

**TENDER BOX IS AVAILABLE AT SECURITY CONTROL ROOM  
FOR DROPPING FILLED TENDERS**

**B H A R A T H E A V Y E L E C T R I C A L S L I M I T E D**

**C O R P O R A T E R E S E A R C H A N D D E V E L O P M E N T D I V I S I O N**

TELEGRAM: BHELDEV. TELEPHONE NO. 23882110, 23774494

FAX NO. 040 – 23776320

TENDER NOTICE NO. CL/02/2008-09

DATED: 28-05-2008

1. Name of work : Construction of control room and RCC foundations for Wind Diesel SPV Power plant at Kadavakallu, Anantapur district
2. Earnest Money Deposit : Rs. 1,00,000.00
3. Time of Completion : 4 Months
4. Maintenance period : 1 Year
5. Last date of receipt of tenders : 24-06-2008 upto 14.30 hrs.
6. Date and time of opening of tenders : 24-06-2008 14.45 hrs.
7. Cost of tender documents : Rs. 1000/-  
Including S.T.

Name & Address:

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EMD PAID / NOT PAID

## TENDERING PROCESS

A. Tender box will be kept in Construction Department  
For dropping Filled Tenders

B. Tender documents are issued in two bid system.

1. Technical bid

2. Price bid

C. Tender opening

On the day of tender opening, only technical bids will be opened and evaluated. After scrutiny and acceptance of the technical bids, price bids of accepted parties only will be opened and date of opening of price bids will be intimated separately.

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

Technical and price bids must be in separate covers and super scribed as "Technical bid" and "Price Bid" separately with item Nos. clearly written on the covers. Tenders received mixed (with price and technical bids) will be rejected. Every page of the price bid document shall be signed by the tenderer at the bottom of the page.

In case of tender application and tender documents downloaded from web site, the tenderer shall pay cost of tender documents and EMD for item of work he is tendering separately by means of two separate DDs (in favour of Accounts Officer BHEL R&D, Vikasnagar, Hyderabad 500 093) one towards cost of tender documents and second towards EMD. Both DD's shall be enclosed along with the Technical bid. DD's may be drawn for cost of tender documents up to last date of receipt of tenders.

## TECHNICAL BID

**(First Three pages along with necessary Documents and EMD should be submitted as Technical Bid)**

Name of the contractor :

1) Name of work :

2) Tender Notice no & :  
Date, Item No.

3) Details of DD/Cash paid.  
D.D or Cash receipt No. for EMD  
DD for cost of tender documents  
when downloaded. (to be enclosed along with  
this bid).

4) Particulars of experience/credentials:

- a) Completion certificate of same nature of job at least one work of 50 % of estimated value during the last three years.
- b) 50 % turnover in any year of previous 3 years for each of item of work.
- c) Penalty : 0.50 % of the gross value work will be levied for every weeks delay by the agency subject to a maximum of 5 % value of the work.

5) Class of Registration Certificate as Civil Contractor with Local PWD/ CPWD/ Railways/ MES / BHEL, and other PSU in Hyderabad (Copy to be enclosed).

6) ESI NO. (Copy to be enclosed)

7) PF CODE No. (Copy to be enclosed)

8) PAN No. (in case not available, proof of having applied with acknowledgement from concerned authorities).

9) APGST/VAT/TIN No. (in case not available, proof of having applied with acknowledgement from concerned authorities).

NOTE:

1. Without PAN and APGST/VAT/TIN No. contractors bills cannot be processed and payments will be held up.
2. Technical bids will be scrutinised on the same day. In case the agency has not satisfied all the above conditions with documentary proof the bid will be rejected and their price bid will not be opened.
3. In case of a firm, shall be in the name of the firm. However in case of sole proprietor or individuals these can be on the name of the sole proprietor or individual.
4. Though some of above documents are available with BHEL for those agencies who are presently working with BHEL, they also should submit one copy of the same. Otherwise the offer will be rejected.
5. All the columns shall be filled with proper information.
6. The contractors are requested to sign on all pages in the documents,

Signature of Contractor(s).

# TENDER DOCUMENT

TENDER NOTICE NO.CL/02/2008-09

DATED 28.05.2008

DATE & TIME OF CLOSING : 24-06-08 14 : 30 HRS.

DATE & TIME OF OPENING : 24-06-08 14 : 45 HRS.

COST OF TENDER DOCUMENT :Rs.1000.00

EARNEST MONEY DEPOSIT : Rs.1,00,000.00

NAME OF WORK : Construction of control room and RCC foundations for wind diesel  
SPV power plant at Kadavakallu, Ananthapur district.

ISSUED TO : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DATE: -----

EMD PAID VIDE DD/ CR/ BC/ NO:

Rs:

TENDER POSITION:

CLX:

DATED:

FMX



**Bharat Heavy Electricals Limited**  
CORPORATE RESEARCH & DEVELOPMENT  
VIKASNAGAR, HYDERABAD – 500 093, (A.P), INDIA.

**BHARAT HEAVY ELECTRICALS LIMITED  
CORPORATE RESEARCH & DEVELOPMENT  
VIKASNAGAR, HYDERABAD – 500 093.**

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**ISSUING OFFICER**

**BHARAT HEAVY ELECTRICALS LIMITED  
CORPORATE RESEARCH & DEVELOPMENT  
VIKASNAGAR, HYDERABAD – 500 093.**

**TENDER NOTICE**

1. CL/02/2008-09 Date: 28-05-2008, Sealed Tenders will be received by the AGM (REP), Bharat Heavy Electricals Ltd., Corporate Research & Development at his office at Vikas Nagar, Hyderabad – 500 093 up to 14-30 Hours on 24-06-2008 for the work of

**Construction of control room & RCC foundations for wind diesel SPV power plant at Kadavakallu, Ananthapur district**

At Vikas Nagar, adjacent to HAL Complex, Balanagar, Hyderabad-500 093.

The Tenders will be opened by the AGM (REP) Bharat Heavy Electricals Ltd., Corporate Research & Development on the date and at the place aforementioned. The Tenderers or their agents are expected to be present at the time of opening of the Tenders. The tender receiving Office will, on opening the Tender, attest over writings or corrections, if any, there in the presence of the Tenders who may be present at the time. The Tender should be in the form obtainable from the Office of the AGM (REP). The CPWD Standard Specification and other documents relating sheet to the contract such as additional specifications, drawing descriptive specification sheet regarding materials etc, can be seen at any time between 9:00 A.M. and 1:00 P.M. on Office of the AGM (REP). Tender forms and other particulars regarding the proposed work can be obtained at the Office of the AGM (REP). Tender forms and other particulars regarding the proposed work can be obtained at the Office of the AGM (REP) on any working day from 9:00 A.M. to 1:00 P.M. up to 23.6.2008 on payment of the prescribed sum of Rs.1000.00 per set which amount is not refundable.

2. Tenders must be submitted in sealed covers and should addressed to the AGM (REP), Bharat Heavy Electricals Ltd., Corp. Research & Development, Vikas Nagar, Hyderabad-500 093, the name of the Tender and the name of the work being noted on the cover. If the Tender is made by an individual, it shall be signed with his full name and his address shall be given. If it is made by firm, it shall be signed with the co-partnership name by a member of the firm, who shall also sign his own name, and the name and address of each member of the firm shall be given. If the Tender is made by a Corporation, it shall be signed by a duly authorised Officer who shall produce with his Tender, satisfactory evidence of his authorisation such Tendering corporation may be required before the agreement is executed, to furnish evidence of its corporate existence.

3. Each Tender must pay as Earnest Money, a sum of Rs.1,00,000.00 (Rupees One lakh only) and enclose with his tender the receipt endorsed accordingly. The Earnest Money prescribed for this work may be offered in any of the following forms duly pledged to the Account Officer BHEL (R&D).

- A) Cash receipt from BHEL (R&D) Cash Office which works from 12-30 hours to 14-00 hours.
- B) Pay order, demand Draft, drawn in favour of **Accounts Officer, Bharat Heavy Electricals Limited, Research and Development, Vikas Nagar, Hyderabad.**

The Earnest Money will be refunded to the unsuccessful tenderer after the intimation of rejection of the tender is sent. The Earnest Money will be retained in the case of the successful tenderer and get converted as a part of security Deposit for the due performance of the contract and either case will no carry any interest. It will be dealt with as provided in the conditions attached to the tender.

When a tender is to be accepted, the tender whose tender is under consideration shall attend the office of the AGM (REP) on the date fixed by written intimation to him. He shall forthwith upon intimation being given to him by the AGM (REP) of acceptance of his tender, complete the execution of the agreement by signing all documents connected therewith. Failure to do so shall entail forfeiture of the earnest money.

4. EMD by the Tenderer will be forfeited as per Tender Document if.

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

5. EMD shall not carry any interest.

6. Tenderers shall pursue carefully the instructions in 'Direction to Parties Tendering and the conditions of the agreement form and all other relevant documents before tendering rates for the work. The approximate quantity of work to be executed under each class is given to the Schedule – A. The quantities are given with a view to enable the tenderer to quote his overall rate for each class of work in the tender form and for a uniform comparison of tenders. It shall be definitely understood that the Bharat Heavy Electricals Limited does not accept any omissions, deductions, or additions that may be made in the tender documents by the parties tendering.

7. AGM (REP) reserves the right to reject any tender or part thereof or all the tenders with out assigning any reasons thereof.

8a. Tenders offering a percentage deduction from or increase on the estimate amount and those not submitted in proper form or in due time will be rejected.

8b. The offer shall be valid for a period of 90 days from the date of opening of the tender.

9. Security Deposit shall be collected from the successful tenderer. The rate of Security Deposit will be as below.

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

The Security Deposit should be deposited before start of the work by the contractor.

9a. Security Deposit may be furnished in any one of the following forms.

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order, Demand Draft in favour of BHEL (R&D).
- iii) Local cheques of schedule banks subject to realization.
- iv) Security available from Post Office such as National savings Certificate, Kissan Vikas Patras etc.
- v) Bank Guarantee from schedules 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 (R&D).
- 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 contractor, A/C BHEL (R&D), duly discharge on the back.
- vii) Security Deposit can also be recovered at the rate 10% from the running bills. However in such cases at least 50% of the security deposit should be deposited before start of the work and the balance 50% will be recovered from the running bills.
- viii) EMD of the successfully tender shall be converted and adjusted against the security deposit.

Note: Acceptance of Security Deposit against Sl. No.(iv) and (vi) above will be adjusted to Hypothecation or endorsement on the documents in favour of BHEL (R&D). However, BHEL (R&D) 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.

9b. Security Deposit shall not be refundable to the contractor except in accordance with the terms of the contract.

The 50% Security Deposit will be released along with final bill balance will be released after 12 (Twelve) Months maintenance period.

10. a) Rs.1,00,000.00 (Rupees One lakh only) will be retained as Security deposit for the due performance to the stipulation to keep the offer open for a period of 90 days from the date of opening of the tender; it being understood that the tender documents have been sold/issued to the tender and the tenderer is being permitted to Tender in consideration of the above stipulation on his part and that he shall not alter or modify the terms and conditions thereof in a manner not acceptable to A.G.M. (REP) Should the tenderer fail to observe or comply with the foregoing stipulation, the aforesaid amount of Rs.1,00,000.00 (Rupees One lakh only) shall be liable to be forfeited.
11. The AGM (REP) reserves the right to reject any tender or part there or all tenders without assigning any reason therefore.
12. Tenders offering a percentage deduction from or increase on the estimate amount, and those not submitted in proper form or in due time will be rejected.
13. The under signed reserves the right to reject any or all tenders or part there of or to divide the work in to convenient groups and award the work to more than one agency. The under signed also reserved the right to allow to public enterprises preference facilities as admissible under the existing policy.

SIGNATURE OF CONTRACTOR(S)

ISSUING OFFICER

Grams: BHELDEV  
Fax : 040-23776320

Phone No: 1) 23882110  
2) 23774494

**BHARAT HEAVY ELECTRICALS LIMITED  
CORP. R&D DIVISION: HYDERABAD – 93**

**TENDER NOTICE NO: CL/02/2008-09 Dt. 28/05/2008**

Sealed Tenders are invited by the AGM (REP) from the reputed contractors experienced in similar work having valid PF No., ESI, Labour License from Central Govt. and registered with local PWD, CPWD, Railways, MES, BHEL, for the following works to be taken up at BHEL Wind Farm at Kadavakallu, Ananthapur district, so as to reach the AGM (REP) Office, BHEL R&D Divn., Vikasnagar, Hyderabad-500 093 up to 14-30 hours on the date mentioned against the Tender which will be opened on 24-06-08 at 14-45 hours in the office of the AGM(REP)

S No.	Description of Work	Estimated cost (Rs. In Lakhs)	EMD Rs. Ps	Cost of Tender Document Rs. Ps	Period of sale of Tender Document	Date of opening	Period of completion
1.	Construction of control room & RCC foundations for wind diesel SPV power plant at Kadavakallu, Ananthapur district.	26.00	100000.00	1000.00	02.06.08 to 23.06.08	24-06-08	4 Months

**Note:**

1. Tenders received without EMD are liable for rejection.
2. Tender documents are obtainable between the dates mentioned from the Office of the AGM (REP), BHEL (R&D) Divn, Vikasnagar, Hyderabad-93 during office hours on submitting the application with full of their experience and enclosing copies of registration certificates, PF No. ESI, Sales Tax registration labour license has to be produce at time of 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 there of 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 Divn., Vikasnagar, Hyderabad-93. Cash may be remitted at our cash office between 12.30 hours to 14.00 hours.
6. Working contractors are also to pay Earnest Money Deposit. EMD will neither be adjusted against their pending bills nor they can be transferred from one work to the other.
7. The conclusion of contract will be in the form prescribed by Bharat Heavy Electricals Limited for the purpose.
8. In case date of opening happens to be holiday by any reason, tenders will be received and opened on next working day.

Sd/-  
AGM (REP)

## **TENDERER AND CONTRACTOR'S CERTIFICATE**

1. I 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 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.
1. I hereby declare that I 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.

DATE \_\_\_\_\_

**SIGNATURE OF CONTRACTOR(S)**

## **DIRECTIONS TO PARTIES TENDERING**

1. A list of materials proposed to be supplied by the Bharat Heavy Electricals Ltd., Corporate Research & Development Division, Vikasnagar, Hyderabad-500 093 and the place where 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, Notwithstanding any subsequent change in the market value for those materials the charges to the party executing the work will remain as originally entered in the agreement. If at anytime, BHEL supplies materials other than those specified in the agreement at the request of the contractor for use on work, they will be charged at the market value prevailing at the time of supply or issue rate plus 12.5% whichever is greater.
2. The tenderer shall examine closely the CPWD Detailed Standard Specifications kept in AGM (REP)'s Office and also the relevant clauses of the Standard Preliminary Specifications before submitting his tender unit rates which shall 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 and additional Specifications and all the documents which form part of the agreement to be entered into by the accepted tenderer.
3. Each tenderer must also send a certification of income Tax Verification from the appropriate income Tax Authority in the form prescribed therefore.

In the case of proprietary or partnership firm it will be necessary to produce the certificate aforementioned for the pre-proprietor or Proprietor and for each of the partners as the case may be.

If a certificate has already been produced by the tenderer during the calendar year in which the tenderer is made in respect of a previous tender, it will be sufficient if particulars regarding the previous occasion on which the certificate was produced are given.

All tenders received without a certificate as aforementioned will be summarily rejected.

4. Every tenderer is expected before quoting his rates, to inspect the site of the proposed work. He should also inspect the quarries, and satisfy himself about the quality.

And availability of materials. The best class of materials shall be used on the 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 his tender notice or as required by the AGM(REP) having jurisdiction for the time being over the work should have the due approval before the supply to site of work in begun. Attention of the contractor is directed to the Standard 'Preliminary Specification' regarding payment of seignior age, tools etc.

5. Time shall be considered as essence of the contract. The rate of progress as indicated in Annexure – C is required to be maintained. Date of commencement of this programme will be the date on which the site (or premises) is handed over to the contractor.

6. The tenderer should quote specific rates for each item in the schedule, and the rates should be in rupees and paisa. The units and rates should be written both in words and figures.

The schedule accompanying the tender shall be written legibly and free from erasure, over writings or conversion of figures Correction-where unavoidable should be made by crossing out, initialing, dating and rewriting, No alteration which is made by the tenderer in the agreement form, the conditions of agreement, the drawing or specifications, accompanying the same will be recognised; and if any such alterations are made the tender will be void.

7. Rates quoted shall include all taxes, octroi, transport etc complete.
8. BHEL's General Conditions of Contract as enclosed shall apply for this work.
9. Income Tax will be deducted on the work as per the direction of Income tax department.
10. Sales Tax will be deducted on the works as per the direction of Sales Tax department.

**CONTRACTOR (S)**

**ISSUING OFFICER**

## 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 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 kept 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.

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

Signature of Contractor (S)

Address:

Exemption from payment of EARNEST MONEY.

I/We agree that should the BHEL decide to forfeit earnest money as aforesaid, unless, a sum equal to earnest money mentioned above is paid by us forthwith, the BHEL may as its option, it out of the deposit and in the event of deficiency, out of any other moneys due to me/us or otherwise.

\_\_\_\_\_

Witness \_\_\_\_\_

Signature \_\_\_\_\_

In the capacity  
Of \_\_\_\_\_

Duly authorised to sign

The tender on behalf of

(in block capitals):

Postal Address \_\_\_\_\_

\_\_\_\_\_

Telegraphic Address \_\_\_\_\_

\_\_\_\_\_

Telephone No. \_\_\_\_\_

A G R E E M E N T

This agreement made this day the \_\_\_\_\_ of \_\_\_\_\_  
\_\_\_\_\_ between Bharat Heavy Electricals Ltd., having its registered Office at  
New Delhi, Unit: Corporate Research & Development Division, Vikas Nagar, Hyderabad-500 093  
(hereinafter called the First Party) of one part and \_\_\_\_\_ (hereinafter called the  
contractor) of second part.

Where as the first party is desirous of \_\_\_\_\_

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(name of work) at Site at Vikasnagar, Hyderabad – 500 093 of Bharat Heavy Electricals Limited,  
Corporate Research & Development Division, situated at about 9 KMs West of Secunderabad City,  
more particularly described in the Schedule including drawings and specification attached herewith.

Whereas in pursuance of the said contractor's tender being accepted, the first party has  
decided to give the aforesaid work to the said contractor.

Where as the said contractor has agreed to execute the assigned work subject to the  
conditions herein contained in these presents and the works shown upon the said drawings and  
specifications at the approved rates embodied in schedule – A (bill of quantities) attached herewith.

And whereas the contractor has agreed to the retention by the first party of the Earnest Money  
Deposit of Rs.1,00,000.00 paid by him when he submitted his tender as part of the security for the  
due fulfillment of the contract to the satisfaction of the first party.

And whereas the contractor has also pursued the copy of the CPWD standard specifications and its  
Addenda volume, BHEL General Conditions of Contract, thereto maintained in the AGM(REP)  
Office and is bound by all the standard Specifications for items of work described by a standard  
specifications number 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 Specification and  
such other conditions as are contained in all the specification and such other conditions as are  
contained in all the specification 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 time of completion as  
mentioned in the Tender Notice.

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

Now its hereby agreed as follows:

1. That the contract shall come into force with retrospective 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 waival of the conditions here to contained in these presents and the liability of the contractor either of part of future compensation shall remain unaffected.
3. That not withstanding anything mentioned earlier by either party, only the conditions included in the agreement shall prevail.
4. That the expenses of completing and stamping the agreements shall be paid by the contractor.
5. The contractor will be responsible for complying with the statutory provisions under various Labour Acts such as workers compensation Act, Minimum wages Act, PF, ESI contributions etc., in case BHEL R&D, as a principal has to pay an amount to any agency for non-fulfillment of any of the provisions of the above referred Acts, I/we authorise BHEL to deduct the amount from my/our bills or I/we will pay the amount to BHEL R&D.

In witness there of the parties have respectively set their signatures in the presence of:

Witness: 1)

2)

Date \_\_\_\_\_

SIGNATURE OF THE CONTRACTOR

For and on behalf of,  
Bharat Heavy Electricals Limited

ACCEPTING AUTHORITY

BHARAT HEAVY ELECTRICALS LIMITED  
CORP RESEARCH & DEVELOPMENT DIVN  
VIKAS NAGAR :: HYDERABAD 500 093

SCHEDULE.A

**Name of the work:** Construction of control room for Wind Diesel SPV power plant Kadvakallu, Ananthapur district.

Sno	Description of Item of work	Quantity Unit	R A T E I N Figures Words	Amount
1	Surface dressing of the ground including removing vegetation and inequalities not exceeding 150mm deep and disposal of rubbish, lead upto 50m. and lift upto 1.5m. in all kinds of soils.(2)	2500 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.(3)	128.57 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 1.5 m but not exceeding 3.0 m including getting out the excavated soil and disposal of surplus earth as directed within a lead of 50 m in kind of soil[17].	8.38 CU.M		
4	Excavation in hard rock or breaking of boulders by only chiseling using necessary machinery, plant required in all depths [payment will be made on the basis of stack measurement duly deducting 40% voids][4]	5.00 CU.M		
5	Supply and filling with morrum brought from outside including Laying in layers not exceeding 200mm in depth, watering and ramming and cosolidating each deposited layer.(12)	101.24 CU.M		

- 6 Filling with available excavated earth 42.43 CU.M  
[excluding rock] in trenches, plinth, sides of foundations etc. in layers not exceeding 200 mm in depth, consolidating each deposited layer by ramming & watering lead up to 50m & lift up to 1.5m [10]
- 7 Inter-carting of surplus excavated earth 60.94 CU.M  
by mechanical transport including loading unloading spreading etc., complete within 2 km lead.[13]
- 8 Supplying and stacking of Chlorpyri 40 Ltr.  
phos/Lindane emulsifiable concentrate of 20% in sealed containers to the site [19]
- 9 Diluting & injecting chemical emulsion 108.36 SQ.M  
for pre-constructional anti-termite treatment & creating chemical barrier under and around the column pits, top surface of plinth filling, junction of wall & floor, expansion joints, surroundings of pipe & conduits etc, complete [plinth area of building at ground floor only shall be measured] with chlorpyriphos emulsifiable concentrate 20% with 1% concentration.[14]
- 10 Providing & laying in position cement 28.07 CU.M  
concrete of mix 1:4:8 [1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size] excluding cost of centering, shuttering – all works up to plinth level. [23]
- 11 Providing & laying in position cement 0.73 CU.M  
concrete 1:2:4 [1 cement: 2 coarse sand: 6 graded stone aggregate 20 mm nominal size] excluding the cost of centering and shuttering upto floor five level.[21]

- 12 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 without impairing strength and durability as per directions of Engineer in charge in Footings, bases of columns, up to plinth levels.(26) 5.97 CU.M
- 13 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 & struts etc., complete in all floors. (31) 6.21 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 without 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. (32) 32.29 CU.M

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| 15 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 & Machine foundations. (48)                                     | 19.08 CU.M  |
| 16 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. (49)                      | 100.19 SQ.M |
| 17 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. (50) | 177.97 SQ.M |
| 18 Providing centring and shuttering including propping, strutting, etc. and removal of form work after a specified time as directed the engineer-in charge ( 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. (52)                               | 136.98 SQ.M |
| 19 Providing centring and shuttering including strutting, propping, etc & removal of form work after specified period as directed by the Engineer in charge (Extent possible usage of wood has to be avoided in the construction activities using only steel shuttering for Weather shade, chajjas , Cobels etc., including edges in all floors. (46)                 | 15.66 SQ.M  |

- 20 Reinforcement for RCC work including fabrication, cutting, bending binding & placing steel in position etc. including cost of gauge MS annealed binding wire in all floors.[57] 200.00 KG
21. 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. TOR / COLD TWISTED BARS.(58) 4669.11 KG.
- 22 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.(62) 59.07 CU.M
- 23 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. (67) 32.08 CU.M
- 24 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 MS rods of 6mm dia for every 5<sup>th</sup> coarse etc. but excluding the cost of MS rods including cost & conveyance of materials & labour charges in all floors. [68] 68.76 SQ.M
- 25 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.(71) 0.209 CU.M

- 26 Providing & fixing 35mm thick second class Indian teakwood glazed shutters with 5 mm thick stained/itching glass with necessary teakwood beading, supply & fixing of MS oxidized butt hinges 100 x 58 x 1.9 mm size 3 nos. to each shutter fitted with suitable necessary MS nettle fold screws, etc. complete including the cost of all materials & labour etc. for double or single leaf shutters. [76] 2.36 SQ.M
- 27 Providing & fixing ISI marked 35mm thick flush door shutters with non-decorative type core of black board construction with frame of first class hard wood and well matched first class commercial ply on both faces of shutter including fixing of ISI marked MS.oxidised butt hinges 100 x58 x1.9mm. 3nos.to each shutter fitted with suitable nettle fold screws , etc , complete, for double/single leaf shutters.(77) 7.28 SQ.M
- 28 Providing & fixing 40x3 mm flat iron hold fast 400mm long including fixing with 10 mm dia bolts, nuts concrete block 30x10x15cm 1:3:6 [1 cement: 3 coarse sand: 6 stone aggregate 20 mm nominal size].[78] 30.00 EACH
- 29 Providing &fixing aluminium sliding door bolt anodized transparent/dyed to required colour/shade with required no. of nettle fold screws etc. size 300mm long x16mm dia. [79] 5.00 EACH
- 30 Providing & fixing aluminium tower bolts anodized transparent or dyed to required colour or shade with necessary screws etc. complete. Size 200mm long x 10mm dia.[80] 10.00 EACH
- 31 Providing & fixing aluminium handles anodized transparent/dyed to required colour/shade with necessary screws, complete of size 125 mm.[81] 10.00 EACH

- 32 Providing & fixing aluminium hanging floor door stopper anodized transparent/dyed to required colour/shade with necessary screws etc. complete Twin rubber stopper.[82] 5.00 EACH
33. Providing & fixing mild steel grills of required pattern and design with MS flats, square of sound bars etc.complete including welding, cleaning, fixing in wooden frames or in openings with holdfasts etc. complete. 84.38 kg
- 34 Supply, fabrication & erection of structural steel welded in built up sections, Trusses & framed work including cutting hoisting, fixing in position & applying a primer coat of approved steel primer including cost of all materials, labour etc., complete.(117) 1145.2 Kg
- 35 Providing and fixing steel casement windows&vents,fixed lover ofstandard rolled steel sections joints mitred and electrically flash welded with 12x 3mm lugs,100mm long embedded in cement concrete 1:3:6 ( 1 cement : 3 coarse sand :6graded stone aggregate 20mm nominal size) blocks 150 x100 x100mm or with wooden plugs &screws or with bolts and nuts as required and glazed with 4mm thick clear glass and fixing with 10mm anodised aluminium metal beading of approved shape & section with cadmium plated machine screws ,rubber around the glass,including fixing of m.s.oxidised pegstays and handles of heavy quality (samples kept in office) one each on openable shutter, openable shutters are welded to frame with 3 nos.of friction type through hinges with guard bars of 10 mm square welded at 100mm intervals horizontally including applying of 2 coats of approved steel primer and 2 coats of butumastic paint to the surface touching masonry or concrete etc. as per drawing.(119) 18.00 SQ.M

36. Providing and laying 10 mm thick ANTISKID Vitrified ceramic tile flooring laid over cement mortar 1:6 [1 cement: 6 coarse sand] of 40 mm thick & applying cement slurry of 6.4 kg/sq.m before laying tiles. Tiles should be joined with matching colour grout compound. Cleaning the finished surface with acid wash etc. complete. 6.00 SQ.M
- 37 Providing and Laying 600x600 mm Glossy Vitrified tile flooring laid over cement mortar 1:6 [1 cement: 6 coarse sand] of 40 mm thick and applying cement slurry of 6.4 kg/sq.m. Tiles should be joined with matching colour grout compound. Cleaning the finished surface with acid wash etc., complete.[685] 52.80 SQ.M
- 38 52 mm thick flooring with 'Hardcrete' concrete hardener topping under layer 40 mm thick cement concrete 1:2:4 (1cement: 2coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick hardcrete cement cement hardener mix 1:2 [1 cement hardener mix: 2 stone aggregate 6 mm nominal size] by volume with which hardcrete hardening compound of Snowcem India Ltd or equivalent is mixed @ 2 litre hardcrete per 50 kg of cement including cement slurry, but excluding the cost of nosing of steps etc. complete. Chemical hardener can be hardcrete or its equivalent chemical of approved make mixed as per the manufacture specifications. [699] 42.00 SQ.M
- 39 Providing and laying ceramic glazed tiles conforming to IS 13753 of minimum thickness 5 mm of approved make on wall face on plaster of 12mm thick cement mortar 1:3 (1 cement : 3 fine sand ) tiles are to be jointed with grey cement slurry mixed with a matching pigment or special grout compound to match the shade of tile and polishing the finished surface with acid wash etc., complete. (158) 22.05 SQ.M

- 40 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 ) of sponge finish in all floors.(167) 633.20 SQ.M
- 41 Providing & applying two coats of Birla lappum over plaster surface to make the surface even & smooth & sand papering two times to get even & smooth surface including curing etc., complete.[689] 120.00 SQ.M
- 42 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 "CERA PROOF IWP" liquid integral water proofing liquid(of CERA -CHEM) or equivalent make approved by the engineer in charge .This has to be added 200 ml for bag of cement.Applying a coat of "CERA LATEX SBR"( of CERA-CHEM) sterene butadine rubber with water 1:1 and added with plain cement 2 Parts & brush applied on the concrete surface before impervious plaster. All the corners of slab Coloumns & parapet are to be rounded in all floors. (656) 119.21 SQ.M.
- 43 Pointing on stone work with cement mortar 1:3 (1cement :3 fine sand) in ruled/ raised pointing in all levels and heights . (174) 33.75 SQ.M
- 44 18 mm thick sunk/raised mortar bands in cement mortar 1:4 [1 cement:4 fine sand] [177] 75.4 R.M.
- 45 Distempering with oil bound washable distemper of approved brand & manufacture to give an even shade on new work (2 or more coats) over and including a priming coat with cement primer.(168) 376.39 SQ.M

- 46 Applying and finishing with water proofing cement paint of approved brand and manufacture of required shade to give an even shade on over a coat of cement primer for new work two or more coats including cost of all materials & labour charges.(182) 207.00 SQ.M
- 47 Reinforced cement concrete 1:5:10 [1 cement: 5 coarse sand: 10 graded stone aggregate 20mm nominal size] excluding cost of centring & shuttering & reinforcement in columns in all floors. 1.04 CU.M
- 48 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. (183) 85.04 SQ.M
- 49 Providing & fixing Mortice lock of approved make & design.[710] 5.00 EACH
- 50 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 24x32x3000mm at every 600mm C/C, CROSS Tee of size 24x25x600 mm at every 600mm C/C max and 19x19x3000mm and suspending the grid using 2mm GI wire and 6mm nylon rawalplug at every 1200mm intervals at the Main Tee and laying MINERAL FIBER ACOUSTIC-ceiling boards (Fine fissured) of M/s Armostron 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 34DB, thermal conductivity of  $K=0.052$  w/m, Weight of 3.5kg/Sq.mtr. and humidity resistance of RH-95 of size 600mm x 600mm x 15mm over the formed grid.(695) 48.00 Sq.m

- 51 Providing & fixing Under deck insula- 48.00 SQ.M.  
 tion below roof slab in the form of 50mm  
 thick TF quality expanded polystyrene  
 sheet having density of 16 kg/cu.m. with  
 non-flammable cold sticking compound/  
 blown bitumen grade 85/25. The EPS  
 sheet shall be tied with lacing wire and  
 GI washers made of 24 G GI sheet to  
 the 10 mm dia and 25mm long Rawal  
 Plugs/screws fixed to the roof before  
 sticking the EPS sheets and secure  
 tightly to the under side of roof.
- 52 Providing and fixing white/colour 1.00 EACH  
 vitreous water closet (orissa type)  
 with 100mm sand cast iron or vitre-  
 ous p or s trap, 12.5 litres high  
 level flushing cistern (approved  
 make) with fittings, C.I. brackets,  
 32mm diameter flush pipe with fit-  
 tings & clamps 20mm over flow pipe  
 with specials and mosquito proof  
 coupling of approved municipal design  
 GI chain & pull including painting  
 of cistern & fittings wherever  
 required of size 580 x 440 mm.
- 53 Providing and fixing white / colour 1.00 EACH  
 vitreous wash basin with C.I.brack-  
 ets painted white 15mm C.P.brass  
 pillar taps, C.P .brass chain with  
 rubber plug, 32mm C.P. brass waste  
 of standard pattern, 32mm diameter  
 C.P. brass trap and unions complete,  
 including cutting and making good  
 the wall wherever required flat  
 back wash basin size 550 x 400 mm  
 with one 15mm n.b.C.P. brass pillar  
 tap.(274)

<p>54 Providing and fixing white vitreous china flat back half stall urinal of 580 X 380 X 350mm with white PVC automatic flushing cistern, Parry-ware/Hindware/Seabird/Oreint(Coral) with fittings, standard size C.P. brass flush pipe spreaders with unions and clamps(all in C.P.brass) with waste fitting as per IS :2556, C.I. trap with outlet grating and other couplings in C.P. brass including painting of fittings and cutting and making good the walls and floors wherever required with Three half stall urinals with 10 liter PVC Automatic flushing cistern.(280)</p>	1.00 EACH
<p>55 Providing &amp; fixing 600x450mm size superior quality glass mirror ( Of approved quality) complete plastic frame of standard pattern with cardboard backing with arrangements to hang/fix to wall face.(276)</p>	1.00 EACH
<p>56 Providing and fixing C.P. brass towel rail 600 x 20 mm size complete with brackets fixed to wooden cleats with C.P. brass screws.(277)</p>	1.00 EACH
<p>57 Providing and fixing soil, waste and vent pipes cast iron S &amp; S pipes of 100mm diameter.(248)</p>	5.00 R.M
<p>58 Providing and fixing soil, waste and vent pipes cast iron S &amp; S pipes of 75mm diameter.(247)</p>	10.00 R.M
<p>59 Providing and fixing sand cast iron trap of self cleaning design with sand cast iron screwed down / hinged grating without vent arm complete &amp; making good the walls and floors: 100mm inlet and 75mm outlet.(267)</p>	3.00 EACH
<p>60 Providing and fixing G.I. pipes class 'b' with G.I fittings required on for internal work. 15mm n b.(283)</p>	30.00 R.M.
<p>61 Providing and fixing G.I pipes class 'b' with G.I fittings required on for internal work.20mm n.b .(284)</p>	30.00 R.M.

- 62 Providing and fixing G.I pipes class 'b' with G.I fittings required on for internal work of 25 mm n b.(285) 50.00 R.M.
- 63 Providing and fixing C.P brass stop cock of approved quality 15mm nominal bore.(297) 5.00 EACH
- 64 Providing and fixing CP brass bib cock of approved quality 15mm nominal bore .(303) 5.00 EACH
- 65 Providing & fixing C.P. brass full way valve with C.I. wheel of approved quality(screwed end);25 mm n b.(311) 4.00 EACH
- 66 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.(342) 150.00 R.M.
- 67 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.(345) 4.00 EACH
- 68 Constructing brick masonry manhole with locally available best quality of bricks in cement mortar 1:5 [1 cement: 5 fine sand] RCC top slab with 1:2:4 [1 cement: 2 coarse sand:4 graded stone aggregate 20mm nominal size], foundation concrete 1:4:8 [1 cement: 4 coarse sand: 8 graded stone aggregate 40mm 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& 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 type design. Inside size 90x80 cm & 45 cm deep including C.I. cover & frame to be not less than 38 kg [cover 23 kg & frame 15 kg]. [353] 2.00 EACH

- 69 Providing laying 110mm dia UV resistant PVC SWR grade pipes(Sudhakar/Prince / Supreme) in trenches including the cost of solvents for fixing PVC pipes etc complete. (644) 60.00 R.M
- 70 Providing laying 110mm dia UV resistant PVC SWR grade pipes(Sudhakar/Prince / Supreme) in all heights including the cost of solvents for fixing PVC pipes and MS clamps. (644) 6.00 R.M
- 71 Providing and fixing 75mm dia UV resistant PVC SWR grade pipe (Sudhakar/Prince/Supreme) in all heights including the cost of Solution for fixing PVC pipes and MS clamps.(645) 6.00 R.M
- 72 Providing and fixing 110 mm dia UV resistant SWR grade PVC (Sudhakar/Prince/Supreme) Door bend in all heights including the cost of solutions for fixing PVC specials etc., complete. (646) 2.00 Each
- 73 Providing and fixing 75 mm dia UV resistant SWR grade Door bend (Sudhakar/Prince/Supreme) in all heights including the cost of solutions for fixing PVC specials etc., complete. (647) 2.00 Each
- 74 Providing and fixing 110 mm dia UV resistant SWR grade plain bend (Sudhakar/Prince/Supreme) in all heights including the cost of solution for fixing PVC specials etc., complete (648) 2.00 Each
- 75 Providing and fixing 75 mm dia UV resistant SWR grade plain bend (Sudhakar/Prince/Supreme) in all height including the cost of solution for fixing PVC specials etc. complete. (649) 2.00 Each

76 Supplying and Erection of P.V.C. 1000.00 LTS  
water tank of approved make over  
roof slab in all heights including  
transportation and handling etc,  
complete.(363)

TOTAL AMOUNT

BHARAT HEAVY ELECTRICALS LIMITED  
CORP RESEARCH & DEVELOPMENT DIVN  
VIKAS NAGAR :: HYDERABAD 500 093

SCHEDULE.A-1

**Name of the work:** Construction of Dump shed room and RCC foundations for SPV Modules and fencing all around the campus for Wind Diesel SPV power plant of BHEL (R&D) at Kadvakallu, Ananthapur district.

Sno	Description of Item of work	Quantity Unit	R A T E I N Figures Words	Amount
1	Surface dressing of the ground including removing vegetation and inequalities not exceeding 150mm deep and disposal of rubbish, lead upto 50m. and lift upto 1.5m. in all kinds of soils.(2)	664 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.(3)	129.15 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 1.5 m but not exceeding 3.0 m including getting out the excavated soil and disposal of surplus earth as directed within a lead of 50 m in kind of soil[17].	5.40 CU.M		

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| 4  | Excavation in hard rock or breaking of boulders by only chiseling using necessary machinery, plant required in all depths [payment will be made on the basis of stack measurement duly deducting 40% voids][4]   | 2.00 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.(12)  | 67.12 CU.M |
| 6  | Filling with available excavated earth [excluding rock] in trenches, plinth, sides of foundations etc. in layers not exceeding 200 mm in depth, consolidating each deposited layer by ramming & watering lead up to 50m & lift up to 1.5m [10]   | 42.62 CU.M |
| 7  | Inter-carting of surplus excavated earth by mechanical transport including loading unloading spreading etc., complete within 2 km lead.[13]  | 60.94 CU.M |
| 8  | Supplying and stacking of Chlorpyriphos/Lindane emulsifiable concentrate of 20% in sealed containers to site[19]   | 20 Ltr.    |
| 9  | Diluting & injecting chemical emulsion for pre-constructional anti-termite treatment & creating chemical barrier under and around the column pits, top surface of plinth filling, junction of wall & floor, expansion joints,surroundings of pipe & conduits etc, complete [plinth area of building at ground floor only shall be measured] with chlorpyriphos emulsifiable concentrate 20% with 1% concentration.[14] | 55.65 SQ.M |
| 10 | Providing & laying in position cement concentrate of mix 1:4:8 [1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size] excluding cost of centering, shuttering – all works up to plinth level. [23]   | 22.03 CU.M |

- 11 Providing & laying in position cement concrete 1:2:4 [1 cement: 2 coarse sand: 6 graded stone aggregate 20 mm nominal size] excluding the cost of centering and shuttering upto floor five level.[21] 16.31 CU.M
- 12 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 without impairing strength and durability as per directions of Engineer in charge in Footings, bases of columns, upto plinth levels.(26) 7.66 CU.M
- 13 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. (31) 10.21 Cu.M

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| <p>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 &amp; Water proofing of the structure without 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.(32)</p> | <p>19.33 CU.M</p>  |
| <p>15 Providing centring and shuttering including strutting, propping, etc. &amp; 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 &amp; Machine foundations.(48)</p>  | <p>37.20 CU.M</p>  |
| <p>16 Providing centring and shuttering including strutting, propping, etc. &amp; 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 construction activities) only using steel shuttering for columns, pillars, posts and struts in all floors.(49)</p>  | <p>152.23 SQ.M</p> |
| <p>17 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.(50)</p>  | <p>110.86 SQ.M</p> |

- 18 Providing centring and shuttering including propping, strutting, etc, and removal of form work after a specified time as directed the engineer-in charge ( 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. (52) 62.51 SQ.M
- 19 Providing centring and shuttering including strutting, propping, etc & removal of form work after specified period as directed by the Engineer in charge (Extent possible usage of wood has to be avoided in the construction activities using only steel shuttering for Weather shade, chajjas, Cobels etc,. including edges in all floors. (46) 32.824 SQ.M
- 20 Reinforcement for RCC work including fabrication, cutting, bending binding & placing steel in position etc. including cost of gauge MS annealed binding wire in all floors. [57] 200.00 kg
21. 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. (58) 3905.65 KG.
- 22 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. (62) 43.66 CU.M
- 23 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. (67) 14.28 CU.M

- 24 Half brick masonry in cement mortar 12.00 SQ.M  
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 MS rods of 6mm  $\Phi$  for every 5<sup>th</sup> coarse etc. but excluding the cost of MS rods including cost & conveyance of materials & labour charges in all floors. [68]
- 25 Providing wood work in frames of 0.051 CU.M  
doors, windows & clerestory windows and other frames, wrought framed and fixed in position in second class Indian teak wood.(71)
- 26 Providing & fixing 35mm thick second 2.36 SQ.M  
class Indian teakwood glazed shutters with 5 mm thick stained/itching glass with necessary teakwood beading, supply & fixing of MS oxidized butt hinges 100 x 58 x 1.9 mm size 3 nos. to each shutter fitted with suitable necessary MS nettle fold screws, etc. complete including the cost of all materials & labour etc. for double or single leaf shutters. [76]
- 27 Providing & fixing ISI marked 35mm 17.70 SQ.M  
thick flush door shutters with non-decorative type core of black board construction with frame of first class hard wood and well matched first class commercial ply on both faces of shutter including fixing of ISI marked MS.oxidised butt hinges 100 x58 x1.9mm. 3nos.to each shutter fitted with suitable nettle fold screws , etc , complete, for double/ single leaf shutters.(77)
- 28 Providing & fixing 40x3 mm flat iron 6.00 EACH  
hold fast 400mm long including fixing with 10 mm dia bolts, nuts concrete block 30x10x15cm 1:3:6 [1 cement: 3 coarse sand: 6 stone aggregate 20 mm nominal size].[78]

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| 29 Providing & fixing aluminium sliding door bolt anodized transparent/dyed to required colour/shade with required no. of nettle fold screws etc. size 300mm long x 16mm dia. [79]  | 1.00 EACH  |
| 30 Providing & fixing aluminium tower bolts anodized transparent or dyed to required colour or shade with necessary screws etc. complete. Size 200mm long x 10mm dia.[80]   | 2.00 EACH  |
| 31 Providing & fixing aluminium handles anodized transparent/dyed to required colour/shade with necessary screws, complete of size 125 mm.[81]  | 2.00 EACH  |
| 32 Providing & fixing aluminium hanging floor door stopper anodized transparent/dyed to required colour/shade with necessary screws etc. complete Twin rubber stopper.[82]  | 1.00 EACH  |
| 33. Providing & fixing mild steel grills of required platform and design with MS flats, square of sand bars etc.complete including welding, cleaning, fixing in wooden frames or in openings with holdfasts etc. complete.  | 84.38 kg   |
| 34 Supply, fabrication and erection of structural steel work in single section angles fixed without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. As per drawing enclosed including 3 Nos doors.(117) | 2409.96 Kg |

- 35 Providing and fixing steel casement windows&vents, fixed lower of standard rolled steel sections joints mitred and electrically flash welded with 12x 3mm lugs, 100mm long embedded in cement concrete 1:3:6 ( 1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) blocks 150 x100 x100mm or with wooden plugs & screws or with bolts and nuts as required and glazed with 4mm thick clear glass and fixing with 10mm anodised aluminium metal beading of approved shape & section with cadmium plated machine screws, rubber around the glass, including fixing of m.s. oxidised pegstays and handles of heavy quality (samples kept in office) one each on openable shutter, openable shutters are welded to frame with 3 nos. of friction type through hinges with or without gaurd bars welded at 100mm intervals horizontally including applying of 2 coats of approved steel primer and 2 coats of butumastic paint to the surface touching masonry or concrete etc. as per drawing. (119) 24.36 SQ.M
- 36 Providing cement concrete flooring mix. 1:2:4 (1 cement: 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 40mm thick flooring. (146) 61.00 SQ.M
- 37 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 ) of sponge finish in all floors. (167) 368.66 SQ.M

- 38 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 "CERA PROOF IWP" liquid integral water proofing liquid(of CERA -CHEM) or equivalent make approved by the engineer in charge .This has to be added 200 ml for bag of cement.Applying a coat of "CERA LATEX SBR"( of CERA-CHEM) sterene butadine rubber with water 1:1 and added with plain cement 2 Parts & brush applied on the concrete surface before impervious plaster. All the corners of slab Coloumns & parapet are to be rounded in all floors.(656) 59.29 SQ.M.
- 39 Pointing on stone work with cement mortar 1:3 (1cement :3 fine sand) in ruled/ raised pointing in all levels and heights . (174) 22.50 SQ.M
- 40 18 mm thick sunk/raised mortar bands in cement mortar 1:4 [1 cement:4 fine sand] [177] 59.68 R.M.
- 41 Distempering with oil bound washable distemper of approved brand & manufacture to give an even shade on new work (2 or more coats) over and including a priming coat with cement primer.(168) 99.34 SQ.M
- 42 Applying and finishing with water proofing cement paint of approved brand and manufacture of required shade to give an even shade on over a coat of cement primer for new work two or more coats includig cost of all materials & labour charges.(182) 185.44 SQ.M
- 43 Reinforced cement concrete 1:5:10 [1 cement: 5 coarse sand: 10 graded stone aggregate 20mm nominal size] excluding cost of centring & shuttering &reinforcement in columns in all floors. 0.62 CU.M

44 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.  
(183) 58.47 SQ.M

45 Providing & fixing chain link mesh 300.00 SQ.M.

TOTAL

### SPECIAL CONDITIONS OF CONTRACT

THAT the contractor further under takes to maintain the following registers as per prescribed proforma.

- a) Register of workmen (Form xiii)
- b) Muster Roll (Form xvi)
- c) Wages Register (Form xvii)
- d) Leave Register
- e) Register of Over time and deductions

2 THAT the company after proper checking of the bills submitted by the said contractor will pay to him during the progress of the said work, at the said contract rates and agreed terms of payment, a sum as determined by the company in respect of the work executed by the contractor.

3 THAT the contract shall come into force with retrospective effect from..... the date on which the letter accepting the tender (letter of Intent) has been communicated to the said contractor.

4 THAT whenever under this contract or otherwise any sum of money shall be recoverable from or payable by the contractor the same may be deducted in the manner as set out in the conditions of contract as aforesaid.

5 THAT all charges on account of Octroi, Terminal and Sales-Tax other duties on materials obtained for the works shall be borne by the said contractor.

5a) It is also agreed between parties that the second party to the contract will ensure adherence to all statutory requirements under the State Rules in respect of service conditions for the employment of contract labour. The second party also hereby undertake to get himself licensed from the appropriate authority as a contractor in accordance with A.P. Contract Labour (R&A) Rules, 1971. It is understood by the second party that for this agreement to be effective, the prime condition is his fulfilling the condition being licensed as a contractor under the state Legislation and the continuance of the agreement is subject to his sustained ensurance of the agreement is subject to his sustained endurance of fulfillment of all statutory requirements including those contained in Labour Commissioner's Notification No.8385/79 in respect of employment conditions for contract labour and payment of wages as specified by the State Government. Further as and when there are changes in the service conditions/wages rates for contract labour, as notified by the State Labour Department, the same will be implemented even if the said modification is given at any time after the conclusion of the Agreement. Any violation in respect of absorbance of statutory requirement under the contract Labour (Regulation and Abolition) Act 1970, will make the Agreement liable for immediate termination in regard to paid holidays, the contractor will observe BHEL list of holidays as notified from time to time.

- b) The Contractor shall ensure abidance by all the labour laws especially including contract Labour (R&A) Act, payment of wages, Workmen's Compensation Act, Minimum wages Act, as amended from time to time.
  - c) The contractor will obtain a separate provident fund code for his establishment and ensure implementation of provident fund Act in the case of all eligible employees and in the process shall conform to all the stipulated conditions under the PF Act and rules framed there under.
  - d) Notwithstanding clause ( C ) above in case of any financial loss incurred by the company on account of the contravention of the provident fund regulations or any regulation of rules touching the same by the contractor, the contractor shall undertake to indemnify the company to the extent of the loss incurred by the company.
6. THAT it is agreed between the parties that the non-exercise of any of the powers conferred on the Authorities of the company, will not in any manner constitute waiver of the conditions here to contained in those presents and the liability of the said contractor either of past or future compensation shall remain unaffected.
7. Any claim or dispute arising under the terms of this document shall only be enforced or settled at any courts located at Hyderabad / Secunderabad / Ranga Reddy only.
8. THAT the expression BHEL wherever occurring means THE BHARAT HEAVY ELCETRICALS LIMITED, Corporate R&D Division Hyderabad-500 093 (Andhra Pradesh)

CONTRACTOR (S)

ACCEPTING OFFICER