						

For Road work

1	Earth work excavation in foundation trenches or drains not exceeding 1.50 m in width or 10 sq.m on plan including dressing of the sides and ramming of bottoms, lift upto 1.50 m including getting out the excavated soil and disposal of surplus soil as directed within a lead of 50m in all kinds of soils.(2) without cost of Cement/steel(0.00)	60.00	Cu.m						
2	Providing and laying in position cement concrete of mix 1:4:8(1 cement: 4 coarse sand: 8 graded stone aggregate 40mm nominal size) excluding the cost of centering , shuttering all works up to plinth level. Cement will be FREE supply(19) without cost of Cement/steel(170.00)	30.00	Cu.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
3	Providing and laying design mix RMC concrete M30 (Cement considered 340 Kg/Cu.m)grade in internal roads using cement concrete as per design using Robo sand and stone aggregate 20mm nominal size in appropriate proportion as per approved design and compacting with concrete vibrator leveling to required slope /camber finishing with required finish. Sides should be provided with steel form work with sturdy MS channel making provision for contraction /expansion and longitudinal joints (10mm wide and 50mm deep by groove cutting machine and providing and filling joints with approved joint filler sealants ,complete all as per direction of engineer in charge.	20.00	Cu.m						
4	Coursed rubble stone masonry (second sort) with hard stone in layers with suitable bond stone at 1 m intervals in each coarse in cement mortar 1:6 (1 cement:6 coarse sand) in basement or super-structure. Cement will be FREE supply.(38) without cost of Cement/steel(75.00)	13.50	Cu.m						
5	Supply and filling with morrum brought from outside including Laying in layers not exceeding 200mm in depth, watering and ramming and consolidating each deposited layer.(11) without cost of Cement/steel(0.00)	60.00	Cu.m						
6	Providing and Fixing Grey color Weather stone interlock concrete pavers in Blocks thickness of 60mm inclusive of sub-base compaction , trimming of edges,treatment of joints with fine sand ,final compaction and sweeping clean etc., including cost of all materials.(76) without cost of Cement/steel(0.00)	138.00	Sq.m						

Interior works (next page)

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
1	Providing and fixing 89mm thick prelaminated double skin partitions full height using 40mm x65mm medium teak wood frame work with horizontals and verticals placed at 600mm center to center and cladding panels of 12mm th. one sided prelaminated exterior grade of approved colour and make on both side of the frame work by using cleats. 3 mm gap has to be provided for expansions at the joining of the cladding panels. 100mm x25mm thick teak wood beading with polish of matching shade has to be used as skirting at bottom of the partiions, Teak wood beading has to be polished either with matching shade of partition laminates or natural colour teak wood polish (Some partions are stopping at Ceiling height but vertical members should go up to beam/Roof bottom. Measurement will be made up to False ceiling only. Prelaminated exterior grade board should confirm to IS:12823.(233) without cost of Cement/steel(0.00)	82.80	Sq.m						
2	Supplying and fixing of 43mm thick Hallow core flush door with all round Teak wood frame of size 4" X 1" middle & bottom frame of 6"x 1" and fixing both sides 9mm thick one side prelaminated exterior grade of approved colour and make in the bottom half portion of the door and balance area with 5mm thick clear galss as per the design of the door and teak wood design beading including polishing all the exposed teak wood design beading including polishing all the exposed teak wood surfaces with wax polishing. Door has to be fixed with necessary furniture fittings such as Mortise Lock of approved make and Aldrop of approved design,Tower bolt, Handles, Door stopers, bottom skirting with polish etc., complete. (222) without cost of Cement/steel(0.00)	12.60	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Ps.	
3	Providing and fixing 89mm thick prelaminated double skin partitions half height using 40mm x65mm medium teak wood frame work with horizontals and verticals placed at 600mm center to center and cladding panels of 12mm th. one sided prelaminated exterior grade of approved colour & make on both side of the frame work by using cleats. 3 mm gap has to be provided for expansions at the joining of the cladding panels. 100mm x25mm thick teak wood beading with polish of matching shade has to be used as skirting . Teak wood beading has to be polished either with matching shade of partition laminates or natural colour teak wood polish Prelaminated exterior grade board should confirm to IS:12823. The exposed edges on top and sides or wherever visible should be covered with 100x12mm teakwood lip ping duly polished to natural colour. Clear glass of 8 mm th.upto a height of 400mm with a curve on top OR as per the design should be fixed above the partition using decorative moulding or D brackets.	36.00	Sq.m						
4	Providing and fixing wall paneling using 35x50mm thick exterior grade plain particle board for horizontals and verticals placed at600mm c/c & leveling to plumb with a gap of minimum 35 mm for running from electrical pipes etc. complete. Cladding has to be made with 18 mm th exterior grade waterproof plywood of approved make. Plywood has to be pasted with 1 mm thick laminate of approved shade and brand as per the design shown in the drg. Teakwood skirting of 100 mm x 25 mm has to be fixed to bottom of panels with natural colour polish of approved shade.	32.10	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Ps.	
5	Providing and fixing, in position concealed G.I. section for wall paneling using 12.5mm thick board of required thickness fixed on the 'W' profile (0.55 mm thick) having a knurled web of 51.55 mm and two flanges of 26 mm each with lips of 10.55 mm, placed @ 610 mm C/C in perimeter chaneel having one flange of 20 mm and another flange of 30 mm with thickness of 0.55 mm and web of length 27 mm. Primeter channel is fixed on the floor and the ceiling with the nylon sleeves @ 610 mm C/C with fully threaded self-tapping dry wall screws. Board is fixed to the 'W' profile with 25 mm countersunk ribbed head screws @ 200 mm C/C., all complete as per the drawing & directions of engineer-in-charge, the joints of the boards are finished with specially formulated jointing compoud and 48 mm wide jointing tape to provide seamless finish : The partition has to be fixed with Synthetic Washable wall paper of approved brand and design (Basic cost of wall paper should be Rs 150/Sft)	62.85	Sq.m						
6	Providing and fixing in true horizontal level false ceiling grid of prelude XL system of M/s Armstrong or equivalent make using hot dipped galvanized steel section, exposed surface chemically cleaned capping prefinished in baked polyester paint, main Tee of size 24x32x3000 mm at every 600 mm C/C, CROSS Tee of size 24x25x600 mm at every 600 mm C/C max and 19x19x3000 mm wall angle around the wall to form the grid size of 600mmx600mm and suspending the grid using 2mm GI wire and 6mm nylon rawalplug at every 1200 mm intervals at the main Tee and laying MINERAL FIBER ACOUSTIC CEILING BOARDS (Fine fissured) of M/s Armstrong or Equivalent make having a fire rating of 60 minutes as per BS 476/23 of 1987, Noise Reduction Co-efficient (NRC) of 0.50 to 0.55, sound attenuation of 34 dB, thermal conductivity of K=0.052 w/m, Weight of 3.5kg/Sq.m. and humidity resistance of RH-95 of size 600 mmx600 mmx15 mm over the formed grid. (234) without cost of Cement/steel(0.00)	209.96	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Ps.	
7	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS :277 and consisting of of angle cleats of size 25 mm wide x 1.6 mm thick with flange fixed to the ceiling with dash fastener 12.5 mm dia x 50 mm long with 6 mm dia bolts , other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts& bolts of required size and other end of angle hanger fixed with intermediate G.I channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre , to which the ceiling section o.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I channel with connecting clips made out of 2.64 mm dia x 230 mm long, G.I wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall / partition with the help of rawl plugs at 450 mm centre, with 25 mm long dry wall screws@ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5x25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joints and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings , specification and direction of the Engineer in charge. But excluding the cost of painting with: 12.5 mm thick tapered edge gypsum plain board conforming to IS : 2095- Part I 12.5 mm thick tapered edge gypsum fire resistant board conforming to IS : 2095-Part I (266).	38.20	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Rs.	Ps.
8	<p>Providing and fixing tiled false ceiling of approved materials of size 595X595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24X38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24X25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form agrid of 1200X600 mm and secondary cross "T" of length 600 mm and size 24X25 mm made of 0.30 mm thik (minimum) sheet to be interlocked at middle of the 1200X600 mm panel to form grids of 600X600 mm and wall angle of size 24X24X0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/marking, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 X37 X 25 X 1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85X30X0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyster paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge :</p> <p><u>12.5 mm thick square edge PVC Laminated Gypsum Tile of size 595X595 mm,made of Gypsum plasterboard</u>, manufactured from natural gypsum as per IS 2095 part I and laminated with white 0.16mm thick fire retardant PVC film on the face side and 12micron metalized polyster on the back side with all edges sealed with the face side PVC film which goes around and wraps the edges and is bonded to the edge.</p>	39.60	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
9	providing fixing thermal insulation of ceiling (Under deck insulation) with Resin Bonded Fibre glass wool conforming to IS :8183. Density 24 kg/M3 , 50 mm thick , wrapped in 200 G Virgin Polythene bags, fixed to ceiling with metallic cleats (50x50x3mm) @ 60 cm and wire mesh of 12.5 mm x 24 gauge wire mesh , for top most ceiling of building. (226)	130.70	Sq.m						
10	Supply, fabrication & fixing of 4 mm thick aluminium composite panel cladding with 0.5mm skin of approved colour and finish fixed to the frame work made up of Aluminium sections 50mm x25mm x1.5mm thick rectangular tube , aluminium angles fixed to the column , wall using anchor bolts. All panels are to be fabricated in trays before fixing. 12mm spacing should be there between composite panels to be filled with a baker rod and sealed with weather proof silicon sealant[Dow Corning 789 or equivalent] Aluminium composite panel cladding panels will be in different approved colour combination OR shapes made with different colour cladding . The cost should include supply, fabrication & erection of all material alongwith necessary scaffolding safety arrangements. sealing the gaps between masonry and cladding with silicon sealent of approved make. Design of cladding will be as per architectural drawing.(227)	125.75	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
11	Providing and fixing partition upto ceiling hieght consiting of G.I frame and required board, including providing and fixing of frame work made of special section power pressed / roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylong plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws o studs, floor and ceiling channels at the spacing of 300 mm centre to cenre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards, fixed to the studs using mental to metal flat head screws, including jointing and finishing to a flushing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm X 25 mm X 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete : 75mm overall thickness partition with 12.5 mm thick double skin tapered edged plain Gypsum board conforming to IS:2095: part I	110.28	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Rs.	Ps.
12	Providing and fixing Fixed Double glazed Casement made out of Exterior grade polyester powder coated aluminium of required colour box section of size 63.5mmx 38.1mm x1.95mm(Jindal or equivalent make) as verticals and horizontals spaced as per the drawing as directed and jointed with cleats and screws.The Window has to be fixed to top and sides of the Partition with coach screws & plugs firmly and it has to be fixed with double glazed hermetically sealed glazing in aluminium windows and ventilators etc. with 6mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	17.28	Sq.m						
13	Providing and fixing thermal insulation with Resin Bounded Fibre glass wool conforming to IS : 8183 having density 24 kg/m ³ , 50 mm thick, wrapped in 200G Virgin Polythene Bags fixed to wall with screw , rawel plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in-charge. (229)	173.13	Sq.m						
14	Providing wood work in frames of doors, windows & clerestory windows and other frames,wrought framed and fixed in position in second class indian teak wood.(43) without cost of Cement/steel(0.00)	0.523	Cu.m						
15	Applying and painting with plastic emulsion paint of approved brand & shade to give an even shade on new work two or more coats over a coat of cement primer of approved brand on gypsum ceiling and walls.(93) without cost of Cement/steel(0.00)	201.04	Sq.m						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Rs.	Ps.
16	Polishing with french spirit polish of approved brand and manufacture of required shade two or more coats on new work including a coat of wood filler.(94) without cost of Cement/steel(0.00)	10.92	Sq.m						
17	Providing and fixing cub-board shutters made out of 18mm thick water proof plywood fixed with high pressure 1mm thick laminated sheet of plain/ wood grain in gloss/ matt/ suede finish on front side with approved colour and shade, other side has to be fixed with 1mm thick white laminate of approved make.frame Around the opening has to be fixed with 18mm thick water proof plywood pasted with 1mm thick matching laminate on front side.Edges of frame and shutter has to be fixed with teak wood beading polished with natural color polish to match colour of laminate.Shutters are to be fixed with hinges, handles, tower bolts, ball catchers,concealed locks etc. complete all as per directions of engineer -in- charge.(731)	26.88	Sq.m						
18	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. With float glass panes of 5.50 mm thickness .	12.60	Sq.m						
19	Providing & Fixing 1mm decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.	9.73	Sq.m						
Sanitary and Water supply									
1	Providing and fixing white/colour vitreous water closet (orissa type)with 100mm sand cast iron or vitreous p or s trap, 12.5 litres low level pvc flushing tank (approved make) with fittings,C.I. brackets,32mm diameter flush pipe with fittings & clamps 20mm over flow pipe with specials Of size 580 x 440 mm. Cement will be FREE supply.(130) without cost of Cement/steel(5.00)	1	Each						

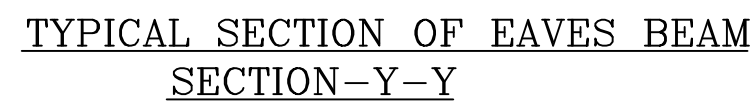
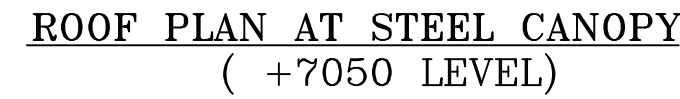
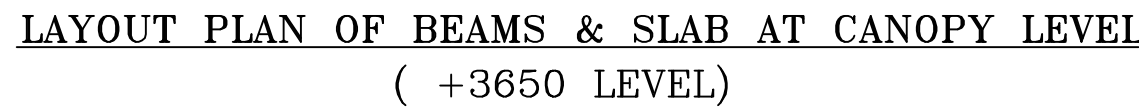
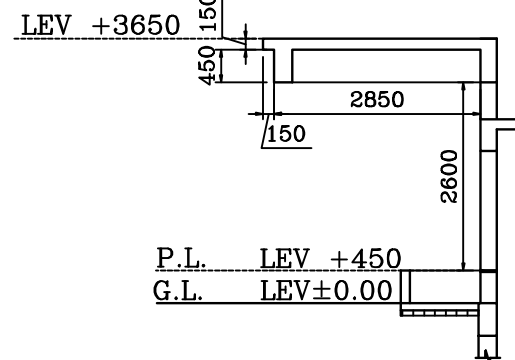
S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
2	Providing and Fixing Sand cast iron S&S as per IS 1729 Nahani trap of self cleaning design with screwed down or hinged grating with or with out vent arm complete, including cost of cutting and making good the walls and floors with 100mm inlet and 100 outlet	12	Each						
3	Providing and fixing black granite stone slab with table rubbed , edges rounded and polished , of size 75x 50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embeddig the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 Cement : 2 coarse of sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer- in -charge and finished smooth.(253)Cement will be free issue.without cost of cement/steel.	5	Sq.m						
4	Providing and fixing 15 mm Nominal outer dia Pipes Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings , i/c fixing the pipe with clamps at 1.00 mm spacing . This includes jointing of pipes & fittings with one step CPVC solvent cement and the coat of cutting chases and making good the same including testing of joints complete as per direction Engineer-in-charge. (133)	80	Rmt						
5	Providing and fixing 20 mm Nominal outer dia Pipes Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings , i/c fixing the pipe with clamps at 1.00 mm spacing . This includes jointing of pipes & fittings with one step CPVC solvent cement and the coat of cutting chases and making good the same including testing of joints complete as per direction Engineer-in-charge. (134)	50	Rmt						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.		Ps.	
6	Providing and fixing 25 mm Nominal outer dia Pipes Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings , i/c fixing the pipe with clamps at 1.00 mm spacing . This includes jointing of pipes & fittings with one step CPVC solvent cement and the coat of cutting chases and making good the same including testing of joints complete as per direction Engineer-in-charge.(135)	50	Rmt						
7	Providing and fixing 50 mm Nominal G.I pipes complete with G.I fittings and clamps , i/c cutting and making good the walls etc to Internal work & external work.(136)	100	Rmt						
8	Providing & fixing C.P brass fullway valve with C.I.wheel of approved quality(screwed end);50 mm n b.(144) without cost of Cement/steel(0.00)	1	Each						
9	Providing & fixing C.P.brass fullway valve with C.I. wheel of approved quality(screwed end);25 mm n b.(143) without cost of Cement/steel(0.00)	4	Each						
10	Providing,laying and jointing glazed stoneware pipes grade `A`with stiff mixture of cement mortar 1:1(1cement: 1 fine sand)including testing joints etc,complete; 100 mm diameter.Cement will be FREE supply.(153) without cost of Cement/steel(2.17)	125	Rmt						
11	Providing & fixing square-mouth S.W. gully trap grade `A` complete with C.I.grating brick masonry chamber with bricks and water tight C.I. cover with frame of 300x300 mm size (inside) the weight fo cover to be not less than 4.5kg. and frame to be not less than 2.7 kg.as per standard design;125 x 100 mm size with P type trap.(155)Cement will be free issue. without cost of Cement/steel(27.00)	4	Each						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
12	Constructing brick masonry manhole with locally available best quality of bricks in cement mortar 1:5 (1 cement : 5 fine sand) R.C.C. top slab with 1:2:4 (1 cement:2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 (1 cement : 4 coarse sand: 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement & making channels in cement concrete 1:2:4(1 cement: 2 coarse sands:4 graded stone aggregate 20mm nominal size) neatly finished complete as per standard type design. inside size 90x80 cm & 45 cm deep including C.I. cover with frame 455 x 610 mm internal dimensions total weight of cover and frame to be not less than 38kg (cover 23 kg kg and frame 15 kg). Cement will be FREE supply.(156) without cost of Cement/steel(292.00)	4	Each						
13	Constructing brick masonry man-hole with locally available best bricks in cement mortar 1:5(1 cement:5 fine sand). RCC top slab with 1:2:4 (1cement:2 coarsesand:4 graded stone aggregate 20 mm nominal size).found ation concrete PCC 1:4:8 (1 cement: 4 coarse sand:8 graded stone aggregate 40 mm nominal size). inside plastering 12 mm thick with cement mortar 1:3 (1 cement:3 coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement:2 coarse sand:4 graded stone aggregate 20 mm nominal size) neatly finished complete as per standard design. inside size 90 x 80 cm. and 60 cm. deep including ci cover with frame 455 x 610 mm internal dimensions.total weight of cover and frame to be not less than 38 kg. (weight of cover 23 kg. and weight of frame 15 kg.).Cement will be FREE supply. (157) without cost of Cement/steel(310.9)	2	Each						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
14	Construction brick masonry manhole with specified bricks in cement mortar 1 : 4 (1 cement : 4 fine sand) R.C.C top slab with 1:2:4 mix (1 cement ; 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size) inside plastering with 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making channels in 1:2:4 cement concrete (cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design etc with and of inside size 120 x 90 cm and 90 cm. deep including CI cover with frame (heavy duty) 560 mm internal diameter total weight of cover and frame to be not less than 208 Kg (weight of cover 108 Kg & weight of frame 100 Kg) etc. with locally available best bricks (257) Cement will be free issue. without cost of cement/steel. (473)	1	Each						
15	Providing and fixing on wall face UNPLASTICISED RIGID PVC RAIN WATER PIPES conforming to IS: 13592 Type-A including jointing with seal ring conforming to IS : 15382 leaving 10mm gap for thermal expansion single socketed pipes etc. for 110 mm dia.	100	Rm						
16	Providing and laying 110 mm dia UV resistant SWR grade PVC pipe (sudhakar/prince supreme) in all height including the cost of fittings, solution for fixing PVC pipe plain bend etc., Complete.	20	Each						
17	Providing and laying 110 mm dia UV resistant SWR grade PVC pipe (sudhakar/prince supreme) in all height including the cost of fittings, solution for fixing PVC pipe and MS clamps etc., Complete.	30	Each						
18	Providing and laying 75mm dia UV resistant SWR grade PVC pipe (Sudhakar/ prince supreme) in all height including the cost of fittings, solution for fixing PVC pipe and MS clamps etc., complete.	30	Each						

S.No.	DESCRIPTION OF ITEM	Quantity	PER	RATE		RATE		AMOUNT	
				in figures		in words		Rs. Ps.	
				Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
19	Providing and Fixing UV resistant SWR grade PVC Door TEE 110x110x110 (sudhakar/prince /supreme) in all height including the cost of fittings, solution for fixing PVC pipe and MS clamps etc., Complete.	8	Each						
20	Providing and Fixing UV resistant SWR grade PVC Door TEE 75x75x75 (sudhakar/prince /supreme) in all height including the cost of fittings, solution for fixing PVC pipe and MS clamps etc., Complete.	8	Each						
21	Providing and Fixing UV resistant SWR grade PVC Plain TEE 75x75x75 (sudhakar/prince /supreme) in all height including the cost of fittings, solution for fixing PVC pipe and MS clamps etc., Complete.	8	Each						
22	Providing and Fixing UV resistant SWR grade PVC Plain TEE 110x110x110 sudhakar/prince /supreme) in all height including the cost of fittings, solution for fixing PVC pipe and MS clamps etc., Complete.	8	Each						
23	Supplying and Erection of P.V.C. water tank of approved make over roof slab in all heights including transportatoion and handling etc, complete.(160) without cost of Cement/steel(00.00)	5000	ltr						



SLAB MKD.	OVER ALL DEPTH (mm.)	REINFORCEMENT DETAILS								REMARK
		SHORT SPAN				LONG SPAN				
		MID. SECTION		SUPPORT SECTION		MID. SECTION		SUPPORT SECTION		
		BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	
RS1	150	8@150C/C	—	8@150C/C	8@150C/C	8@150C/C	—	8@150C/C	8@150C/C	
S1	150	8@150C/C	—	8@150C/C	8@150C/C	8@150C/C	—	8@150C/C	8@150C/C	
CS1	150	8@150C/C	—	8@150C/C	8@150C/C	8@150C/C	—	8@150C/C	8@150C/C	
ST	180	8@200C/C	—	8@200C/C	8@200C/C	12@125C/C	—	12@125C/C	12@125C/C	STAIR WAIST SLAB.

BEAM MKD.	OVER ALL DEPTH (mm.)	RIB WIDTH (mm.)	LONGITUDINAL REINFORCEMENT								STIRRUPS		
			MID SPAN		L.H.S		R.H.S		L.H.S	R.H.S	MID SPAN		
			BOT.	TOP	BOT.	TOP	BOT.	TOP					
LB1, LB2, LB3	600	230	3-20#	3-20#	3-20#	3-20#	3-20#	3-20#	8#2L@150C/C	8#2L@150C/C	8#2L@200C/C		
LB4, LB5, LB6	600	230	2-20#	2-20#	2-20#	2-20#	2-20#	2-20#	8#2L@150C/C	8#2L@150C/C	8#2L@200C/C		
LB7, LB9, LB11, LB13	600	230	2-20#	3-25# 3-20#	—	—	2-20#	3-25# 3-20#	—	8#2L@150C/C	8#2L@150C/C		
LB8, LB10, LB12, LB14	600	230	2-20#	2-25#	2-20#	3-25# 3-20#	2-20#	2-25# 1-20#	8#2L@150C/C	8#2L@150C/C	8#2L@200C/C		
LB15	600	230	3-25#	2-25#	2-25#	3-25#	2-25#	3-25#	8#2L@150C/C	8#2L@150C/C	8#2L@200C/C		

BEAM MKD.	OVER ALL DEPTH (mm.)	RIB WIDTH (mm.)	LONGITUDINAL REINFORCEMENT						STIRRUPS		
			MID SPAN		L.H.S		R.H.S		L.H.S	R.H.S	MID SPAN
			BOT.	TOP	BOT.	TOP	BOT.	TOP			
EB1,EB2,EB3,EB4,EB5,EB6,EB7,EB8,EB9,EB10,EB11,EB12,EB13,EB14,EB15,EB16,EB17,EB18,EB19,EB20	550	230	2-20 ϕ	2-20 ϕ	2-20 ϕ	2-20 ϕ	2-20 ϕ	2-20 ϕ	8 ϕ 2L@150C/C	8 ϕ 2L@150C/C	8 ϕ 2L@200C/C

BEAM MKD.	OVER ALL DEPTH (mm.)	RIB WIDTH (mm.)	LONGITUDINAL REINFORCEMENT						STIRRUPS		
			MID SPAN		L.H.S		R.H.S		L.H.S	R.H.S	MID SPAN
			BOT.	TOP	BOT.	TOP	BOT.	TOP			
RB1,RB2,RB3,RB4,RB5, RB6,RB7,RB8,RB9,RB10, RB11,RB14,RB15,RB35, RB36,RB37	550	230	2-20 Φ	2-20 Φ	2-20 Φ	2-20 Φ	2-20 Φ	2-20 Φ	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 200C/C
RB12	550	230	2-20 Φ 2-20 Φ	3-20 Φ	2-20 Φ 2-20 Φ	3-20 Φ	2-20 Φ 2-20 Φ	3-20 Φ	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 200C/C
RB16,RB20,RB24,RB27, RB29,RB31,RB33	550	230	2-20 Φ	2-25 Φ 2-25 Φ	—	—	2-20 Φ	2-25 Φ 2-25 Φ	—	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 150C/C
RB17,RB21,RB25,RB28, RB30,RB32,RB34	550	230	2-20 Φ	2-20 Φ	2-20 Φ	2-25 Φ 2-25 Φ	2-20 Φ	3-20 Φ	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 200C/C
RB26	550	230	3-20 Φ	3-20 Φ	3-20 Φ	3-20 Φ	3-20 Φ	3-20 Φ	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 200C/C
RB18,RB19,RB22,RB23	550	230	2-20 Φ	2-20 Φ	2-20 Φ	2-20 Φ 1-16 Φ	2-20 Φ	2-20 Φ 1-16 Φ	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 200C/C
RB13 (WRECKER BEAM)	550	230	2-20 Φ	2-20 Φ	2-20 Φ	2-20 Φ	2-20 Φ	2-20 Φ	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 150C/C	8 Φ 2L Φ 200C/C

BEAM MKD.	OVER ALL DEPTH (mm.)	RIB WIDTH (mm.)	LONGITUDINAL REINFORCEMENT						STIRRUPS		
			MID SPAN		L.H.S		R.H.S		L.H.S	R.H.S	MID SPAN
			BOT.	TOP	BOT.	TOP	BOT.	TOP			
CB1,CB2,CB3,CB4,CB5, CB6,CB7,CB8,CB9,CB10, CB11,CB12	550	230	2-20 ϕ	2-20 ϕ	2-20 ϕ	2-20 ϕ	2-20 ϕ	2-20 ϕ	8 ϕ 2L ϕ 150C/C	8 ϕ 2L ϕ 150C/C	8 ϕ 2L ϕ 200C/C

SIGNATURE OF OWNER

SIGNATURE OF ARCHITECT

SIGNATURE OF STRUCTURAL ENGINEER

1. ALL DIMENSION'S ARE IN mm. UNLESS OTHERWISE SPECIFIED.
2. CONC. MIX. FOR ALL R.C.C. WORK SHALL BE GRADE M20(1:1.5:3).
3. ALL REINFORCING STEEL FOR R.C.C. WORK SHALL BE COLD T.WISTED DEFORMED ROD OF GRADE Fe-500 CONFORMING TO I.S. CODE : 1786 - 1979 (LATEST).
4. CUTTING, BENDING, BINDING, PLACING & LAPPING OF REINFORCING STEEL SHALL BE AS PER STANDARD PRACTICES. CONFORMING TO I S CODE : 2502 (LATEST).
5. CONCRETING WORK SHALL CONFORM TO I.S. CODE : 456.
6. MIN. CLEAR CONC. COVER SHALL BE AS FOLLOWS :
SLAB -20 mm, BEAM-25 mm, FOUNDATION-50 mm,
COL-40 mm, TIE BEAM-30 mm.
7. FOR ALL R.C.C. WORK, WATER & CEMENT RATIO SHALL BE BETWEEN 0.50 TO 0.55 WITH A MAX. SLUMP 100.

RELEASE STATUS:-TENDER DRAWING.

PROJECT :-

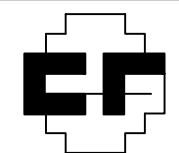
PROPOSED TEST BED FOR
PERMANENT MAGNET TECHNOLOGY
AT BHEL R & D, HYDRABAD.

DRAWING TITLE :—

LAYOUT MARKING PLAN AND R.C.C DETAILS
OF BEAMS AND SLABS.

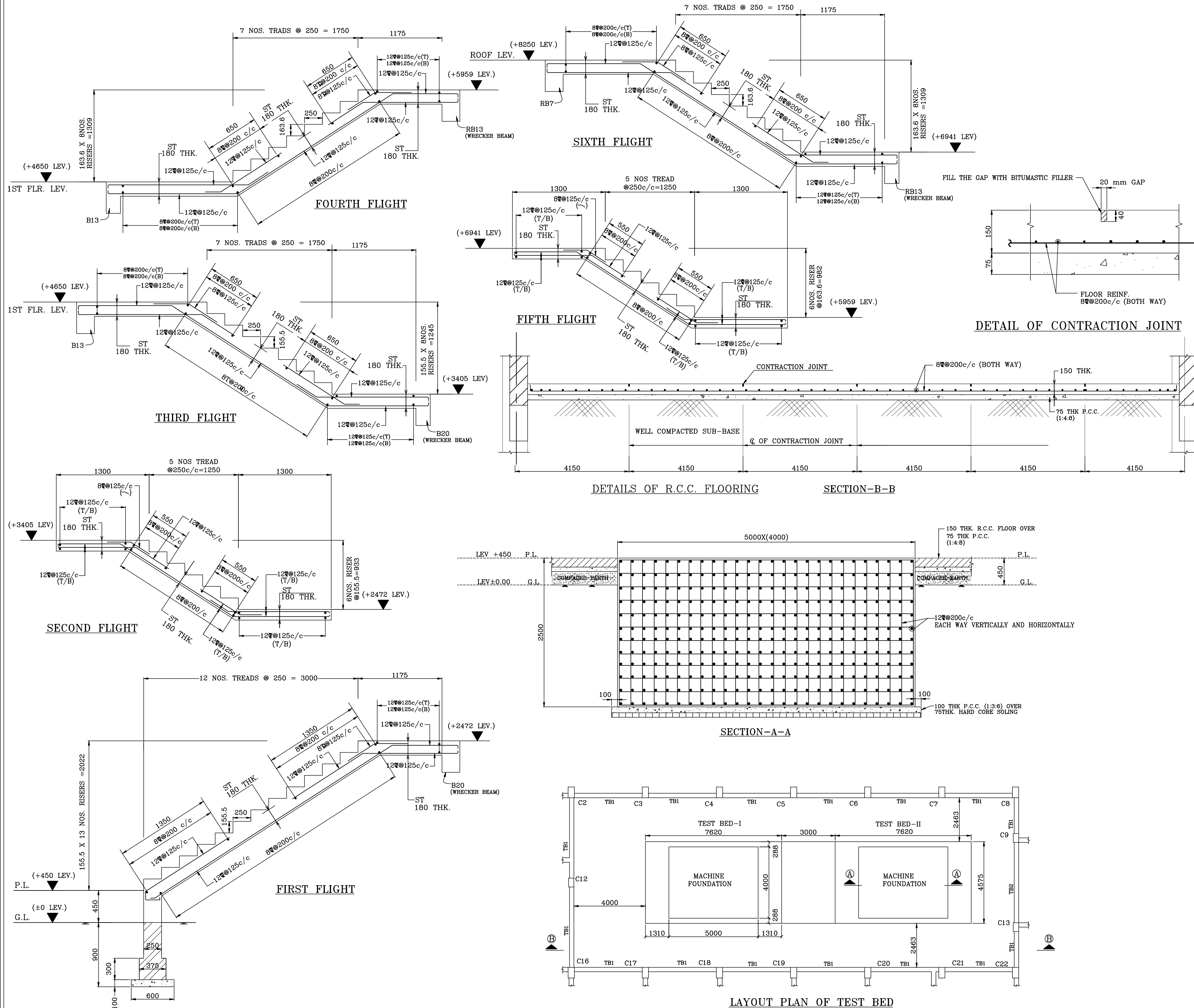
CLIENT :-

BHARAT HEAVY ELECTRICALS LIMITED
(CORPORATION RESEARCH & DEVELOPMENT DIVISION)



CREATIVE FORUM PVT. LTD.
ARCHITECTS, ENGINEERS & PLANNERS
158/1BAKUL BAGAN ROAD.
KOLKATA-700 025
creativeforum09@gmail.com

DRAWN -S.MONDAL	CHECKED - T.K.B.	SCALE- 1:100,30,25
REVISED -		DATE - 08.01.2016
APPROVED - B. DATTA		JOB NO.-445
DRAWING NO.-CF/445/BHEL-HYDRABAD/S/A1/02/R1		REV NO.- R1 DATE 19.01.2016



SIGNATURE OF OWNER

SIGNATURE OF ARCHITECT

SIGNATURE OF STRUCTURAL ENGINEER

NOTES

1. ALL DIMENSION'S ARE IN mm. UNLESS OTHERWISE SPECIFIED.
2. CONC. MIX. FOR ALL R.C.C. WORK SHALL BE GRADE M20(1:1.5:3).
3. ALL REINFORCING STEEL FOR R.C.C. WORK SHALL BE COLD TWISTED DEFORMED ROD OF GRADE Fe-500 CONFORMING TO I.S. CODE : 1786 - 1979 (LATEST).
4. CUTTING, BENDING, BINDING, PLACING & LAPPING OF REINFORCING STEEL SHALL BE AS PER STANDARD PRACTICES. CONFORMING TO I S CODE : 2502 (LATEST).
5. CONCRETING WORK SHALL CONFORM TO I.S. CODE : 456.
6. MIN. CLEAR CONC. COVER SHALL BE AS FOLLOWS :
SLAB -20 mm, BEAM-25 mm, FOUNDATION-50 mm,
COL-40 mm, TIE BEAM-30 mm.
7. FOR ALL R.C.C. WORK, WATER & CEMENT RATIO SHALL BE BETWEEN 0.50 TO 0.55 WITH A MAX. SLUMP 100.

RELEASE STATUS:-TENDER DRAWING.

PROJECT :-

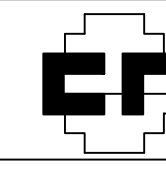
PROPOSED TEST BED FOR
PERMANENT MAGNET TECHNOLOGY
AT BHEL R & D, HYDRABAD.

DRAWING TITLE :-

LAYOUT PLAN OF TEST BED AND R.C.C.
DETAILS OF FLOOR, MACHINE FOUNDATION
AND STAIR.

CLIENT :-

BHARAT HEAVY ELECTRICALS LIMITED
(CORPORATION RESEARCH & DEVELOPMENT DIVISON)



CREATIVE FORUM PVT. LTD.
ARCHITECTS, ENGINEERS & PLANNERS
158/1BAKUL BAGAN ROAD.
KOLKATA-700 025
creativforum09@gmail.com

DRAWN - S.MONDAL	CHECKED - T.K.B.	SCALE- 1:100, 30:25
REVISED -		DATE - 08.01.2016
APPROVED - B. DATTA		JOB NO.-445
DRAWING NO.-CF/445/BHEL-HYDRABAD/S/1/04/R1		REV NO.- R1 DATE 19.01.2016