



**BHARAT HEAVY ELECTRICALS LIMITED  
CENTRALISED STAMPING UNIT & FABRICATION  
PLANT  
Jagdishpur**

**TENDER FOR EXECUTION OF MISCELLANEOUS CIVIL  
AND ELECTRIFICATION WORKS FOR OPERATION OF  
CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT  
JAGDISHPUR**

**Tender Enquiry No: BHE/CSU/CVL/18**

**SECTION III**

**SPECIAL CONDITIONS OF CONTRACT**

**BHARAT HEAVY ELECTRICALS LIMITED  
(A GOVERNMENT OF INDIA UNDERTAKING)  
CSU & FP  
Industrial Area  
Jagdishpur (UP) 227817**

**SECTION-III****SPECIAL CONDITIONS OF CONTRACTS****1. INTRODUCTION**

- 1.1. The terms and conditions mentioned in this section are in addition to what are stated in Section – II (General Conditions of Contract) of the tender document. In case of any contradiction between the terms and conditions given in Section - II and those specified in this Section- III, the terms and conditions of this Section–3 shall prevail.

**2. SITE LOCATION**

- 2.1. Bharat Heavy Electricals Ltd. is setting up a manufacturing plant at Jagdishpur; district Sultanpur UP, for production of fabricated components. New facility will be located adjacent to the existing Insulator Plant (IP) and upcoming centralized stamping unit (CSU) of BHEL. The site area is about 31.6 Acre. The site location is about 80 KM south east of Lucknow on Lucknow Varanasi highway and approx 55 KM from Sultanpur and 210 Km from Varanasi. The nearest Airport is at Lucknow.

**3. SCOPE OF WORK :**

- 3.1. The scope of work will broadly cover construction of the following buildings / facilities:
- Civil, electrification and architectural works of CSU's operation staff offices , toilets in plant area.
  - Fabrication, erection and painting of main gates
  - Balance flooring in main plant after the erection of machines.
  - Balance painting work
  - Essential electrification of main plant
  - Foundation for weigh bridge.
  - Other miscellaneous civil ,architectural and electrification works required for smooth operation of CSU plant Phase-I production.
  - Any other infrastructural work and building within the BHEL premises / BHEL land at Jagdishpur Industrial area.
  - Associated water supply distribution and sewerage system of toilets

- 3.2. All material including cement , steel , light fittings etc is to be supplied by the contractor as per BOQ items.
- 3.3. The bidder's scope shall broadly include construction of all the civil, structural , electrification & architecture works related to buildings and foundations which includes earth work, plain & reinforced cement concrete, reinforcement, scaffolding, formwork, masonry work, floor finishing, skirting, plastering, painting, roof finishes, doors / windows / ventilators /rolling shutters, internal & external plumbing, water supply, water proofing, drainage & sewerage, metal cladding, fencing, roads, MS embedment etc.; as well as supply of all materials, consumables, labour, tools and plants, transportation and storage, sample testing etc.; all complete as per BOQ, specifications and drawings.
- 3.4. In addition to above the bidder's scope shall also cover submission of drawings/designs details/ brochures / technical write ups / manufacturer's test certificates and field test results etc, as applicable, along with source of supplies for the bought out items pertaining to his scope of supplies and execution for the following –
- a) Bar bending schedule of reinforcement steel
  - b) Shutterings details including propping, scaffolding etc.
  - c) Aluminium sections and sectional details
  - d) Cement, sand ,aggregates, bricks etc
  - e) Plasticizers, additives
  - f) Tiles and misc. floorings
  - g) Water supply and sanitary items
  - h) Water proofing items
  - i) Any other item as per BOQ and specifications.
- 3.5. The specific technical requirements for work to be executed under this Contract shall be as per Section V. **The applicability of specifications shall be limited to the scope of civil works only as specified in the BOQ.** Mechanical /Electrical items indicated are for general information only.
- 3.6. The scope of work will also include such other related works although they may not be specifically mentioned above and all such incidental items not specified but reasonably implied and necessary for completion of the job as a whole and as desired and as directed by the engineer. The detail scope of work covered above is not a comprehensive list of items of work involved. The detail scope of work may vary considerably depending on the actual construction requirements.
- 3.7. Unless otherwise specified, the work to be provided by the contractor for the items mentioned in the “Bill of Quantities” shall include but not be limited to the following.
- a) Furnishing all labour, materials, supervision, construction plans, equipment, supplies, transport, to and from the site, fuel, electricity, compressed air, water, transit and storage insurance and all other incidental items and

temporary works not shown or specified but reasonably implied or necessary for the proper completion, maintenance and handling over the works, except in accordance with the stipulations laid down in the contract documents and additional stipulations as may be provide by the engineer during the course of works.

- b) Furnishing samples of all materials required by the engineers for testing / inspection and approval for use in the works. The engineer for final incorporation in the works may retain the samples.
  - c) Furnishing test reports for the products used or intended to be used, if called for the specifications or if so desired by the engineer.
  - d) Giving all notices, paying all fees, taxes etc., in accordance with the general conditions of contract, that is required for all works including temporary works.
  - e) Arranging manufacturer's supervision for items of work done as per manufacturer's specifications when so specified.
  - f) Carrying out topographic survey of required area and establish levels and coordinates at suitable intervals from existing grid levels and coordinates furnished by the owner established bench marks, setting out the locations and levels of proposed structures, constructions and marking of reference pillars and other identification works etc., The contractor shall provide BHEL such a assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used.
  - g) Providing all incidental items not shown or specified but reasonably implied or necessary for the successful completion of the work in accordance with contract.
  - h) Make necessary storage arrangement / sheds of adequate capacity to store cement within his normal scope without any extra cost to BHEL.
  - i) Arrange necessary T & P and IMTEs for carrying out the work. A list of such T & P and IMTEs required for such work as a minimum is given in **Annexure SCC-I and SCC-II.**
- 3.8. BHEL is ISO 9001-2000, ISO 14001-1996 and OHSAS 18001-1999 certified company. The contractor in all respects shall organize his work, systems, environment, process control documentation, tools, plant, inspection, measuring and testing equipments etc. as per instructions of Engineer.
- 3.9. The contractor shall also comply with applicable legislation and regulations with regards to Health, safety and environmental aspects for minimizing risk arising from occupational health, safety hazards, controlling pollution and wastage.
- 3.10. BHEL and their Consultant may depute their representative for checking and supervision of important stages of work. The contractor shall be required to provide all facilities for inspection of works at no extra cost to BHEL. Any defect in

quality of work or deviations from drawings / specifications pointed out during such inspection shall be made good by the contractor in the same way as if pointed out by the BHEL Engineer, without any cost implication to BHEL.

#### 4. TIME SCHEDULE

- 4.1. The contractor is required to commence the work within 15 days from the date of issue of letter of intent unless BHEL decides to fix any other later date.
- 4.2. Entire work as detailed in tender specification shall be completed within **3 (Three) months**. The date of start of work shall be taken as given in Letter of Intent.
- 4.3. The start date for the above works shall be as indicated in the Annexure SCC – IV and as directed by BHEL from time to time. The Contractor shall ensure that the above major works are completed in time.
- 4.4. Contractor has to mobilise adequate resources to meet his commitments to BHEL as indicated from time to time. **In case due to reasons not attributable to the contractor, the work gets delayed and additional manpower / resources have to be mobilized so as to expedite the work to meet various milestones, same shall be done within the quoted rates as per Rate Schedule, at no extra cost to BHEL.** In the event the contractor fails to respond to these requirements, BHEL shall take appropriate actions to meet its commitments in line with the provisions of General Conditions of Contract.
- 4.5. In case due to reasons not attributable to the contractor, the work gets delayed and scheduled completion gets extended, time extension will be granted by BHEL but in no case over run compensation will be payable.
- 4.6. The work under the scope of this contract is deemed to be completed in all respects, only when all the works are carried out as per satisfaction of BHEL. The decision of BHEL on completion date shall be final and binding on the contractor.

#### 5. TAKING OVER OF WORKS BY BHEL

- 5.1. All works shall be taken over by BHEL in part or in full when it has been completed in all respects and/or can be put to use satisfactorily. The complete work under the contract shall be taken over only after completion of all punch points, pending work, rework wherever required, site clearing and reconciliation of materials.
- 5.2. The guarantee period shall start only after the complete work under the contract has been taken over by BHEL.

**6. PRICE**

- 6.1. Price quoted shall be fixed and not subject to any escalation whatsoever during the period of execution of the Contract including the extended period, if any.
- 6.2. The quoted price shall include all taxes and duties on input materials and all taxes on Contract execution including Works Contract Tax.
- 6.3. All Taxes and Duties payable as extra to the quoted price should be specifically stated in the offer. BHEL will not be liable for payment of Taxes and Duties not specifically mentioned in the offer.
- 6.4. **No price variation /over run charges** on account of any increase whatsoever, (irrespective of whether escalation is steep/ unanticipated) will be payable during the entire period of execution of Contract including extended period, if any.

**7. SALES TAX / WORKS CONTRACT TAX**

- 7.1. Sales tax on transfer of property in goods involved in works contract is applicable as per laws in force in U.P. state .The contractor shall register him self with the sales tax authorities of the state and submit proof of such registration to BHEL along with the first RA bill. Deduction of tax at source shall be made as per the provisions of law. The TDS shall be deducted from the bills of the contractor and deposited with the UP trade tax authorities. Present rate of TDS on this account is 4 % (Four percent). If UP Trade tax authorities allows compounding scheme then the tax at source shall be deducted accordingly.
- 7.2. Contractor shall get his organization registered with concerned sales tax authorities within 30 days of award of this contract. The delay on this account and delay in bringing the material shall be to contractor's account and no extension of time shall be allowed on this account. The sales tax registration for this contract shall be forwarded to BHEL. In case the contractor is already registered for sales tax with Govt. Authorities he must quote his registration no., while submitting their tender.
- 7.3. Contractor has to make his own arrangement at his cost for completing the formalities, if required, with Sales Tax Authorities, for bringing their materials, plants, and equipment at site for the execution of the work under this contract.

**8. SERVICE TAX**

- 8.1. Contractor's price/ rates shall be exclusive of service tax and cess on output services.
- 8.2. Contractor shall deposit the service tax with the concerned tax authorities, such amount will be paid by BHEL. Contractor shall submit to BHEL documentary evidence of service tax registration and remittance records of such tax immediately after depositing the tax with the concerned authorities. Contractor shall obtain prior written consent from BHEL before billing the amount towards such taxes.

- 8.3. The prevailing rate of service tax is 4.12 % (Four point one two percent) effective from 01/03/2008, inclusive of education cess and SAH education cess under works contract (composition scheme for payment of service tax) Rules, 2007

## **9. INCOME TAX**

- 9.1. Income Tax at the prevailing rate on gross value of work done and applicable surcharge and education cess shall be deducted from the running bills as per relevant rules unless exempted by the Income Tax Authorities.

## **10. NEW TAXES/ LEVIES**

- 10.1. In case the Government imposes any new tax/ levy on the output services/ goods / work after the award of work, the same shall be reimbursed by BHEL at actuals. All necessary documents as required by BHEL shall have to be provided by the contractor. However, in the event of delay in work execution solely attributable to the contractor the new taxes/ levies imposed during the delay period shall not be reimbursed to the contractor.
- 10.2. In case any tax/levy/duty etc becomes applicable after the date of bidder's offer, the bidder/ Contractor must convey it's impact on his price duly substantiated by documentary evidence in support of the same before opening of the Price Bid. Claim for any such impact after opening the price bid will not be considered by BHEL for reimbursement of tax or reassessment of offer.
- 10.3. No reimbursement on account of increase/ decrease in the rate of taxes, levies, duties etc on input goods/ services/ work shall be made. Bidder has to make his own assessment of the impact of future variation if any, in rates/ duties/ levies etc in his price bid.

## **11. MODELITIES OF TAX INCIDENCE ON BHEL**

- 11.1. Wherever the relevant tax laws permit more than one option or methodology for discharging the liability of tax/levy/duty, BHEL will have the right to adopt the appropriate one considering the amount of tax liability on BHEL as well as procedural simplicity with regard to assessment of the liability. The option chosen by BHEL shall be binding on the contractor for discharging the obligation of BHEL in respect of the tax liability to the contractor.
- 11.2. The contractor shall pay all (save the specific exclusions as enumerated in this contract) taxes, fees, misc. charges, deposits, duties, tools, royalties, commissions or other charges which may be levied on the input goods and services delivered in course of his operations in executing the contract. In case BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit.

## **12. RATE SCHEDULE CUM BOQ**

- 12.1. Contractor shall fully understand description and scope of work before quoting. The scope of work and responsibility of the contractor as mentioned under this specification shall be covered within the quoted / finally accepted rates.

- 12.2. The Tenderer shall quote the prices/rates for entire scope of work as per the rate schedule only, in part II - price bid. Conditional price bids or price bids with any deviation / clarification etc. are liable to be rejected. No cutting / erasing / over writing shall be done.
- 12.3. Quantities mentioned in the rate schedules are approximate only and liable for variation both on positive and negative sides. The tentative contract value (CV) for entire scope of work shall be calculated as per finally quoted / accepted item rates & the quantities indicated in Rate Schedule cum BOQ.
- 12.4. In addition to the above, the Contractor shall also submit the rates as asked for in the **Annexure: SCC-III.**

### 13. EVALUATION OF THE OFFERS

- 13.1. Comparison of the prices & determination of lowest bidder shall be as per Price Schedule for the complete scope.
- 13.2. The grand total price of all the items in BOQ shall be the basis for deciding the lowest bidder.

### 14. VARIATION IN SCOPE OF WORK / DEVIATION LIMIT

- 14.1. BHEL reserves the right to add or delete items of scope of work depending upon the final requirement. For such addition or deletion the Contract price shall be adjusted based on the quoted unit price. Such variation is not expected to be more than  $\pm 30\%$ . The price quoted by the Contractor shall be valid for such variation. Variation beyond the above limit can be executed on mutually agreed rates.

### 15. EXTRA WORK

- 15.1. The Contractor shall, when requested by BHEL, perform extra work at mutually agreed rates.

### 16. TERMS OF PAYMENT

- 16.1. The Contractor shall be paid monthly running bill of **95%** of the value of the work actually executed on site provided the work has been executed to the satisfaction of the Engineer.
- 16.2. The balance **5%** of the bill value shall be released as follows--
- (a) The **2.5%** of the bill value shall be payable on taking over of complete works by BHEL and passing of the final bill.

- (b) The balance **2.5%** of bill value will be payable on completion of the guarantee period.
- 16.3. From the amount payable, recovery such as advances, security deposit, taxes etc. would be made.
- 16.4. Measurement of work completed shall be done by the Contractor and submitted to BHEL for checking and approval. For this purpose, Contractor shall submit hard copies as well as a soft copy in the floppy / CD containing abstract & detailed measurement sheets of the bill. The measurement sheets and the bill will be checked and approved by BHEL for further processing, or returned to the Contractor for correction and resubmission. The certificate of Engineer regarding such approval and passing of sums shall be final and conclusive against the Contractor.
- 16.5. The abstract of the measurements and RA bill shall be entered in BHEL Measurement Book and signed and dated by both parties as per the provisions of the General Conditions of Contract.
- 16.6. All running bill payments shall be regarded as advance payments against the final bill. Any certificate relating to the work done during monthly running bills may be modified by any subsequent interim certificates or by the final certificates and no certificate of the Engineer supporting an advance payment shall of itself be conclusive evidence that any work or materials to which it relates are in accordance with the contract.
- 16.7. In case any amount is withheld by BHEL during course of execution of work on account of non-compliance of contract requirement, the same shall be recovered / released from the contractors bills as deemed fit by the engineer-in-charge of BHEL and the decision of engineer-in-charge shall be final in this regard and binding on the contractor.

## **17. GUARANTEE**

- 17.1. The works constructed by the Contractor shall be guaranteed for a period of 12 (twelve) months from taking over by BHEL. During this period the Contractor shall attend to all the matters relating to the Contract work as required by BHEL.

## **18. PENALTY FOR DELAY**

- 18.1. If the Work is not completed within the specified period and any extension thereof, the Contractor shall be liable to pay penalty for delay in completion of work @ 0.5% of the total Contract value for every week of delay or part thereof, subjected to a maximum of 10 % of the Contract value without BHEL being required to establish and prove the actual loss/damage suffered by BHEL on account of such delay.

## **19. COMPLETION CERTIFICATES/ NOC FROM LOCAL STATUTORY BODIES**

- 19.1. Contractor has to arrange at his own cost to obtain building/ work completion certificates as required to be obtained from the local statutory bodies of central and state govt.. However, any fees required for obtaining such NOCs shall be paid by BHEL on production of relevant depository challans/ receipts from such Govt. authorities.

## **20. DRAWINGS**

- 20.1. Following drawings are enclosed for reference purpose only.

- (a) layout of plant

- 20.2. The construction of the works shall be taken up on the basis of construction drawings which shall be issued after award of the work.

**Annexure: SCC-I****INDICATIVE LIST OF T&Ps TO BE ARRANGED BY THE CONTRACTOR AT HIS OWN COST**

<b>SL NO</b>	<b>EQUIPMENT</b>	<b>QUANTITY</b>
1.	CONCRETE MIXTURE M/Cs & BATCHING PLANT.	AS PER REQUIREMENT
2	CONCRETE VIBRATORS	AS PER REQUIREMENT
3	HYDRA CRANE 8 / 10 T	1 NO
4	MOBILE CRANE 15/18 T	1 NO
5	15/20 MT TRAILORS WITH PULLING UNIT	1 NO
6	WATER TANKER	AS PER REQUIREMENT
7	DEWATERING PUMP	AS PER REQUIREMENT
8	POWER / HAND WINCHES	AS PER REQUIREMENT
9	WELDING MACHINES	AS PER REQUIREMENT
10	HEATING OVEN	AS PER REQUIREMENT
11.	DG SETS OF REQUIRED CAPACITY	AS PER REQUIREMENT
12	PORTABLE OVENS	AS PER REQUIREMENT
13	ROAD ROLLERS	AS PER REQUIREMENT
14	EXCAVATORS AND DUMPERS	AS PER REQUIREMENT
15	EARTH COMPACTOR	AS PER REQUIREMENT
16	CAST- IN SITU PILING RIGS & TESTING EQUIPMENT	AS PER REQUIREMENT

NOTES

- 1 The above list specifies only major T&Ps (may not be complete to be deployed by the contractor). All additional / other tools and plants including trucks & devices, tackles, machines, measuring instruments etc. in good and safe working conditions which are required for satisfactory & timely completion of work shall also be deployed by the contractor within finally accepted rate / price.
- 2 Other terms and conditions regarding above items please also refer clause 38 T&P/IMTEs).

**Annexure- SCC-II****INDICATIVE LIST OF IMTEs TO BE ARRANGED BY THE CONTRACTOR AT HIS OWN COST**

SL NO	EQUIPMENT	QTY
1	THEODOLITE ONE SECOND ACCURACY	1 NO
2	DUMPY LEVEL UPTO 350 MM	1 NO
3	COMPRESSION STRENGTH TESTING EQUIPMENT	1 NO
4	CONSTRUCTION MATERIAL TEST EQUIPMENT	AS PER REQUIREMENT
5	CONCRETE CUBE MOULD (150 X 150 X 150 ) mm	1 SET
6	CONCRETE slump cone	1 SET
7	COARSE AGGREGATE SIEVES & SAND SIEVER	1 SET
8	SIEVE SHAKER	1 NO
9	AGGREGATE IMPACT TEST MACHINE	AS PER REQUIREMENT
10	HEATING OVEN	1 NO
11	PHYSICAL BALANCE FOR LAB WORK	1 NO
12.	TOTAL STATION THEODOLITIE	1 NO

**NOTES:**

1. The above list specifies only major IMTEs (may not be complete to be deployed by the contractor). Contractor has to set up the field laboratory with facilities required for material & concrete testing. All additional / other IMTEs / measuring instruments etc. in good and safe working conditions which are required for satisfactory & timely completion of work shall also be deployed by the contractor within finally accepted rate / price.
2. Other terms and conditions regarding above items please also refer clause 38 T&P/IMTEs).

**ANNEXURE: SCC -III****ANALYSIS OF UNIT RATE QUOTED**

Sl.no.	Description	Percentage of the unit rate quoted	Remarks
1.	Salary & Wages of Staff & workers		
2.	Consumables (a) Gases (b) Welding Electrodes (c) P.O.L. (d) Others		
3.	Depreciation & maintenance for T & Ps		
4.	Depreciation & maintenance for other items		
5.	Establishment and administrative expences of site		
6.	Overheads		
7.	Profit		

(Signature of tenderer)  
With Stamp

PRELIMINARY  
FOR TENDER PURPOSES ONLY



LAYOUT OF PLANT

SKETCH NO

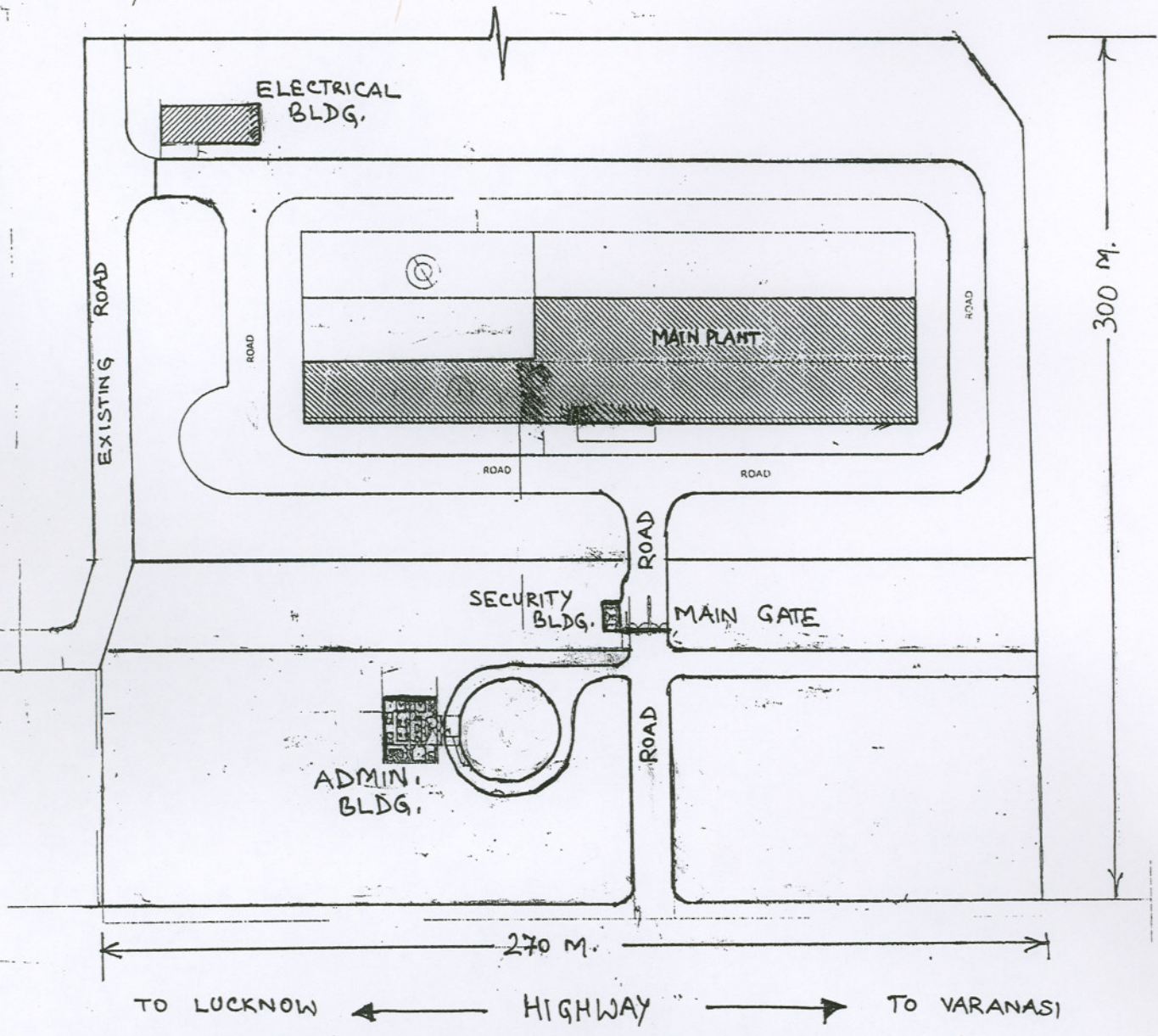
CSU/LAY/15

DATE

11<sup>th</sup> DEC-06

REV NO

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**BHARAT HEAVY ELECTRICALS LIMITED  
CENTRALISED STAMPING UNIT & FABRICATION  
PLANT  
Jagdishpur**

**TENDER FOR EXECUTION OF MISCELLANEOUS CIVIL  
AND ELECTRIFICATION WORKS FOR OPERATION OF  
CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT  
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**SECTION IV**

**BILL OF QUANTITIES AND PRICE SCHEDULE**


**BHARAT HEAVY ELECTRICALS LIMITED  
(A GOVERNMENT OF INDIA UNDERTAKING)  
CSU & FP  
Industrial Area  
Jagdishpur (UP) 227817**


SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
<b>Centralised Stamping Unit (CSU), Jagdishpur</b>						
<b>BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.</b>						
1	<b>EARTH WORK IN EXCAVATION, BACKFILLING AND DISPOSAL AS PER SPECIFICATION, DRAWINGS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:-</b>					
1.1	Earth work in excavation in foundation trenches in ordinary soil including all lead and lift and disposal of surplus earth as directed.	Cu.M.	80			
1.2	Filling of Earth in foundation trenches etc. with ordinary soil with 1.5m lift and 50m lead including dressing, and ramming.	Cu.M.	23			
1.3	Sand filling in plinth under floors including watering, ramming, consolidating and dressing complete including supply of all material, labour and T&P required for proper completion of work. completion of work.	Cu.M.	45			
2	<b>PROVIDING AND PLACING CONCRETE WORK INCLUDING COST OF LABOUR, MATERIALS AND EQUIPMENT FOR HANDLING, TRANSPORTATION, BATCHING, MIXING, PLACING, VIBRATING AND CURING, (EXCLUDING COST OF CENTERING, SHUTTERING AND REINFORCEMENT) COMPLETE AT ALL ELEVATIONS AS PER DRAWING, SPECIFICATIONS UNLESS SPECIFIED OTHERWISE AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:</b>					
2.1	Providing and laying cement concrete in 1:4:8, cement, coarse sand and 40mm gauge stone aggregates under foundation, floors & Grade Beams and curing complete excluding cost of form work and including cost of all materials and T&P required for proper completion of work.	Cu.M.	6			
2.2	R.C.C.[M20] works in <b>Footings &amp; Column pedestal</b> with cement, coarse sand (F.M.-2.2) and 20mm gauge graded stone aggregates in the proportion to produce M-20 concrete excluding cost of reinforcement and shuttering and including cost of all materials and T&P required for proper completion of work.	Cu.M.	102			
2.3	R.C.C.[M20] works in <b>Lintels, Sun-shades Fins</b> etc with cement, coarse sand (F.M.-2.2) and 20mm gauge graded stone aggregates in the proportion to produce M-20 concrete excluding cost of reinforcement and necessary shuttering cantering etc. and including cost of all materials and T&P required for proper completion of work.	Cu.M.	1			

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
2.4	R.C.C. [M20] works in <b>Slabs</b> with cement, coarse sand (F.M.-2.2) and 20mm gauge graded stone aggregates in the proportion to produce M-20 concrete excluding cost of reinforcement and necessary shuttering centering etc. and including cost of all materials and T&P required for proper completion of work.	Cu.M.	19			
3.0	<b>SUPPLYING, FIXING AND REMOVING FORMWORK AT ANY ELEVATION INCLUDING ALL LABOUR, MATERIAL, SCAFFOLDING COMPLETE INCLUDING POCKETS ETC. AND INCLUDING PROPPING, SCAFFOLDINGS ,SHUTTERING OIL ETC AS PER SPECIFICATIONS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:</b>					
3.1	<b>Ordinary form work below finished ground floor level</b> for foundations, footings, bases of columns, walls, columns pilasters, beams, mass concrete, trenches etc.	Sq.M.	1			
3.2	<b>Fairface form work above finished ground floor level with plyboard or equivalent shuttering</b> for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies, domes, arches etc for all heights.	Sq.M.	130			
4	<b>REINFORCEMENTS</b>					
4.1	<b>Providing, straightening, cutting, bending, placing in position at any level, binding in position of tor steel reinforcements</b> confirming of <b>grade Fe-415</b> confirming to IS:1786 including cost of binding wire, labour, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer. Authorised lapping shall be measured.	MT	9			
5	<b>WATER PROOFING AS PER SPECIFICATIONS , DRAWINGS AND SPECIALISED MANUFACTURER'S RECOMMENDATIONS.</b>					
5.1	<b>Providing and mixing approved water proofing compound in concrete or cement mortar</b> for works wherever specified or directed as per specification/ manufacturer's instructions, testing of samples for water proofing etc complete. (8Kg/cum consumption)	KG	16			

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
5.2	Providing and laying <b>Brick Koba Water Proofing</b> treatment with 10 years of performance guarantee to vertical and horizontal surfaces of depressed portions of WC, Kitchen, Roof Terracing etc., consisting of -	Sq. M.	130			
	1st course of applying cement slurry @4.4kg/sqm. Mixed with water proofing compound 'Impermo' of Snowcem or equivalent conforming to IS 2645 in recommended proportions.					
	2nd course of laying Cement Concrete using broken bricks/ brick bats 25mm to 100mm size with 50% of cement mortar 1:5 (1 cement: 5 Course sand) admixed with proprietary water proofing compound conforming to IS: 2645 over 20mm thick layer of cement mortar of mix 1:5 (1 cement: 5 course sand) admixed with proprietary water proofing compound confirming to IS: 2645 to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.					
	After two days of proper curing applying a second coat of cement slurry admixed with proprietary water proofing compound confirming to IS: 2645					
	3rd course of finishing the surface with 20mm thick jointless cement mortar plaster of mix 1:3 (1cement : 3 coarse sand) admixed with proprietary water proofing compound mixed as per manufacturers specification and finally finishing the surface with trowel with neat cement slurry and making of 300x300mm square.					
	The whole terrace so finished shall be flodded with water for a minimum period of two weeks for curing and for final leak test and after the surface is dried up then apply					
	4th course of blown or residual bitumen applied hot at 1.7kg per sqm on area.					
	5th course of 400micron thick PVC sheet. (Overlaps at joints of PVC sheet shall not be less than 100mm wide and pasted to each other with hot blownbitumen @ 1.7kg/sqm)					
	The average thickness of above treatment shall be 120mm and minimum thickness at khurras as 65 mm and the work shall be carried out under strict supervision of approved specialised agency for proprietary items and as directed by engineer.					

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
5.3	Making Khurras 45x45 Cm with average minimum thickness of 5 Cm cement concrete 1:2:4 ( 1 cement:2 course sand: 4 graded stone aggregate of 20 mm nominal size) over PVC sheet 1m x 1m x 400 microns, finished with 12 mm cement plaster 1:3 (1 cement: 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete.	Each	5			
5.4	Screed concrete 1:2:4 conforming to IS 456 with coarse sand and graded hard stone aggregate 12.5mm/6 mm nominal size <b>on the roof</b> at any level or thickness to maintain the required grade complete.	Cu.M.	1			
6	<b>M.S. EMBEDMENTS</b>					
6.1	Supply, fabricating and fixing of <b>embedments, MS inserts</b> , pipe sleeves, guide rails, angle pieces, rungs of various diameters, plates of dimensions as required including cost of all labour, materials and equipment, transportation, loading, unloading, handling, welding, cutting, drilling, scaffolding and setting complete as per specifications, drawings and as directed by Engineer.	Kgs	500			
6.2	Covering all open pits with MS chequered plates.	Kgs	1,000			
7	<b>GROUTING AS PER SPECIFICATION FOR THE FOLLOWING:</b>					
7.1	Providing and <b>grouting of pocket holes</b> , pipe sleeves of any shape and size under base plates after erection of necessary structural steel work, machinery with <b>mix 1:1:2</b> (one part Cement : 1part Sand : 2 parts of 6mm down graded stone chips) at any elevation including roughening surface, cleaning, ramming, curing etc complete (non-shrink hand grout using approved admixture) as per specification and as directed by the Engineer.	Cu.M.	1			
8	<b>DOORS, WINDOWS, VENTILATORS, LOUVERS, ROOF VENTILATORS, ROLLING SHUTTERS, PARTITIONS ETC. COMPLETE INCLUDING FRAMING, KICK PLATES, STOPPERS AS PER SPECIFICATION, DRAWINGS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:-</b>					


 <b>Centralised Stamping Unit (CSU), Jagdishpur</b>						
<b>BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.</b>						
SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
8.1	Providing and fixing <b>40mm thick solid core flush door shutters (single or double)</b> with commercial faces and hard board edges. Core of solid core doors shall be of block board or wood particle board of approved make including all fixtures, Godrej make Mortice lock with 3 no keys and 2No master keys for each building with handle on both sides, shop painting/polishing as per specification all complete including test certificates.Flush door shutters to be of decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3ply veneering with vertical grains or cross bands and face veneers on both faces of shutters including ISI marked Stainless Steel butt hinges with necessary screws, including cost of all materials and T&P required for proper completion of work.	Sq.M.	10			
8.2	Providing and fixing anodized extruded <b>aluminium windows and ventilators</b> (single or double shutter) powder coated with approved colour including aluminium frame conforming to IS:1948, IS:1949 fabricated from extruded sections of INDAL , JINDAL or approved equivalent having minimum 2 mm wall thickness as per IS:1285, IS:733 and electro color coating of minimum 15 microns thickness. <b>Glazing shall be clear float glass of 5.0mm thickness of approved make e.g SaintGobain, Modifloat Etc</b> including snap fit type beading, concealed screws, fixtures with handle on both sides etc complete.Rates to include cost of floor springs . Aluminium section shall be smooth, free of stains, straight, mitred & jointed mechanically wherever required.	Sq.M.	15			
8.3	Supply and fixing powder coated rolling shutters of approved make and with mechanical arrangement for opening and closing including all standard accessories as per specifications made of required size MS laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5 cm long wire springs grade No 2 and MS top cover of required thickness for rolling shutters . The lath size shall be 80x 1.25mm MS laths with 1.25 mm thick top cover including ball bearing for rolling shutters and as directed by engineer	Sq.M.	180			


 <b>Centralised Stamping Unit (CSU), Jagdishpur</b> <b>BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.</b>						
SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
8.4	Providing and fixing <b>anodized extruded aluminium doors</b> (single or double shutter) part pannelled and part glazed with prelaminated flat pressed particle board (NOVAPAN, ECOBOARD etc) of approved colour and make. Aluminium sections shall be powder coated with approved colour with aluminium frame conforming to IS:1948, IS:1949 fabricated from extruded sections of INDAL , JINDAL or approved equivalent make having minimum 3mm wall thickness as per IS:1285, IS:733 and electro color coating of minimum 15 microns thickness. Glazing shall be clear float glass of 6.0mm thickness of approved make e.g SaintGobain, Modifloat Etc including snap fit type beading, concealed screws, fixtures, Godrej make Mortice lock Godrej make Mortice lock with 3 no keys for each door and 2 master keys for each building with handle on both sides etc complete. Aluminium section shall be smooth, free of stains,rust free, straight, mitred & jointed mechanically wherever required. Prelaminated board shall be 12mm thickness with all fixtures. Rates to include cost of floor springs of approved make.	Sq.M.	10			
8.5	Providing and fixing <b>aluminium glazed partition part</b> pannelled and part glazed with prelaminated flat pressed particle board (NOVAPAN, ECOBOARD etc)boards of approved colour and make. Aluminium sections shall be powder coated with approved colour and of extruded sections of INDAL, JINDAL or approved equivalent make having minimum 3mm wall thickness as per IS:1285, IS:733 and electro color coating/ powder coated of minimum 15 microns thickness. Glazing shall be clear float glass of 5.5mm thickness of approved make e.g SaintGobain, Modifloat Etc including snap fit type beading, concealed screws, hold fast, fixtures (like tower bolts, handles, door stoppers with rubber shoes, "L" drops, stays, floor springs, hydrolic door closers etc),C.P. brass/ stainless steel screws, providing and fixing hinges/pivots, and making provisions for fixing of fittings where ever required including the cost of PVC/neoprene gas fits all complete, Godrej make Mortice lock with 3 no keys for each door and 2 master keys for each building with handle on both sides, necessary fillingup of gaps at the junctions, at top, bottom and sides, etc complete.	SQM	40			
8.6	Providing and fixing of over <b>head hydraulic door closers</b> of `Yale" make or approved equivalent & quality as directed by Engineer.	NOS	7			

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
8.7	Providing and fixing anodised aluminium grills of standard make and shape on windows including all standard fasteners complete as approved by engineer.	Sq.Mt.	10			
8.8	Supply and fixing ceiling fan Hook Box made of 18 gauge M.S. sheet and 16mmØ rod.	Nos	6			
9	<b>BRICKWORK MASONRY INCLUDING SUPPLY OF MATERIAL, COST OF LABOUR, SCAFFOLDING ETC. COMPLETE AS PER SPECIFICATIONS, DRAWING AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:-</b>					
9.1	Providing <b>Brick work of thickness between 230mm and 254mm</b> of class 150 in 1:4 cement and fine sand (F.M. 1.25) mortar in <b>foundation &amp; plinth</b> , including supply of all materials, labour and T&P required for proper completion of work as directed by engineer but excluding plastering and painting, using bricks of class designation 75 or best locally available quality of nominal dimensions as per specification including supply of all material, labour and T & P required for proper completion of work.	Cu.M.	20			
9.2	Providing <b>brick work of thickness between 230mm and 254mm in class 150 in cement mortar 1:4</b> (1cement : 4 coarse sand) in walls, chambers etc. at all heights, places and position <b>above plinth</b> including raking out joints, curing, scaffolding, complete but excluding plastering and painting, using bricks of class designation 75 or best locally available quality of nominal dimensions as per specification including supply of all material, labour and T & P required for proper completion of work.	Cu.M.	35			
9.3	Providing <b>brick work of thickness between 115mm and 127mm</b> in cement mortar 1:3 (1 cement : 3 coarse sand) <b>in partition walls, chambers etc.</b> at all heights, places and position above or below plinth/graded level including providing 2 nos. 6mm dia. MS bars at every third layer, raking out joints, curing, scaffolding etc. all complete using bricks of class designation 75 or best locally available quality of nominal dimensions excluding plastering and painting as per specification. Cost of providing reinforcement shall be measured separately under item 4.1	Sq.Mt.	5			

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
9.4	Constructing a septic tank and soak pit of size 5.00m x 1.60m x 1.40 m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per direction of Engineer-in-charge.	Nos.	1			
10	<b>DAMP PROOF COURSE INCLUDING ALL MATERIALS, LABOUR, SHUTTERING, CENTERING, CURING ETC., COMPLETE WITH THICKNESS AS SPECIFIED/SHOWN ON DRAWINGS OR AS DIRECTED BY ENGINEER FOR THE FOLLOWING:-</b>					
10.1	Damp Proof Course 25mm thick 1:1.5:3 concrete (10mm and down graded aggregate) with 2% of approved admixture of water proofing compound. Two layers of hot bitumen coating 85/25 grade as per IS:702 @ 1.7Kg./sqm shall be applied before & after the DPC as per specification.	Sq.Mt.	15			
11	<b>CEMENT MORTAR PLASTER INCLUDING MAKING GROOVES WHEREVER REQUIRED, ALL MATERIALS, SCAFFOLDING, CURING ETC. COMPLETE AS PER SPECIFICATION, DRAWING AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:-</b>					
11.1	10mm thick plastering in 1:4 cement and fine sand (FM 1.25) mortar over brick work and RCC work including rounding, chamfering, etc. finished smooth including cost of all material labour and T&P required for proper completion of work.	Sq.Mt.	350			
11.2	15mm thick plastering in 1:4 cement and fine sand (FM 1.25) mortar over wall or half brick wall and RCC including rounding, chamfer, etc. finished smooth including cost of all material labour and T&P required for proper completion of work.	Sq.Mt.	150			
11.3	10mm thick plastering in 1:3 cement and coarse sand (FM 2.2) mortar in <b>ceiling</b> including rounding, chamfer, etc. finished smooth including cost of all material labour and T&P required for proper completion of work.	Sq.Mt.	130			
11.4	Providing <b>15mm thick neat plaster in drains/culverts in 1:3 (1 cement: 3 sand)</b> as per specification.	Sq.Mt.	20			

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
12	<b>FINISHES, PAINTING TO CONCRETE, PLASTERED SURFACES, SURFACE PREPARATION INCLUDING ALL MATERIALS, LABOUR, SCAFFOLDING ETC. ALL COMPLETE AS PER SPECIFICATION, DRAWING AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:-</b>					
12.1	Two or more coats of <b>white washing with lime</b> to give an even shade on ceiling including a priming coat complete.	Sq.Mt.	153			
12.2	Two or more coats of <b>distemping with oil bound washable distemper</b> as per IS:428 of approved brand and manufacture to give an even shade including a priming coat with distemper primer complete over P.O.P.	Sq.Mt.	350			
12.3	Painting walls with two coats of Acrylic Smooth exterior paint "Trump/Apex paint" or equivalent of required shade over new work (two or more coats applied @3.28ltr/10sqm) over and including base coat of water proofing cement paint "Snowcem Plus" or equivalent applied @2.20kg/10sq. including curing, cost of all material, labour and T&P required for proper completion of work.	Sq.Mt.	150			
12.4	Painting two coats with high gloss super synthetic enamel paint such as Luxol3, or equivalent approved brand or manufacturer over one coat of red oxide paint on steel and other metal surfaces after cleaning and brushing the surface free of dirt, dust, rust etc. to give an even shade including cost of all material, labour and T&P required for proper completion of work.	Sq.Mt.	200			
13	<b>FLOORING AND SKIRTING INCLUDING BASE LAYER AND ALL MATERIALS, LABOUR, CURING, POLISHING ETC. COMPLETE IN ALL RESPECTS AS SHOWN ON DRAWINGS, DESCRIBED IN SPECIFICATIONS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:-</b>					

 <b>Centralised Stamping Unit (CSU), Jagdishpur</b>						
<b>BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.</b>						
SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
13.1	Providing and laying <b>Heavy Duty dust pressed Ceramic Tiles (matt finish)</b> of size 300x300 (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 13755 of NITCO, ORIENT, SOMAY KAJARIA, SPARTECH or equivalent make in colours such as white, Ivory, Grey, Fume Red Brown, laid on 20mm thick cement mortar 1:3 (1cement : 3 coarse sand) including pointing the joints with white cement and matching pigment etc., complete including cost of all materials and T&P required for proper completion of work thick of reputed manufacturer of approved finish shade and colour for wall and floor of matching combination.	Sq.Mt.	110			
13.2	Providing and laying 50 mm thick <b>heavy duty I.P.S flooring</b> in specified panels with glass strips with <b>metallic hardener pigmented topping</b> comprising of uniform graded treated iron particles <b>in flooring</b> . Under layer of 38mm thick cement concrete mix 1:2:4 ( 1 part cement, 2 parts sand and 4 parts stone chips 12.5 mm well graded ) laid on top of existing RCC floor and top layer of 12mm thick metallic concrete complete.Proportion of the metallic hardener shall be as specified or as indicated by the manufacturer. However, in absence of any such direction 1 part metallic hardener shall be mixed dry, with 4 parts cement, by weight. To this mixture 6 mm nominal size stone chips shall be added in proportion of 1 part cement (mixed with hardener) to 2 parts of stone chips by volume and uniformly mixed. Minimum quantity of water shall be added to make it workable.	Sq.Mt.	3,000			
13.3	Floor painting with floor enamel paint of approved brand and manufacturer of required colour to give an even shade with two or more coats on new work	Sq M	1,000			
14	<b>PROVIDING AND FIXING RAIN WATER DOWN TAKE PIPES INCLUDING ALL SPECIALS AND ACCESSORIES ETC. COMPLETE AS PER SPECIFICATION.</b>					
14.1	Supplying and fixing of 110mm dia. heavy duty PVC rain water down pipes of approved colour fixed properly to wall or column with M.S./PVC stays and clamps along with bend/head and shoe required for proper completion of work including supply of all bends, clamps, Tees and specials and as directed by enginner.	RM	15			
15	<b>MISCELLANEOUS ITEMS</b>					

 <b>Centralised Stamping Unit (CSU), Jagdishpur</b> <b>BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.</b>						
SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
15.1	Providing and Laying Plinth Protection with under base of 230mm thick brickbats packed in cement sand mortar of 1:6 and top layer of cement concrete 1:2:4 with top surface of cement punning and of required pannels as approved by engineer.	sqm	20			
15.2	Providing and Fixing 75 mm collar/socket for GI pipes.	nos.	10			
15.3	Providing and Fixing 100 mm cowl	nos.	2			
15.4	Providing and Fixing vertical veritian of Arollex/Mak/ Vista levelor of twin colours of velvett texture with standard arrangement	sqm	12			
16	<b><u>SANITARY</u></b>					
16.1	Providing & fixing White Vitreous China water closet <b>Squatting Pan Orissa Pattern W.C.</b> Pan ( PARRYWARE, HINDUSTAN or approved equivalent make)of size 580x440 with integral type Foot Rest, Flush Pipe & Over flow arrangement with 100 mm sand cast Dron- P or S Traps 10 ltr. Low level P.V.C. flushing Cistern ( of approved make) with fittings, CI/MS brackets 32mm dia. Flush Pile with fittings and clamps.	Each	2			
16.2	Providing & fixing White Vitreous China water closet <b>European type W.C.</b> Pan Ist quality ( PARRYWARE, HINDUSTAN or approved equivalent make) with White solid plastic seat and lid with Flush Pipe & Over flow arrangement with 100 mm sand cast Dron P or S Traps 10 ltr. Low level P.V.C. flushing Cistern ( of approved make) with fittings, CI/MS brackets 32mm dia. Flush Pile with fittings and clamps.	Each	2			
16.3	Providing & fixing White Vitreous China Flat back or wall corner type, lipped front Urinal Basin ( PARRYWARE, HINDUSTAN or approved equivalent make)of size 460x260x350 size with 5ltrs white PVC two way electronic controlled automatic flushing cistern with standard flush pipe and C.P. brass spreaders with fitting and CS/MS brakets.	Each	5			
16.4	Providing & fixing White Vitreous China <b>Squatting Plate</b> ( PARRYWARE, HINDUSTAN or approved equivalent make)with an integral longitudinal flushing pipe, white PVC automatic flushing cistern, Perryware/Hindware /Seabrid/Orient (coral) with fitting standard size G.I. flush pipe for back and front flush with standard fittings.	Each	2			

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
16.5	White Vitreous China <b>Wash Basin</b> ( PARRYWARE, HINDUSTAN or approved equivalent make) of size 630x450 with CS/MS brackets, 15mm C.P. brass Waste of standard pattern, including painting of fittings and brackets, with <b>pair of 15m C.P. Brass Pillar Cock</b> .	Each	3			
16.6	Providing & fixing Stainless Steel Kitchen Sink as per IS:13983 of size 610x510 bowlx178mm depth without drain board, with CS/MS brackets, stainless steel pug 40mm 15mm C.P. brass Waste of standard pattern, including painting of fittings and brackets, etc.	Each	1			
16.7	Providing & fixing PVC Flexible <b>waste Pipe, of 40mm dia.</b> for sink or wash basin coupling etc. complete.	Each	8			
16.8	Providing & fixing <b>Stainless Steel Jali (Grating)</b> with or without hole for waste pipe for N. Trap. Weight not less than 70 grms.	Each	4			
16.9	Providing & fixing <b>Mirror</b> of superior size with bevelled edge with 6mm thick hard board back fixed to wall with wooden cleats and C.P. brass screws & washers complete.	Each	4			
16.10	Providing & fixing C.P. brass <b>Toilet paper holder of</b> complete.	Each	4			
16.11	Providing & fixing C.P. Brass <b>Towel rail</b> with C.P. Brass brackets fixed to wooden cleats with C.P. brass screws.	Each	2			
16.12	Providing & fixing SCI, <b>Water or Vent pipe 110 mm</b> internal dia.	RM	2			
16.13	Providing & fixing <b>100x100x100mm dia. SCI Tee with access door</b> , insertion rubber washers 3mm thick, bolts and nuts complete .	Each	5			
16.14	Providing & fixing <b>75x75x75mm dia. SCI Tee with access door</b> , insertion rubber washers 3mm thick, bolts and nuts complete.	Each	2			
16.15	Providing & fixing 100mm dia. <b>SCI Bend of required degree with access door</b> , insertion rubber washers 3mm thick, bolts and nuts complete.	Each	2			
16.16	Providing & fixing 75mm dia. <b>SCI Bend of required degree with access door</b> , insertion rubber washers 3mm thick, bolts and nuts complete.	Each	2			

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
<b>Centralised Stamping Unit (CSU), Jagdishpur</b>						
<b>BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.</b>						
16.17	Providing & fixing 100mm dia. <b>SCI Plain Bend</b> of required degree without access door.	Each	2			
16.18	Providing & fixing 75mm dia. <b>SCI Plain Bend</b> of required degree, without access door.	Each	2			
16.19	Providing & fixing 100mm dia. Inlet & 75mm dia outlet, Sand cast Iron <b>Nahani Trap</b> of self cleaning design with sand cast iron screwed down or hinged grating with or without vent arm complete.	Each	2			
16.20	Providing & fixing <b>Cutting chases</b> in brick masonry or R.C.C. for 100/75mm dia sand cast iron pipes and making good the same with cement concrete 1:3:6 cement, coarse sand and 12.5mm nominal size grit and plastering the surface with 1:4 mortar.	Each	2			
17	<b><u>WATER SUPPLY</u></b>					
17.1	Providing & fixing <b>Concealed G.I. pipe fitting of 15mm dia.</b> Nominal bore including G.I. fittings as required including painting with anti-corrosive bitumenastic paint and making good the chase.	RM	55			
17.2	Providing & fixing <b>Concealed G.I. pipe fitting of 20mm dia.</b> Nominal bore including G.I. fittings as required painting with anti-corrosive bitumenastic paint and making good the chase.	RM	20			
17.3	Providing and fixing <b>Open G.I. pipe fitting of 20mm dia.</b> Nominal bore including G.I. fittings as required including trenching and refilling including trenching and refilling.	RM	15			
17.4	Providing & fixing <b>Open G.I. pipe fitting of 32mm dia.</b> Nominal bore including G.I. fittings as required including trenching and refilling.	RM	130			
17.5	Providing and fixing <b>32mm dia. bore gun metal Gate Valve</b> with C.I. wheel of approved quality.	Each	5			
17.6	Providing and fixing 20mm dia. Nominal bore Brass Ball Valve.	Each	6			
17.7	Providing and fixing <b>150mm dia. C.P. Brass Shower Rose</b> with 15mm dia inlet.	Each	1			

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
17.8	Providing and fixing 15mm dia. Nominal bore <b>C.P. Brass long body Bib Cock</b> of approved quality confirming to IS:8931 weighing not less than 690 gms.	Each	10			
17.9	Providing and fixing 15mm dia. Nominal bore <b>C.P. Brass Angle Valve</b> of approved quality confirming to IS:8931.	Each	4			
17.10	Providing and fixing 15mm dia. Nominal bore <b>C.P. Brass close hole Basin Mixer Pillar Cock</b> of approved quality weighing not less than 1970 kg.confirring to IS:8931.	Each	8			
17.11	Providing and placing on terrace <b>1000ltrs. Capacity high density polyethelene water storage tank of approved brand and manufacturer e.g Sintex</b> or equivalent with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes and the base support for tanks and including float ball valve of standard quality.	Each	1			
17.12	Providing and placing on terrace <b>500ltrs. Capacity high density polyethelene water storage tank of approved brand and manufacturer e.g Sintex</b> or equivalent with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes and the base support for tanks and including float ball valve of standard quality.	Each	1			
17.13	Supply and fixing <b>100mm internal dia S.W. Pipe</b> over a concrete bed laid in 1:4:8 Cement, fine sand (F.M. 1.25) and 40mm gauge stone aggregate including jointing of pipes with Jute and 1:1 cement and fine sand.	RM	10			
17.14	Supply and fixing <b>150mm internal dia S.W. Pipe</b> over a concrete bed laid in 1:4:8 Cement, fine sand (F.M. 1.25) and 40mm gauge stone aggregate including jointing of pipes with Jute and cement complete.	RM	12			
17.15	Supply and fixing 150x100mm size <b>square mouth S.W. Gully Trap P</b> type, with C.I. grating, brick masonry chamber, and water tight C.I. cover frame 300x300mm size inside The wt. of cover & frame to be not less than 7.2 kg.	Each	4			



## Centralised Stamping Unit (CSU), Jagdishpur

### BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
17.16	Constructing brick masonry <b>Man holes</b> in 1:4 cement mortar of inside size 900x800 and 450mm, with circular C.I. cover & frame( Heavy Duty) of size 560 internal diameter along with inside plaster 15mm thick with 1:3 cement mortar along with providing galvanised rungs as per drawing with a floating coat of neat cement and making channels in cement conc. 1:2:4 mix and finishing smooth including curing and testing.	Each	1			
17.17	Constructing brick masonry <b>Man holes</b> in 1:4 cement mortar of inside <b>size 1200x900 and 900mm deep</b> with C.I. cover & frame (Heavy Duty) of size 560 internal diameter. Total wt. of cover and frame to be not less than 208 kg. and inside plaster 15mm thick with 1:3 cement mortar with a floating coat of neat cement along with providing galvanised rungs as per drawing and making channels in cement conc. 1:2:4 mix and finishing smooth including curing and testing.	Each	1			
18	<b>Electrification</b>					
	<b>For All the items specified below, the scope of work shall be as per tender specification, construction drawings and as directed by the engineer including all materials, labour, consumables, T &amp; Ps ,IMTEs, supply and approval of samples, chase cutting in walls, floor and making good after concealment of conduits, floor racers, drilling &amp; holdfastening in RCC/ Brickwork/ Ironite floor etc for the following--</b>					
	<b>Wiring, Materials &amp; Light for Manufacturing Building , Stores, office &amp; toilet block, electrical bldg.</b>					
18.1	Supply and fixing 2mm thick heavy duty PVC pipe dia. 25mm. ISI mark	Nos.	100			
18.2	Supply and fixing 2mm thick heavy duty PVC junction box 25mm. ISI mark	Nos.	20			
18.3	Supply and fixing ceiling rose of 5 Amp.	Nos.	25			
18.4	Supply and fixing 2mm thick heavy duty PVC elbow 25mm.	Nos.	40			
18.5	Supply and fixing MCB box 8 way (TPN) double power quoted IP-54 insulated surface mounting with transparent cover/door.	Nos.	15			
18.6	Supply and fixing MCB 10Amp. Single face	Nos.	22			
18.7	Supply and fixing 2mm thick heavy duty casing patti PVC 25mm.	Mt.	25			



## Centralised Stamping Unit (CSU), Jagdishpur

### BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
18.8	Supply and fixing 2mm thick heavy duty PVC bend 25mm.	Nos.	50			
18.9	Supply and fixing 2mm thick heavy duty casin Konia 25mm.	Nos.	20			
18.10	Copper wire 6sq.mm multi-stand/multi-layer FR +HR 105 degree centigrade.	Mt	1,000			
18.11	Copper wire 4sq.mm multi-stand/multi-layer FR +HR 105 degree centigrade.	Mt.	600			
18.12	Copper wire 2.5sq.mm multi-stand/multi-layer FR +HR 105 degree centigrade.	Mt.	400			
18.13	Copper wire 1.5sq.mm multi-stand/multi-layer FR +HR 105 degree centigrade.	Mt.	200			
18.14	Supply and fixing MCB 16Amp. Single phase	Nos.	10			
18.15	Supply and fixing 2mm thick power box PVC casing 16Amp.	Nos.	2			
18.16	Supply and fixing integral industrial medium highbay lights of 250watt revenues high pressure with bulb of Phillips model HPK 225 or equivalent make.	Nos.	80			
18.17	Supply and fixing integral industrial medium highbay lights of 150watt revenues high pressure with bulb of Phillips model HPK 225 or equivalent make.	Nos.	25			
18.18	Supply and fixing of light control panel (as per single diagram hall no.1 ) custom built panel CRC sheet 14SWG/16SWG, clad, dust and vermin proof floor mountd type comprise with aluminium bus-bar 250Amp. 3.5 phase neutal wires, lugs, insulators and all panel outer and inner shall be powder coated enamel paints with pre-necessary treatment engineering. CPRI approved builders.	Nos.	1			
18.19	Supply and fixing of incoming MCCB 200Amp. 4pole, 35 KA BC	Nos.	1			
18.20	Supply and fixing MCB 63Amp. 4pole 'C' curve	Nos.	1			
18.21	Supply and fixing of copper wire 1.00sq.mm multi-stand/multilayer-1.1 KV grade FR+HR 105 degree centigrade	Mt.	200			
18.22	Supply and fixing of telephone wire 4 pair scree protected along with telephone jack flush mounted	Mt.	100			
18.23	Supply and fixing GI box 12"x10" factory made with UPVC sheet & brass screw of matching colours	Nos.	10			



## Centralised Stamping Unit (CSU), Jagdishpur

### BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.


SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
18.24	Supply and fixing GI box 7"x4" factory made with UPVC sheet & brass screw of matching colours	Nos.	6			
18.25	Supply and fixing GI box 4"x4" factory made with UPVC sheet & brass screw of matching colours	Nos.	15			
18.26	Supply and fixing of switch & socket, on-off 6Amp. 3 mm thick ISI mark modular type	Nos.	2			
18.27	Supply and fixing of switch & socket on-off 16Amp. Modular type, 3 mm, ISI mark.	Nos.	5			
18.28	Supply and fixing of button holder state type	Nos.	30			
18.29	Supply and fixing of ceiling rose 5 Amp.	Nos.	5			
18.30	Supply and fixing box 3 way TPN powder coated with double door.	No.	4			
18.31	Supply and fixing of MCB 63Amp. TPN 'B' curve 20 KA BC	No.	4			
18.32	Supply and fixing of MCB 32Amp. SP 10 KA BC	Nos.	4			
18.33	Supply and fixing of MCB 25Amp. SP 10 KA BC	Nos.	8			
18.34	Supply and fixing of single Tube Light fittings residential type copper choke ballast	Nos.	10			
18.35	Supply and fixing of double Tube Light fittings industrial type copper choke ballast	Nos.	10			
18.36	Supply and fixing of ceiling fan 48" with fan box MS 3mm thick	Nos.	10			
18.37	Supply and fixing of exhaust fan 300mm wall bearing type.	Nos.	2			
18.38	Supply and fixing of wall mounted cabin fan 18" / 450mm dia. Of Havells/ Khaitan/ Polar or equivalent make.	No.	4			
18.39	Supply and fixing of fan dimmer 300watt flush mounted .	Nos.	10			
18.40	Supply and fixing of CI box 4"x4" (double door) factory made.	Nos.	8			



## Centralised Stamping Unit (CSU), Jagdishpur

### BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.

SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)
				In Figures	In Words	
18.41	Supply and fixing of MCB 40Amp. DP 10KV BC with box	No.	5			
18.42	Supply and fixing of MCB 20Amp. DP 10KV BC with box	Nos.	4			
18.43	Supply and fixing of wall bracket light 18 watt CFL fittings in stair cases, lobby etc	Nos.	4			
18.44	Supply and fixing of switch board of outer+ inner MS 3 mm thick, 10module /12module.	Nos.	20			
18.45	Supply and fixing of storage type ISI mark Geyser 15 litre vertical type	Nos.	2			
18.46	Supply and fixing of decorated basin / fancy lights bulb holder light with 18 watt CFL IP-56	Nos.	5			
18.47	Supply and fixing of MCCB 250Amp. TP 35KA 415 volt	No.	2			
18.48	Supply and fixing of MCCB 63Amp. TP 35KA 415 volt	Nos.	1			
18.49	Supply and fixing of MCCB 125Amp. TP 35KA 415 volt	Nos.	1			
18.50	Supply and fixing of metering set three phase for construction power supply	Set	2			
18.51	Supply, laying and termination of 95 Sq mm x three and half core ALU armard cable 1.1KV for construction power of ISI standard and make Finolex/Polycab/KEI RR/National/United or equivalent	Meter	400			
18.52	Supply and fixing of fan box (metal) 3mm thick.	Nos.	8			
18.53	Supply and fixing of AC box 32Amp. 3mm thick	Nos.	4			
18.54	Supply and fixing of MCB box (double door) 4 way SP powder coated factory made	Nos.	5			
18.55	Supply and fixing of call bell electrical operated	Nos.	5			
18.56	Supply and fixing of call bell switch MK type	Nos.	5			
18.57	Supply and fixing of Post top lights of Phillips make HPS 360 model or equivalent 150 Watt with outdoor type IP-56 protection enclosures with necessary holding arrangement as per drawing	Nos.	8			

 <b>Centralised Stamping Unit (CSU), Jagdishpur</b>							
<b>BILL OF QUANTITIES AND PRICE SCHEDULE OF MISCELLANEOUS CIVIL AND ELECTRIFICATION WORKS FOR OPERATIONS OF CSU PHASE-I INCLUDING ARCHITECTURAL WORKS AT JAGDISHPUR.</b>							
SL NO.	DESCRIPTION OF ITEM OF WORK	UNIT	Qty.	Rate Quoted		Amount (Rs)	
				In Figures	In Words		
18.58	Supply and fixing of flood lights of Phillips make SWF 230-SK 150 W model or equivalent with outdoor type IP-56 protection enclosures with necessary holding arrangement as per drawing	Nos.	15				
					Sub-Total A =		
	Service tax including edu. cess and SAH edu. cess @ 4.12% on sub-total "A" as per SCC Clause 8.3= Sub-Total B =						
					<b>Grand Total=(A+B) =</b>		