



ODISHA POWER TRANSMISSION CORPORATION LTD.

(A Government of Odisha Undertaking)

CIN – U40102OR2004SGC007553

REGD. OFFICE: JANPATH, BHUBANESWAR – 751 022,

OFFICE OF THE GENERAL MANAGER, (Elect)

EHT (O&M) Circle, Cuttack. At :- Madhusudan Nagar

P.O:- Tulsipur, Cuttack-753008.

Tel-/FAX-(0671)-2300547, E-mail-ehm.cle.ctc@optcl.co.in

TENDER SPECIFICATION NO.- 02/2015-16

**FOR EXTENSION OF EXISTING CONTROL ROOM BUILDING OF
220/132/33KV GRID SUB-STATION, CHANDAKA.**

PART-I

SECTION-I-	INSTRUCTION TO TENDERERS.
SECTION-II-	GENERAL CONDITIONS OF CONTRACT
SECTION-III-	LIST OF ANNEXURE
SECTION-IV-	TECHNICAL SPECIFICATION.
SECTION V-	TECHNO COMMERCIAL BID

PART-II

- 1. PRICEBID**
- 2. PRICE SCHEDULE**

Request for online tender documents – From dt- 10.04.2015 (10.00 Hrs) to dt- 22.04.2015(12.30 Hrs)

Issue of online tender documents (bid sheets)- From dt- 10.04.2015 (10.01 Hrs) to dt- 22.04.2015 (12.31 Hrs)

Last date of submission of online tender – upto dt 22.04.2015 (17.00 Hrs)

Date of opening of Tender - dt. 24.04.2015 (12.30 Hrs)

TELEPHONES / CONTACTS

1. General Manager: 09438907065
2. TA to General Manager: 9438907673
3. Office Land Line: 0671 2300226

NOTE: -

1. In case the due date for opening of tender happens to be a holiday, then tenders would be received & opened on the next working day at the same time.
2. Please note that the tenders against this tender enquiry are being invited **through e-tendering mode**. In case of any clarification the prospective bidders may contact this office as mentioned above.
3. **The prospective bidders are requested to get their digital signatures (Class-3) well in time** for participation in the tender and no request for extension on this account will be entertained.
4. **Manual tenders in any form/case will not be accepted.**



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E-TENDER NOTICE NO. 02/2015-16

For and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD., General Manager, EHT (O&M) Circle, Cuttack invites Tenders from reputed bidders having **B class/ A class civil contractor license** issued by Govt. of Odisha/railways/ Military for the work of “**EXTENSION OF EXISTING CONTROL ROOM BUILDING OF 220/132/33KV GRID SUB-STATION, CHANDAKA**” in single part bidding system. The interested bidders would be required to enroll themselves on the tender portal www.tenderwizard.com/OPTCL. Complete set of bidding documents shall be available at www.tenderwizard.com/OPTCL from 10.4.2015 (10.01 Hrs) up to 22.04.2015 (12.31 Hrs). Interested contractors may visit OPTCL’s official web site <http://www.optcl.co.in> and www.tenderwizard.com/OPTCL for detail specification.

N.B:- All subsequent addendums/corrigendum to the tender shall be hosted in the OPTCL’s official web site <http://www.optcl.co.in> and www.tenderwizard.com/OPTCL only.

GENERAL MANAGER



NOTICE INVITING TENDER

ODISHA POWER TRANSMISSION CORPORATION LTD.,

CIN – U40102OR2004SGC007553

REGD. OFFICE: JANPATH, BHUBANESWAR – 751 022,

OFFICE OF THE GENERAL MANAGER, (Elect)

EHT (O&M) Circle, Cuttack. At :- Madhusudan Nagar

P.O:- Tulsipur, Cuttack-753008.

Tel- 0671-2300226 FAX-0671-2300547, E-mail-ehm.cle.ctc@optcl.co.in

e-TENDER NOTICE NO- 02/2015-16.

For and on behalf of the ODISHA POWER TRANSMISSION CORPORATION LTD., the undersigned invites bids under single-part bidding system in e- tendering mode only as per the following details.

Tender Specification No : GM/EHTM/CTC- 02 / 2015-16

Request for online tender documents – From dt- 10.04 .2015 (10.00 Hrs) to dt- 22.04.2015(12.30 Hrs)

Issue of online tender documents (bid sheets)- From dt- 10.04.2015 (10.01 Hrs) to dt- 22.04.2015 (12.31 Hrs)

Last date of submission of online tender – upto dt 22.04 .2015 (17.00 Hrs)

Date of opening of Tender - dt. 24.04 .2015 (12.30 Hrs)

Cost of Tender Spec.Document : Rs.6000/ + Rs300/- (VAT)= Rs 6,300/-

Earnest Money Deposit : Rs 47000/-

Tender Processing Fee : Rs.4700/- + Rs 581/- (ST @ 12.36%) = Rs 5281 /-

Sl. No	Description of Work	Unit	Qty
1	Earthwork in all kinds of soil in excavation of foundation trenches for columns, basement, tie beams, walls and steps in all kinds of soil including moorum, hard stony earth and earth mixed with boulders except sheet rocks and boulders requiring blasting with 50 Mtr leads and 1.5 Mtr lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with all leads and lifts, T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, designing including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	CUM	29.11
2	Excavation of foundation trenches in disintegrated / laterite rock or any hard rock other than granite not requiring blasting to be removed by pick-axe, crow bars and depositing materials within initial lead of 50m and lift of 1.5m including dressing and leveling the bed sides etc. as per specification and direction of Engineer-in-charge including stacking the useful materials separately, including cost of all labour, T&P etc. as required for the work complete as per direction by the Engineer-in-charge.	CUM	116.422
3	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black	CUM	22.681

	crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 150 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.		
4	R.C.C. work of M-20 grade with 20mm and down grade hard black crusher broken granite stone chips of approved quality from approved quarry including hoisting, lowering, laying and compacting concrete, watering and curing, centering, shuttering and finishing the exposed surfaces smooth with cost, conveyance, royalties, taxes of all materials with all labour and T&P required for the work etc. complete in all respect but excluding the cost and conveyance of M.S. rods or Tor steel and binding wire of 18 to 20 gauge and excluding labour charges for straightening, cutting, bending, binding and tying the grills and placing proper position as per direction of Engineer-in-charge.		
	Column base.	Cum.	18.773
	Column Sub-Structure	Cum.	4.860
	Tie Beam	Cum.	6.192
	Column Superstructure	Cum.	17.320
	R.C.C wall in cable trench	Cum.	12.269
	Column for elevation	Cum.	0.410
	Floor beam, Roof roof & head room Beam	Cum.	34.214
	Roof Slab	Cum.	34.989
	Pergolla	Cum.	0.645
	Lintel	Cum.	13.842
	Chajja	Sqm.	14.620
	Stair Case	Cum.	3.598
5	Straightening bent up or coiled rods, cutting, bending, cranking, hooking, welding or jointing (if required), the M.S. rods or Tor steel and binding, tying the grills, hoisting, lowering and placing in proper position as required for R.C.C. works including cost, conveyance and taxes of M.S. rods or Tor Steel (Rerolling Steel bar shall not be used and should be from reputed manufacture like SAIL & TATA) and binding wires of 18 to 20 gauge and labour with all T&P required for the work etc. complete in all floors (weight of binding wires will not be considered for payment and payment will be made on weight of M.S. rods or Tor Steel only.) as per direction of Engineer-in-charge.	Qntl	105.021
6	1 st Class Fly Ash brick work in cement motar (1:6) using Fly ash brick of approved quality and to the IS specification having crushing strength from 75 Kg/cm ² to 99 Kg/cm ² free from cracks, well-shaped, uniform in size and shall produce a clear metallic ringing sound when struck includes molding, chamfering, corbelling etc. complete as per drawing, design and specification including racking out joints, watering, curing, scaffolding and cost of all materials, labour, T&P, carriage, royalty, taxes etc. and as per direction of Engineer in charge for the following finished item of works.		

	Foundation & Plinth.	Cum	15.999
7	1 st Class Fly Ash brick work in cement mortar (1:6) using Fly ash brick of approved quality and to the IS specification having crushing strength from 75 Kg/cm ² to 99 Kg/cm ² free from cracks, well-shaped, uniform in size and shall produce a clear metallic ringing sound when struck includes molding, chamfering, corbelling etc. complete as per drawing, design and specification including racking out joints, watering, curing, scaffolding and cost of all materials, labour, T&P, carriage, royalty, taxes etc. and as per direction of Engineer in charge for the following finished item of works.		
	Super Structure		
	250 mm wall	Cum	118.170
	125 mm wall	Cum	11.435
8	16 mm. thick inside cement plaster in cement mortar (1:6) over uneven surface of brick/R.C.C. walls after racking out the joints finished smooth with proper line, plumb, watering, curing for 7 days with cost, conveyance, royalties, taxes of all materials and cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	Cum	777.734
9	Providing 12 mm. thick ceiling plaster in cement mortar of proportion (1:4). after racking out the joints finished smooth to proper line and plumb, watering, curing for 7 days with cost, conveyance, royalties, taxes of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	Cum	305.970
10	Providing 12 mm. thick outside cement plaster in cement mortar of proportion (1:4) over R.C.C. walls, beams, column etc. after racking out the joints finished smooth to proper line and plumb, watering, curing for 7 days with cost, conveyance, royalties, taxes of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	Cum	606.041
11	Providing 25mm thick grading concrete in C.C. (1:2:2) in roof slab with 6mm size & downgraded black hard crusher broken granite chips including watering and curing for 7 days including chipping & cleaning the roof surface with all cost, conveyance, royalty and taxes of all materials, labour, T&P etc. as per direction of Engineer-in-charge.	Cum	142.800
12	Providing Cement washing one coat with approved quality and shade of water proofing cement paints over a coat of cement wash to plastered surface with brush including cleaning the surface watering, curing, cost of cement paint, taxes, labour charges, T&P etc. complete as per direction of Engineer-in-charge.	Sqm	1689.700
13	Inside & Outside wall painting with cement primer one coat including cleaning the surface, with taxes, labour charge. T&P required for the work complete in all respect as per direction of Engineer-in-charge.	Sqm	1689.74
14	Outside wall painting with weather coat paint (two coats) including cleaning the surface, with taxes, labour charge. T&P required for the work complete in all respect as per direction of Engineer-in-charge.	Sqm	606.041
15	Inside painting with 2 coats of oil bound distemper including cleaning the surface, with taxes, labour charge. T&P required for the work complete in all respect as per direction of Engineer-in-charge.	Sqm	1083.7

16	Providing & injecting chemical emulsion for pre constructional antitermite treatment as per I.S & creating a chemical barrier in bottom & sides of foundation trenches, top surface of plinth filling junction of walls & floors along with external perimeter of the building expansion joints surrounding the pipes & cables etc. complete using approved quality of chemical emulsion of requisite quantity prescribed by the manufacturer as directed by the Engineer-in-charge including cost of materials & labour, taxes, etc. complete. (Indemnity bond for warranty for 5 years to be furnished)	Sqm	173.600
17	Painting two coats of synthetic enamel paint over iron / wood works as per approved shade of approved quality over a coat of primer, sand papering, polishing the surface including cost, conveyance, taxes of all materials cost of all labour, T&P etc. in all floors as required for the work complete as per direction of Engineer-in-charge.(Paints and primer will be supplied by the contractor) (For all floors)	Sqm	117.840
18	Supplying, fitting and fixing 12mm thick marble flooring in steps of approved quality, texture and more than 0.40 Sqm size for flooring set on 25mm thick cement mortar (1:1) bedding and joined with cement slurry and joints pointed with cement and admixture of pigments to match the shade of the tiles, pressed properly and curing and cleaning the surface with chemical solutions and polishing the top surface properly with oil and wax including cost, conveyance, royalty, taxes of all materials, all labour, T&P required for the work complete as per direction of the Engineer-in-charge.	Sqm	19.477
19	Supplying, fitting and fixing ceramic floor tiles in floors of size (300 x 300mm) of approved make & approved shade set on 25mm thick cement mortar (1:1) bedding and joined with cement slurry and joints pointed with cement and admixture of pigments to match the shade of the tiles, pressed properly and curing and cleaning the surface with chemical solutions and polishing the top surface properly with oil and wax including cost, conveyance, royalty, taxes of all materials, all labour, T&P required for the work complete as per direction of the Engineer-in-charge.	Sqm	333.106
20	Supplying, fitting & fixing of window grill to be fixed into the walls etc. made up of 30 x 30 x 5mm size M.S angle frames with internal grills of 20 x 6mm M.S flats etc. complete for all floors as per approved drawing and design, cutting to required size and welding properly, finished smooth and sand papering, painting one coat with red oxide primer, including cost, conveyance, taxes of all materials, T&P etc. as required for the work complete as per direction of the Engineer-in-charge. (Weight certificate way measurement will be produce at the time of bill)	Kg	845.090
21	Supplying, fitting, fixing up window (sliding type) made up aluminum Section 151-154, 151-155, as windows frame section No. 151-155, 151-153 and 151-167 as shutter frame with 5mm thick black glass as panel fitted with rubber bending including lucking arrangement including all fitting including cost of materials all taxes labour, T&P etc. complete as per direction of Engineer-in-charge.	Sqm	26.180
22	Supplying, fitting and fixing of Door chowkath of different sizes in respective position in all foors including Conveyance, royalties, taxes of all materials Labor charges. T&P etc, complete in all respect including loading and unloading.	Sqm	34.790
23	Supplying, Fitting and fixing of Door shutters of different sizes in respective position in all foors including Conveyance, royalties, taxes of all materials Labor charges. T&P etc, complete in all respect including loading and	Sqm	20.550

	unloading.		
24	Architectural treatment such as Corbelling in C.M (1:4) including Conveyance, royalties, taxes of all materials Labor charges. T&P etc, complete in all respect including loading and unloading.	Sqm	262.600
25	Stainless steel handrail 750 mm high over finished level of staircase with 75Ø top handrail, 50 Ø vertical members & 2 layers of 25Ø stiffeners to vertical bars.The members to be welded,bent in a geometric shape wherever necessary including Conveyance, royalties, taxes of all materials Labor charges. T&P etc, complete in all respect including loading and unloading.	Mtr	54.3
26	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5 cm. (9") thick ramming and watering well with initial leads and lifts T&P etc. complete as directed by the Engineer-in-charge.	Cum	53.756
27	Sanitary installations: Complete finishing of the bath rooms with supply and fixing of approved quality ISI mark sanitary fittings, vitrified floor tiles/wall tiles, Indian style PAN etc as per technical specification.	Nos	5
28	Electrical installations as per technical specifications including supply of all materials, labour etc. Minimum number of points to be provided: Light point - 42 nos, Fan points - 14 nos, AC point - 12 nos, Extra plug point: 15 amp - 5 nos, 5 amp - 5 nos	L.S	1

The bidders can view the tender documents from website free of cost.

The bidders who want to submit bid shall have to pay Rs6300/- (Rupees Six thousand three hundred only non refundable including VAT @ 5%) towards the tender cost, in the form of Demand draft only, drawn in favour of EHT (O&M) Circle Cuttack payable at Cuttack and the same is to be submitted to the office of the undersigned on or before the last date & time of submission of tender.

The bidders shall have to submit non refundable amount of **Rs. 5281/- (Rupees Five thousand two hundred eighty one only)** towards the tender processing fee in the form of Demand draft, drawn in favour of K.S.E.D.C.Ltd, Payable at Bangalore. The said demand draft is to be submitted along with the EMD & tender cost at the office of the undersigned on or before the last date & time of submission of tender. **Payment can also be made directly through e-payment gate way.**

The bidders shall scan the Demand Draft towards EMD, Tender paper Cost and tender processing fee and upload the same in the prescribed form in .gif or .jpg format in addition to sending the original as stated above.

The prospective bidders are advised to register their user ID, Password, company ID from website www.tenderwizard.com/OPTCL by clicking on hyper link "Register Me".

GENERAL MANAGER (Elect.)
E.H.T. (O&M) CIRCLE,
CUTTACK

COMMERCIAL SPECIFICATION.

SECTION-I

INSTRUCTIONS TO BIDDER

1. Submission of Bids: -

The bidder shall submit the bid in Electronic Mode only i.e www.tenderwizard.com/OPTCL. The bidder must ensure that the bids are received in the specified website of the OPTCL by the date and time indicated in the Tender notice. Bids submitted by telex/telegram will not be accepted. No request to collect the Bids in physical form will be entertained by the OPTCL.

The OPTCL reserves the right to reject any bid, which is not submitted according to the instruction, stipulated above. The participants to the tender should be registered under IT Act / Service tax Act.

For all the users it is mandatory to procure the Digital Signatures(class-3).

2. Contractors / Vendors / Bidders are requested to follow the below steps for

Registration:

- a. Click "Register", fill the online registration form.
- b. Pay the amount of Rs. **2247/-** through DD in Favour of **KSEDC Ltd.** Payable at Bangalore. This registration is valid for one year.
- c. Send the acknowledgment copy for verification.
- d. As soon as the verification is being done the e-tender user id will be enabled.

3. After viewing Tender Notification, if bidder intends to participate in tender, he has to use his e-tendering User Id and Password which has been received after registration and acquisition of DSCs.

4. If any Bidder wants to participate in the tender he will have to follow the instructions given below:

- a. Insert the PKI (which consist of your Digital Signature Certificate) in your System.
(Note: Make sure that necessary software of PKI be installed in your system).
- b. Click / Double Click to open the Microsoft Internet Explorer (This icon will be located on the Desktop of the computer).
- c. Go to Start > Programs > Internet Explorer.
- d. Type www.tenderwizard.com/OPTCL in the address bar, to access the Login Screen.
- e. Enter e-tender User Id and Password, click on "Go".

f. Click on “Click here to login” for selecting the Digital Signature Certificate.

Select the Certificate and enter DSC Password.

Re-enter the e-Procurement User Id Password

5. To make a request for Tender Document, Bidders will have to follow below mentioned steps.

- Click “Un Applied” to view / apply for new tenders.
- Click on Request icon for online request.
-

Enter the required fields including details of D.D for tender Processing fee.

6. After making the request Bidders will receive the Bid Documents which can be checked and downloaded by following the steps mentioned below:

- Click to view the tender documents which are received by the user.
- Tender document screen appears.
- Click “Click here to download” to download the documents.

7. After completing all the formalities Bidders will have to submit the tender and they must take care of following instructions.

- Prior to submission, verify whether all the required documents have been attached and uploaded to the particular tender or not.
- Note down / take a print of bid control number once it displayed on the screen

8. Tender Opening event can be viewed online.

9. Competitors bid sheets are available in the website for all.

10 For any e-tendering assistant contact help desk number mentioned below.

Bangalore - 080- 40482000.

Mr, Satyamanyu - 09937140591

2. Division of Specification.

SECTION-I-	INSTRUCTION TO BIDDERS
SECTION-II-	GENERAL CONDITIONS OF CONTRACT
SECTION-III-	LIST OF ANNEXURES
SECTION-IV-	PRICE BID & TECHNO COMMERCIAL BID

The Tenderers are required to submit the tenders in single parts.

3. Purchaser’s Right Regarding Alteration of Quantities Tendered.

The Purchaser may alter the quantities of work at the time of placing orders. Initially the purchaser may place orders for lesser quantity with full freedom to place extension orders for further quantity under similar terms and conditions of

the original orders. Orders may also be split among more than one bidder for any particular item , if considered necessary in the interest of the OPTCL.

4. Purchaser's right to accept/reject bids:

The purchaser reserves the right to reject any or all the tenders without assigning any reasons what so ever if it is in the interest of OPTCL, under the existing circumstances.

5. Mode of submission of Tenders.

[A] Tenders shall be submitted in electronic mode only.

(www.tenderwizard.com/OPTCL)

[B] Telegraphic or FAX tenders shall not be accepted under any circumstances.

6. Earnest money deposit:

The Tenders shall be accompanied by Earnest Money deposit of value specified in the notice inviting tenders. Tenders without the required EMD will be rejected out rightly

The earnest money deposit shall be furnished in shape of Bank Draft To be drawn in favour of EHT (O&M) Circle, OPTCL, Cuttack, payable at Cuttack.

NOTE:-

(i) No adjustment towards EMD shall be permitted against any outstanding amount with the ODISHA POWER TRANSMISSION CORPORATION LTD.

(ii) In the case of un- successful tenderer, the EMD will be refunded after finalization of the tender. In the case of successful Tenderer, this will be refunded on written request only after award of contract & on submission of security deposit in the form of BG/DD.

(iii)Suits, if any, arising out of this clause shall be filed in a Court of law to which the jurisdiction of High Court of ODISHA extends.

(iv) EMD will be forfeited if the tenderer fails to accept the purchase order and/or work order issued in his favour or to execute the order, placed on them.

(v) Tenders not accompanied by Earnest Money shall be disqualified.

7. Validity of the Bids: -

The tenders are requested to keep the validity of their offer for a period of 180 days from the date of opening of the tender, failing which the tenders will be rejected.

8. PRICE: -

The bidders are advised to quote their rate as per the price schedule attached with this specification and shall remain firm inclusive of all taxes & duties, labour charges etc. within the validity of the tender. However Service tax will be paid extra as per Prevailing Govt. Norms.

9. Tenderers to be fully conversant with the clauses of the Specification:

Tenderers are expected to be fully conversant with the meaning of all the clauses of the specification before submitting their tenders. In case of doubt regarding the meaning of any clause, the tenderer may seek clarification in writing from the GM EHT (O&M) Circle, Cuttack, This, however, does not entitle the Tenderer to ask for time beyond due date, fixed for receipt of tender.

10. Documents to Accompany Bids.

Tenderers are required to submit tenders in the following manner:

- [i] Declaration Form as per Annexure-I (duly signed) to be uploaded in .pdf format.
- [ii] Earnest Money (scanned copy is to be uploaded)
- [iii] Abstract of Terms & conditions in prescribed proforma as per Annexure-II. To be keyed in, in the bid sheets provided.
- [iv] General Terms & Conditions of contract as per Section-II of the Specification.(All the required documents are to be uploaded.)
- [v] Data on past experience if any as per the Specification.(Scanned copy to be uploaded)
- [vi] Service Tax Registration certificate, Civil License & permanent account number [PAN] of the firm is required under Income tax Act. (Scanned copy to be uploaded).
- [vii] Any other document required, is to be uploaded.
- [viii] Schedule of prices in the prescribed proforma in the price bid sheet provided in .xls format.

11. Conditional Offer:

Conditional offer shall not be accepted.

10. General: -

- (i) The tenderer must get him registered in tender portal by paying an amount of Rs. **2247/-** through DD in Favour of **KSEDC Ltd**. Payable at Bangalore. This registration is valid for one year.
- (ii) The tender paper cost (Form fee non refundable) for an amount of Rs **6300/-** is to be paid.
- (iii) The tender processing fee for an amount of **Rs 5281/-**(Nonrefundable) is to be paid.
- (iv) The EMD amount as specified is to be paid .
- (v) In the event of discrepancy or arithmetical error in the schedule of price, the decision of the purchaser shall be final and binding on the Tenderer.

- (vi) Notice inviting tender shall form part of this specification.
- (vii) The EMD, if any, shall be returned to the unsuccessful bidders after finalization of tender on written request.
- (viii) It should be distinctly understood that the price bid shall contain only details/documents relating to price, as mentioned herein above.
- (ix) The Tenderer must submit the EMD amount, cost of tender document and Tender processing fee in shape of draft in a sealed cover envelope super scribing the Tender Notice No & Date opening of tender clearly on the envelope cover. The said envelope is to be submitted in the office of the purchaser on or before the last date and time of submission of tender.
- (x) The estimated quantity as indicated in section-III of this tender document for reference. The tenderers are advised to visit the site; assess the quantum of work involvement and make themselves acquainted with the site conditions before submission of tender.
- (xi) The tenderer must observe all the safety rules while working in EHV environment.

SECTION-II

GENERAL TERMS AND CONDITIONS OF CONTRACT [G.T.C.C.]

1. Scope of the contract:

The scope of contract covers extension of control room of grid substation Chandaka as per the design, drawing attached and as per the instruction of engineer-in-charge including supply of all materials, labour, T&P, transportation & mobilization to site to complete the work in all respect.

2.0 Definition of terms:

For the purpose of this specification and General Terms and Conditions of contract [GTCC], the following words shall have the meanings hereby indicated, except where otherwise described or defined.

- 2.1 “The Purchaser” shall mean the General Manager, EHT (O&M) Circle, Cuttack for and on behalf of ODISHA POWER TRANSMISSION CORPORATION LTD., Bhubaneswar.
- 2.2 “The Engineer” shall mean the Engineer appointed by the Purchaser for the purpose of this contract.
- 2.3 “Purchaser’s Representative” shall mean any person or persons or consulting firm appointed and remunerated by the Purchaser to supervise, inspect, test and examine workmanship and materials of the equipment to be supplied.
- 2.4 “The Contractor” shall mean the bidder whose bid has been accepted by the purchaser and shall include the bidder’s executives, administrators, successors and permitted assignees.
- 2.5 “Contract Price” shall mean the sum named in or calculated the bid.
- 2.6 “General Condition” shall mean these General Terms and Conditions of Contract.
- 2.7 “The Specification” shall mean both the technical as well as commercial parts of the specification annexed to or issued with GTCC and shall include the schedules
- 2.8 “Month” shall mean “Calendar month”.
- 2.9 “Writing” shall include any manuscript, type written, printed or other statement reproduction in any visible form and whether under seal or under hand.
- 2.10 “FOR Destination costs” shall mean the cost at our work site. The cost is inclusive of all taxes & duties etc. , but excluding Service tax.
- 2.11 The term “Contract document” shall mean and include GTCC, specifications, form of tender, Notice Inviting Tender, covering letter, schedule of prices or the final General Conditions, any special conditions, applicable to the particular contract.
- 2.13 Terms and conditions not herein defined shall have the same meaning as are assigned to them in the Indian Contract Act, failing that in the ODISHA General Clauses Act.

3. Manner of execution:

All the work shall be taken as per the civil engineering procedure with supply and fitting of good quality approved materials.

4. PERIOD OF EXECUTION:- The work shall be carried out and completed in all respect within 120 days from the date of issue of this work order.

5. INSPECTION :- Necessary inspection will be done by the consignee/ Supervising officer during execution of work. The steel materials to be used must be of specified brand which are to be inspected by the engineer in charge before taking up the work.

4. Language and measures:

All documents pertaining to the contract including specifications, schedule, notices, correspondence, operating and maintenance instructions or any other writing shall be written in English language. The metric system of measurement shall be used exclusively in this contract.

5. Right to reject/accept any tender:

The Purchaser reserves the right either to reject or to accept any or all tenders if the situation so warrants in the interest of the OPTCL. Orders may also be split up between different Tenderers on individual merits of the Tenderer. The Purchaser has exclusive right to alter the quantities of work at the time of placing final work order.

6. COMPENSATION: - The contractor shall be fully responsible for paying compensation, if any under the Workmen Compensation Act on account of workmen deployed by him. He must have followed all the safety rules and provide all the required protective equipments to his workmen as they are to work in a surroundings of Extra High Voltage System. OPTCL in no way will be responsible for payment of any compensation.

7. Force Majeure:

The Contractor shall not be liable for any penalty for delay or for failure to perform the contract for reasons of force majeure such as acts of god, acts of the public enemy, acts of Govt., Fires, floods, epidemics, Quarantine restrictions, strikes, Freight Embargo and provided that the Contractor shall within Ten (10)days from the beginning of delay on such account notify the purchaser in writing of the cause of delay. The purchaser shall verify the facts and grant such extension, if facts justify.

8. Extension of time:-

If the Completion of work is delayed due to reasons beyond the control of the Contractor, the Contractor shall without delay give notice to the purchaser in writing of his claim for an extension of time. The Purchaser on receipt of such notice may or may not agree to extend the contract period date as may be reasonable but without prejudice to other terms and conditions of the contract.

9. Guarantee period: -
The guarantee period for this contract shall be One Year. Any defect/ deviation if noticed during this period shall be immediately rectified free of cost on written notice from the consignee failing which the security deposit shall be forfeited
10. SERVICE TAX REGISTRATION No., PAN CARD & CIVIL LICENSE:
Clear attested Xerox copies of PAN No./ Valid VAT registration & clearance certificate/Civil contractor license (A/B Class) issued by Govt of Odisha/Railways /Military, service tax registration number (if applicable) valid on the date of opening of tender should be submitted along with tender, without which tender will be rejected. The Contractor may be requested to produce original PAN card, VAT registration, VAT clearance certificate, Service Tax registration number as applicable & Civil contractor license and all other relevant documents for verification. Those who fail to produce the same and found not to be valid on the date of opening of tender, their tenders will be rejected.
11. Security deposit towards, 100% payment and performance guarantee:
The successful tenderer will be required to deposit a sum amounting to 10% of value of the contract in shape of Bank Draft / B.G from any nationalized bank (as per the prescribed format) valid up to two months after the guarantee period drawn in favour of the paying officers within 15 days of receipt of the work order. In the event of any breach or default in all or any conditions of the work order, the G.M., EHT (O&M) Circle, Cuttack may forfeit the whole amount of Security deposit. No interest will be paid on the security deposit so deposited by the contractor and will be released after expiry of the guarantee period by the paying officer. The security value must be deposited prior to execution of work.
11. Terms of Payment.
100% of the Contract Value shall be paid after successful completion of the work , subject to approval of the Guarantee Certificate by the Ordering Authority.
The above payments are subject to submission of the Contract Security-cum-Performance Guarantee by the contracted firm as per Clause 2 of Section-II of the tender specification.
Deduction of Income Tax & Work Contract Tax and reimbursement of Service Tax shall be as per the prevailing norms of OPTCL
13. Penalty for Delay in Completion of Contract
Penalty shall be imposed @ ½% (half percent) of contract price for each calendar week of delay of part thereof subject to maximum of @ 5% (five percent) of contract amount. Charges towards penalty shall be counted after scheduled date of completion/issue of clear instruction to the contractor for commencement of works by the General Manager, E.H.T (O&M) Circle, Cuttack /concerned Asst. General Manager, (O&M) Divisions.
14. Jurisdiction of the High Court of ODISHA.
Suits, if any, arising out of this contract shall be filed by either Party in a court of Law to which the jurisdiction of High court of ODISHA extends.

15. Correspondences.

- i) Any notice to the Contractor under the terms of the contract shall be served by Registered Post or by hand at the Contractor's Principal Place of Business.
- ii) Any notice to the Purchaser shall be served at the Purchaser's Principal Office in the same manner.

Official Address of the Parties to the Contract

The address of the parties to the contract shall be specified:-

- [i] Purchaser: General Manager EHT (O&M), Circle, OPTCL, Cuttack
(Odisha)

Telephone No.06712300226

FAX No. 06712300547

Email id:- ehtm.cle.ctc@optcl.co.in

- [ii] Contractor: Address

Telephone No.

Fax No.

17. Outright Rejection of Tenders

Tenders shall be out rightly rejected if the followings are not complied with.

- [i] The tenderer shall submit the bid in electronic mode only and shall submit the cost of tender document and Tender processing fee on or before the date and time of opening of the bid.
- [ii] The Tender shall not be submitted telegraphically or by FAX.
- [iii] The prescribed EMD shall be submitted on or before the last date and time of submission of the bid.
- [iv] The Tender shall be kept valid for a minimum period of 180 days from the date of opening of tender.
- [v] The schedule of prices should be filled up fully to indicate the break-up of the prices including taxes and duties. Incomplete submission of this schedule will make the tender liable for rejection.
- [vi] The Tenderer should quote 'FIRM' price only and the price should be kept valid for a minimum period of 180 days from the date of opening of the tender.
- [vii] Abstract of general terms and conditions of contract.

TECHNICAL SPECIFICATION

1. The Scope of work: - The scope of contract covers extension of control room of grid substation Chandaka as per the design, drawing attached and as per the instruction of

engineer-in-charge including supply of all materials, labour, T&P, transportation & mobilization to site to complete the work in all respect.

2. Supply of Materials:- All required materials, consumables, are to be supplied by the Contractor and must be of approved quality. Different sizes of steel rod to be used must be of TATA/SAIL make. The materials are to be inspected by the representative of OPTCL before utilization of the same. The required amount of angle will be supplied Departmentally.

3. Workmanship:- The work shall be carried out as per standard Civil Engineering procedure & as per the instruction of the site in-charge.

4. Programme and Progress of work:-The contractor shall submit the detailed programme of work.

SCHEDULE OF QUANTITY

1. Earth work in excavation

a. For column

C1,C9,C14 = $1.5 \times 1.5 \times 1.8 \times 3$ = 12.15 cum.

C6,C13 = $1.8 \times 1.8 \times 1.8 \times 2$ = 11.664 cum.

C2,C5,C10 = $2.0 \times 2.0 \times 1.8 \times 3$ = 21.60 cum.

C3,C4,C7,C8,C11,C12 = $2.1 \times 2.1 \times 1.8 \times 6$ = 47.628 cum.

Total = 93.042 cum.

b. For brick work

Brick pedestal wall = $0.95 \times 0.70 \times 1.3 \times 3$ = 2.593 cum.

Outside wall = $17.76 \times 0.70 \times 1.3$ = 16.16 cum.

Stair wall = $11.80 \times 0.70 \times 1.3$ = 10.74 cum.

Outside brick wall for elevation = $7.668 \times 0.70 \times 1.3$ = 6.977 cum.

Total = 36.47 cum.

c. For cable trench

$11.63 \times 1.45 \times 0.95$ = 16.02 cum.

Grand total = $93.042 + 36.47 + 16.02$ = 145.532 cum.

20% for ordinary soil = $145.532 \times 20/100$ = 29.11 cum.

80% for laterite rock = $145.532 - 29.11$ = 116.422 cum.

2.P.C.C (1:3:6)

a. Under column

$$C1,C9,C14 = 3 \times 1.5 \times 1.5 \times 0.1 = 0.675 \text{ cum.}$$

$$C6,C13 = 2 \times 1.8 \times 1.8 \times 0.1 = 0.650 \text{ cum.}$$

$$C2,C5,C10 = 3 \times 2.0 \times 2.0 \times 0.1 = 1.200 \text{ cum.}$$

$$C3,C4,C7,C8,C11,C12 = 6 \times 2.1 \times 2.1 \times 0.1 = \underline{2.646 \text{ cum.}}$$

$$\text{Total} = 5.171 \text{ cum.}$$

b. Under brick work

$$\text{Brick pedestal} = 0.95 \times 0.70 \times 0.1 \times 3 = 0.200 \text{ cum.}$$

$$\text{Outside wall} = 17.76 \times 0.70 \times 0.1 = 1.240 \text{ cum.}$$

$$\text{Stair wall} = 11.8 \times 0.70 \times 0.1 = 0.826 \text{ cum.}$$

Outside brick wall for elevation

$$= 7.668 \times 0.70 \times 0.1 = 0.53 \text{ cum.}$$

$$\text{Under flooring} = 3 \times 3.1 \times 11 \times 0.1 = 10.23 \text{ cum.}$$

$$= 6 \times 2.6 \times 0.1 = 1.56 \text{ cum.}$$

$$= 4.75 \times 2.6 \times 0.1 = \underline{1.235 \text{ cum.}}$$

$$\text{Total} = 15.824 \text{ cum.}$$

c. Under cable trench

$$11.63 \times 1.45 \times 0.1 = 1.686 \text{ cum.}$$

$$\text{Grand total} = 5.171 + 15.824 + 1.686 = 22.681 \text{ cum.}$$

3. Providing & injecting chemical emulsion for pre constructional antitermite treatment

$$\text{Area} = 173.60 \text{ sqm.}$$

4. Brick work in foundation & plinth

a. Brick pedestal

$$1^{\text{st}} \text{ step} = 0.75 \times 0.5 \times 0.175 = 0.066 \text{ cum.}$$

$$2^{\text{nd}} \text{ step} = 0.75 \times 0.375 \times 0.175 = 0.049 \text{ cum.}$$

$$3^{\text{rd}} \text{ step up to plinth} = 0.75 \times 0.25 \times 1.1 = 0.206 \text{ cum.}$$

b. Outside wall

$$1^{\text{st}} \text{ step} = 17.56 \times 0.5 \times 0.175 = 1.536 \text{ cum.}$$

$$2^{\text{nd}} \text{ step} = 17.56 \times 0.375 \times 0.175 = 1.150 \text{ cum.}$$

$$3^{\text{rd}} \text{ step upto plinth} = 17.56 \times 0.25 \times 1.1 = 4.830 \text{ cum.}$$

c. Stair wall

$$1^{\text{st}} \text{ step} = 11.6 \times 0.5 \times 0.175 = 1.015 \text{ cum.}$$

$$2^{\text{nd}} \text{ step} = 11.6 \times 0.375 \times 0.175 = 0.761 \text{ cum.}$$

$$3^{\text{rd}} \text{ step upto plinth} = 11.6 \times 0.25 \times 1.1 = 3.190 \text{ cum.}$$

d. Outside wall for elevation

$$1^{\text{st}} \text{ step} = 7.468 \times 0.50 \times 0.175 = 0.653 \text{ cum.}$$

$$2^{\text{nd}} \text{ step} = 7.468 \times 0.375 \times 0.175 = 0.490 \text{ cum.}$$

$$3^{\text{rd}} \text{ step} = 7.468 \times 0.25 \times 1.1 = \underline{2.053 \text{ cum.}}$$

$$\text{Total} = 15.999 \text{ cum.}$$

5. Brick work in super structure

a. Ground floor

$$250 \text{ mm wall} = 47.048 \times 3.625 \times 0.25 = 42.637 \text{ cum.}$$

Deduction for opening & lintel

$$\text{Door D} = 1.2 \times 2.29 \times 0.25 \times 2 = 1.374 \text{ cum.}$$

$$D2 = 0.75 \times 2.1 \times 0.25 \times 2 = 0.790 \text{ cum.}$$

$$\text{Window W} = 1.0 \times 1.54 \times 0.25 \times 7 = 2.695 \text{ cum.}$$

$$\text{Ventilator V} = 0.6 \times 0.6 \times 0.25 \times 2 = 0.180 \text{ cum.}$$

$$\text{Lintel} = 47.048 \times 0.25 \times 0.15 = \underline{1.764 \text{ cum.}}$$

$$6.803 \text{ cum.}$$

$$\text{Total} = 42.637 - 6.803 = 35.834 \text{ cum.}$$

$$125 \text{ mm wall} = 2.6 \times 3.625 \times 0.125 = 1.178 \text{ cum.}$$

$$\text{Deduction for lintel} = 2.6 \times 0.125 \times 0.15 = 0.048 \text{ cum.}$$

$$\text{Total} = 1.178 - 0.048 = 1.130 \text{ cum.}$$

b. First floor

$$250 \text{ mm wall} = 69.678 \times 0.25 \times 3.625 = 63.145 \text{ cum.}$$

Deduction for opening & lintel

$$\text{Door D} = 1.2 \times 2.29 \times 0.25 \times 2 = 1.374 \text{ cum.}$$

$$D1 = 1.0 \times 2.29 \times 0.25 = 0.570 \text{ cum.}$$

$$D2 = 0.75 \times 2.1 \times 0.25 \times 2 = 0.790 \text{ cum.}$$

$$\begin{aligned} \text{Window W} &= 1 \times 1.54 \times 0.25 \times 9 &= 3.465 \text{ cum.} \\ \text{Ventilator V} &= 0.6 \times 0.6 \times 0.25 \times 3 &= 0.270 \text{ cum.} \\ \text{Lintel} &= 69.678 \times 0.25 \times 0.15 &= \underline{2.610 \text{ cum.}} \\ &&9.080 \text{ cum.} \end{aligned}$$

$$\text{Total} = 63.145 - 9.08 = 54.065 \text{ cum.}$$

$$125 \text{ mm wall} = 17.803 \times 3.625 \times 0.125 = 8.066 \text{ cum.}$$

Deduction for opening & lintel

$$\begin{aligned} \text{Door D} &= 1.2 \times 2.29 \times 0.25 &= 0.687 \text{ cum.} \\ \text{D2} &= 0.75 \times 2.1 \times 0.25 &= 0.395 \text{ cum.} \\ \text{Lintel} &= 17.803 \times 0.25 \times 0.15 &= \underline{0.670 \text{ cum.}} \\ &&1.749 \text{ cum.} \end{aligned}$$

$$\text{Total} = 8.066 - 1.749 = 6.317 \text{ cum.}$$

c. Headroom

$$250 \text{ mm wall} = 16.725 \times 0.25 \times 3.0 = 12.540 \text{ cum.}$$

Deduction for opening

$$\begin{aligned} \text{Door} &= 1.2 \times 2.29 \times 0.25 &= 0.687 \text{ cum.} \\ \text{Window} &= 1.0 \times 1.54 \times 0.25 &= \underline{0.385 \text{ cum.}} \\ &&= 1.072 \text{ cum.} \end{aligned}$$

$$\text{Total} = 12.54 - 1.072 = 11.471 \text{ cum.}$$

d. Parapet wall

$$250 \text{ mm wall} = 8.8 \times 0.25 \times 2.8 = 6.16 \text{ cum.}$$

$$125 \text{ mm wall} = 42.548 \times 0.75 \times 0.125 = 3.988 \text{ cum.}$$

e. Outside wall for elevation

$$= 5.7 \times 0.25 \times 7.468 = 10.641 \text{ cum.}$$

$$\text{Total 250 mm wall} = 118.170 \text{ cum.}$$

$$\text{Total 125 mm wall} = 11.435 \text{ cum.}$$

6.R.C.C M20

a. Footing

$$C1, C9, C14 = 3 \times 1.3 \times 1.3 \times 0.3 = 1.521 \text{ cum.}$$

$$C6, C13 = 2 \times 1.6 \times 1.6 \times 0.4 = 2.048 \text{ cum.}$$

$$C2, C5, C10 = 3 \times 1.8 \times 1.8 \times 0.45 = 4.374 \text{ cum.}$$

$$C3, C4, C7, C8, C11, C12 = 6 \times 1.9 \times 1.9 \times 0.5 = \underline{10.830 \text{ cum.}}$$

$$\text{Total} = 18.773 \text{ cum.}$$

b. Column upto plinth level

$$C1, C5, C6, C9 = 4 \times 0.35 \times 0.6 \times 1.8 = 1.512 \text{ cum.}$$

$$C2, C3, C4, C10, C11, C12 = 6 \times 0.35 \times 0.6 \times 1.8 = 2.268 \text{ cum.}$$

$$C7, C8, C13, C14 = 4 \times 0.25 \times 0.6 \times 1.8 = \underline{1.08 \text{ cum.}}$$

$$\text{Total} = 4.86 \text{ cum.}$$

c. Column in super structure

$$C1, C9 = 2 \times 0.35 \times 0.6 \times 7.5 = 3.150 \text{ cum.}$$

$$C5, C6 = 2 \times 0.35 \times 0.6 \times 10 = 4.200 \text{ cum.}$$

$$C2, C3, C4, C10, C11, C12 = 6 \times 0.35 \times 0.6 \times 7.5 = 4.725 \text{ cum.}$$

$$C7, C8 = 2 \times 0.25 \times 0.6 \times 10 = 3.000 \text{ cum.}$$

$$C13, C14 = 2 \times 0.25 \times 0.6 \times 7.5 = \underline{2.250 \text{ cum.}}$$

$$\text{Total} = 17.320 \text{ cum.}$$

d. R.C.C wall in cable trench

$$11.63 \times 0.75 \times 1.3 = 11.339 \text{ cum.}$$

$$11.63 \times 0.1 \times 0.8 = \underline{0.93 \text{ cum.}}$$

$$\text{Total} = 12.269 \text{ cum.}$$

e. Tie beam

$$82.56 \times 0.25 \times 0.3 = 6.192 \text{ cum.}$$

f. Beam

Ground Floor roof beam

$$B1-B2-B3-B4-B5 = 13.08 \times 0.25 \times 0.35 = 1.144 \text{ cum.}$$

$$B6-B7-B8-B9-B10 = 10.68 \times 0.25 \times 0.35 = 0.934 \text{ cum.}$$

$$= 2.6 \times 0.25 \times 0.45 = 0.292 \text{ cum.}$$

$$B11 = 2.6 \times 0.125 \times 0.45 = 0.146 \text{ cum.}$$

$$B12-B13-B14-B15-B16 = 0.934 + 0.292 = 1.226 \text{ cum.}$$

B17,B18,B19 = 3X11X0.3X0.9 = 8.910 cum.
 B20-B21 = 10.4X0.25X0.45 = 1.170 cum.
 B22-B23 = 10.4X0.25X0.45 = 1.170 cum.
 Total = 14.992 cum.

1st floor roof beam

B1-B2-B3-B4-B5 = 13.08X0.25X0.45 = 1.471 cum.
 B6-B7-B8-B9-B10 = 13.28X0.25X0.45 = 1.494 cum.
 B12-B13-B14-B15-B16 = 13.08X0.25X0.45 = 1.471 cum.
 B16a-B16b = 10.75X0.3X0.45 = 1.451 cum.
 B17,B18,B19 = 3X11X0.3X0.9 = 8.910 cum.
 B20-B21 = 6X0.25X0.5 = 0.750 cum.
 = 4.4X0.25X0.45 = 0.495 cum.
 B22-B23 = 6X0.25X0.5 = 0.750 cum.
 = 4.4X0.25X0.45 = 0.495 cum.
 Total = 17.287 cum.

Headroom beam

17.2X0.25X0.45 = 1.935 cum.

Grand total of floor beam,roof beam

& headroom beam = 34.214 cum.

g. Pergolla

Beam = 2X0.25X0.25X0.44 = 0.055 cum.

Pergolla = 0.127X3.1X0.3X5 = 0.590 cum.

Total = 0.645 cum.

h. Slab

Ground floor roof slab=127.2 sqm.X0.125 m.= 15.900 cum.

First floor roof slab=127.2 sqm.X0.125 m. = 15.900 cum.

Headroom roof slab=2X3.616X0.1X3.3 = 2.386 cum.

Slab over outside wall=7.65X1.05X0.1 = 0.803 cum.

Total slab =34.989 cum.

i. Lintel

Ground floor lintel

$$\text{Over 250 mm wall} = 47.048 \times 0.25 \times 0.15 = 1.764 \text{ cum.}$$

$$\text{Over 125 mm wall} = 2.6 \times 0.125 \times 0.15 = 1.130 \text{ cum.}$$

First floor lintel

$$\text{Over 250 mm wall} = 69.678 \times 0.25 \times 0.15 = 2.610 \text{ cum.}$$

$$\text{Over 125 mm wall} = 17.803 \times 3.625 \times 0.125 = 8.066 \text{ cum.}$$

$$\text{Over 250 mm outside wall} = 7.268 \times 0.25 \times 0.15 = \underline{0.272 \text{ cum.}}$$

$$\text{Total} = 13.842 \text{ cum.}$$

j. Chhaja

$$\text{Ground floor} = 7 \times 0.6 \times 1.5 = 6.3 \text{ sqm.}$$

$$\text{First floor} = 7 \times 0.6 \times 1.5 = 6.3 \text{ sqm.}$$

$$\text{For elevation} = 2.382 \times 0.85 = \underline{2.02 \text{ sqm.}}$$

$$\text{Total} = 14.62 \text{ sqm.}$$

k. R.C.C. column for elevation

$$4 \times 0.2 \times 0.1 = 0.08 \text{ cum.}$$

$$2 \times 0.049 \times 3.4 = \underline{0.33 \text{ cum.}}$$

$$\text{Total} = 0.41 \text{ cum.}$$

l. Stair case

$$\text{Waist slab} = 6.9 \times 0.125 \times 1.2 = 1.035 \text{ cum}$$

$$\text{Step} = 23 \times 1.2 \times 0.15 \times 0.3 = 1.242 \text{ cum.}$$

$$1^{\text{st}} \text{ landing} = 2.6 \times 1.2 \times 0.15 = 0.468 \text{ cum.}$$

$$2^{\text{nd}} \text{ landing} = 2.6 \times 1.2 \times 0.15 = 0.468 \text{ cum.}$$

$$= 1.2 \times 0.3 \times 0.15 = 0.117 \text{ cum.}$$

$$\text{Stair beam} = 2 \times 8.6 \times 0.25 \times 0.25 = \underline{0.268 \text{ cum.}}$$

$$\text{Total} = 3.598 \text{ cum.}$$

7.16mm thick inside cement plaster in (1:6)

a. Ground floor

$$72.61 \times 3.75 = 272.28 \text{ sqm.}$$

Deduction for opening

$$\text{Door } D = 3 \times 1.2 \times 2.29 = 8.244 \text{ sqm.}$$

$$D2 = 2 \times 0.75 \times 2.1 = 3.150 \text{ sqm.}$$

$$\text{Window } W = 7 \times 1.0 \times 1.54 = 10.780 \text{ sqm.}$$

$$\text{Ventilator } V = 2 \times 0.6 \times 0.6 = \underline{0.720 \text{ sqm.}}$$

$$\text{Total} = 22.894 \text{ sqm}$$

$$\text{Deduct 50\% area of opening} = 272.28 - (22.894 \times 50\%)$$

$$= 272.28 - 11.447$$

$$= 260.833 \text{ sqm.}$$

First floor

$$31.924 \times 3.75 = 494.715 \text{ sqm.}$$

Deduction for opening

$$\text{Door } D = 6 \times 1.2 \times 2.29 = 16.488 \text{ sqm.}$$

$$D1 = 2 \times 1 \times 2.29 = 4.580 \text{ sqm.}$$

$$D2 = 8 \times 0.75 \times 2.1 = 12.600 \text{ sqm.}$$

$$\text{Window } W = 9 \times 1.0 \times 1.54 = 13.860 \text{ sqm.}$$

$$\text{Ventilator } V = 3 \times 0.6 \times 0.6 = \underline{1.080 \text{ sqm.}}$$

$$\text{Total} = 48.608 \text{ sqm.}$$

Deduct 50% area of opening

$$= 494.715 - (48.608 \times 50\%)$$

$$= 470.411 \text{ sqm.}$$

Stair head room

$$3 \times 6.35 = 19.050 \text{ sqm.}$$

$$2 \times 2.45 \times 2.6 = 12.740 \text{ sqm.}$$

$$6 \times 2.45 = \underline{14.700 \text{ sqm.}}$$

Total = 46.490 sqm.

Total plastering area = 777.734 sqm.

8.12 mm thick Ceiling plaster in (1:4)

Ground floor

$$= 11.0 \times 11.63 = 127.93 \text{ sqm.}$$

$$= 2.6 \times 4.626 = \underline{12.02 \text{ sqm.}}$$

Total = 139.95 sqm.

First floor

$$= 8.343 \times 4.75 = 39.629 \text{ sqm.}$$

$$= 3.163 \times 4.75 = 15.024 \text{ sqm.}$$

$$= 2.6 \times 1.5 = 3.900 \text{ sqm.}$$

$$= 1.725 \times 1.5 = 2.58 \text{ sqm.}$$

$$= 11.63 \times 6 = \underline{69.78 \text{ sqm.}}$$

Total = 134.820 sqm.

Stair waist slab

$$2.6 \times 6 = 15.600 \text{ sqm.}$$

$$\text{Stair head room Ceiling} = 2.6 \times 6 = \underline{15.600 \text{ sqm.}}$$

Total = 31.200 sqm.

Grand total ceiling plastering = 305.97 sqm.

9.12mm thick Outside plaster in (1:6)

a. Outside wall = $50.15 \times 7.5 = 376.125 \text{ sqm.}$

b. Elevation wall = $8.268 \times 6.19 = 51.17 \text{ sqm.}$

c. Parapet wall
 $= 70.2 \times 0.75 = 52.17 \text{ sqm.}$

$$= 8.6 \times 3.6 = 30.96 \text{ sqm.}$$

d. Pergolas
 $= 4 \times 4.4 \times 0.25 = 4.40 \text{ sqm.}$

$$= 12 \times 0.3 \times 3.1 = 11.16 \text{ sqm.}$$

$$= 12 \times 0.125 \times 3.1 = 4.65 \text{ sqm.}$$

e. Head room plastering = $19.2 \times 3 = \underline{57.6 \text{ sqm.}}$

Total = 588.715 sqm.

Deduct 50% area of opening

Door D=2X1.2X2.29 = 5.496sqm.

Window w=17X1.0X1.54 = 26.180sqm.

Ventilator v=5X0.6X0.6 = 1.800sqm.

Total = 33.476 sqm.

Total = 588.715-(33.476X50%)

= 571.977 sqm.

f. Chhaja plastering = 30X1.5X0.6 = 27.00 sqm.

30X0.6X0.1 = 1.80 sqm.

2X2.632X0.5 = 2.632sqm.

2X2.632X0.5 = 2.632sqm.

Total = 34.064 sqm.

Grand total = 606.041 sqm.

10. Flooring

ceramic floor tiles in floors of size(300x300mm) on 25mm thick c.m(1:1)

a. Ground floor

11.63X11.0 = 127.93 sqm.

2.6X2.313 = 6.0138 sqm

2.6X2.313 = 3.0138 sqm.

2.6X6.0 = 15.60 sqm.

Dado area

11.63X0.15X2 = 3.489 sqm.

11.0X0.15X4 = 6.60 sqm.

15.6X0.15 = 2.34 sqm.

b. First Floor

8.343X4.75 = 39.629 sqm.

11.63X6 = 69.78 sqm.

3.163X4.75 = 15.024 sqm.

3X2.6X1.5 = 11.70 sqm.

2.6X2.6X6 = 15.60 sqm.

Dado area

2X8.343X0.15	=2.50 sqm.
2X4.75X0.15	=1.425 sqm.
2X3.163X0.15	=0.948 sqm.
2X4.75X0.15	=1.425 sqm.
2X11.63X0.15	=3.489 sqm.
2X6X0.15	<u>=1.80 sqm.</u>

Grand total = 333.106 sqm.

11. Ceramic wall tile in toilets of size (200x300mm) on 12mm thick cement mortar (1:3)

38.771X2.1=81.42 sqm.

12. Marble flooring in steps

1st landing

1.2X2.6 =3.12 sqm.

1.2X0.3 =0.36 sqm.

Steps = 23X1.2X0.3 =8.28 sqm.

2nd landing = 1.2X2.6 =3.12sqm.

Step sides

23X (1/2x0.15x0.3) = 0.5175sqm.

Waist slab = 12X0.125 =1.5 sqm.

Dado = 17.2X0.15 =2.58sqm.

Total = 19.477sqm.

13. Cement washing one coat

Area same as inside, ceiling and

outside plastering = 1689.74 sqm.

14. Cement primer one coat

Area same inside, ceiling and

outside plastering = 1689.74 sqm.

15. Outside weather coat cement paint 2 coats

Area same as outside plastering = 606.041 sqm.

16. Inside painting 2 coat of oil bound distemper

Area same as inside & ceiling plastering = 1083.70 sqm.

17. Painting 2 coats of synthetic enamel paint over iron/wood

Door D=1.2X2.29X5 =13.74 sqm.

D1=1.0X2.29X2 =4.58 sqm.

D2=0.75X2.X5 =7.875 sqm.

Window W=1.0X1.54X17 =26.180 sqm.

Total= 52.375 sqm.

Painting = 2.25X opening

=2.25 X52.375=117.84sqm.

18. Corbelling

168.1+64.9+29.6=262.6 m.

19. Excavated earth filling

3 X3.1X 0.15 =15.345 cum.

6 x 2.6 x0.15 =2.340 cum.

4.75x2.6x0.15 =4.275 cum.

Total=21.96 cum.

= Excavated earth – P.P.C –Footing – Column up to P.L – Brick wall – tie beam

– P.C.C &C.C under flooring.

=129.51 – 7.97 – 18.773 – 4.86 – 15.999 – 6.192 – 21.96

= 53.756 cum

20. Supplying fitting & fixing of window grill

17 x 1.0 x 1.54 = 26.18 sqm.

GRILL = 32.28 kg/sqm.

$$26.18 \times 32.28 = 845.09 \text{ kg}$$

21. Steel in R.C.C

a. Footing = 18.773cumX 60	= 1126.38kg
b. Column = 22.18cumX 120kg	= 2661.60kg
c. Beam =27.927cum x 65kg	= 3351.24kg
d. slab =34.168cumX 65kg	= 2222.09kg
e. Lintel = 13.842cum x 60kg	= 830.52kg
f. Chhaja =1.46cum x 40kg	= 58.49kg
g. R.C.C wall for cable trench=13.199cumX50kg	= 659.95kg
h. stair case =3.598cum x 70 kg	= <u>251.86kg</u>
Total = 11162.136 kg = 111.62qntl	

22. 25 mm grading concrete

$$\text{Area} = 142.8\text{sqm.}$$

23. Wood work

Sal wood chowkath

$$D = 4 \times 3.49 = 13.96 \text{ m.}$$

$$D1 = 2 \times 3.29 = 6.58 \text{ m.}$$

$$D2 = 5 \times 2.85 = \underline{14.25 \text{ m.}}$$

$$\text{Total} = 34.79 \text{ m.}$$

Shutter

$$D = 4 \times 1.1 \times 2.24 = 9.856 \text{ sqm.}$$

$$D1 = 2 \times 0.9 \times 2.24 = 4.032 \text{ sqm.}$$

$$D2 = 5 \times 0.65 \times 2.05 = \underline{6.662 \text{ sqm.}}$$

$$\text{Total} = 20.55 \text{ sqm.}$$

24. Supplying, Fitting & fixing of aluminum window (sliding type)

$$17 \times 1.0 \times 1.54 = 26.18 \text{ sqm.}$$

25. Stainless steel handrail

$$\text{Total length} = 54.3 \text{ m.}$$

26. Internal water supply & sanitary installation & external P.H work

Fixing of vitrified glazed double charged digital wall tiles of good quality(Ex: Somany, Kajaria, RAK Ceramics, Johnson, Nitco) in dados, skirting and risers of steps on 12mm thick cement plaster (1:3) jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing

complete.

Providing Vitrified Floor Tiles with Ceramic (Anti-skid type) tile flooring of good quality (*Ex: Somany, Kajaria, RAK Ceramics, Johnson, Nitco*) on 25mm thick bed of cement mortar 1:1(1 cement: 1 sand) jointed with neat cement slurry mixed with pigment to match the shades of the tiles, including rubbing and polishing complete.

Providing laying and plumbing of PVC Pipes of heavy quality (Oriplast) with required fittings for water supply in house plumbing, sanitation plumbing and external PH work as per site requirement including earth work in excavation etc. complete as per P.H. Specification & as per the direction of the Engineer-in-charge.

Providing and fixing of PVC/Porcelain fittings & spares, CP (Brass) fittings and specials in water supply and sanitary as toilet accessories etc. complete:

1. Odisha Pan with requisite Trap: 5
2. CP Short Body Bib Cock (Brass): 5
3. CP Soap Holder: 10
4. PVC Cistern with Cistern Pipe: 5
5. CP Long Body Bib Cock (Brass): 4
6. CP Shower Head with CP Shower Pipe: 5
7. CP Concealed Cock (Brass): 4
8. CP Wall Mixer (Non-Concealed) with provision for overhead Shower: 1
9. Towel rail: 5
10. Floor Drain with requisite Trap: 14 (Shower Area, Urinals, Wash Basin)
11. CP Angular Stop Cock (Brass): 15 (COLD) (Cistern, Urinals, Wash Basin, Geyser)
1 (HOT) (Geyser)
12. Wash Basin with waste pipe & CP Wash Basin Coupler: 5
13. Flexible Connecting Pipes: 14 (Cisterns, Wash Basins, Urinals)
2 (Steel Wire Meshed Hot & Cold Geyser Pipes)
14. CP Pillar Cock (Brass): 5
15. Glass Shelf: 5
16. Mirror: 5

*On the basis of site requirement the above quantity may be varied.

*All CP cocks must be quarter turn type.

*All Porcelain fittings should be of good quality (Hindware, Parryware)

*All Sanitary ware CP (Brass) fittings should be of Jaquar

Construction of required number of **Inspection chambers** as per PH Specification, including cost of all materials and labours with T&P as required for the work etc. complete as per the direction of Engineer-in-charge.

Construction of required number of **Man Hole Chamber** as per PH Specification, including cost of all materials and labours with T&P as required for the work etc. complete as per the direction of Engineer-in-charge.

Supplying of all labours with T&P for construction of required number of **Gully Trap chamber** of standard size as per PH Specification, including cost of all materials etc. complete as per the direction of Engineer-in-charge.

Supplying of all labours T&P for construction of required number of **Soak way pit** including cost of all materials & labours etc. complete as per the direction of Engineer-in-charge.

Supplying of all labours T&P for construction of a overhead **RCC tank** of required size (with its walls water proofed) on roof top including cost of all materials and labour with T&P for the work etc. complete as per the direction of Engineer-in-charge.

27. Electrical installation for both internal & external

1. Recessed wiring to light point/exhaust fan point/call bell point with 1.5sqmm FR PVC insulated single core multistrand copper conductor of ISI marked with 20mm dia non-metallic PVC flexible conduit with 6Amp 250V modular type Switch with modular box, board, cover & accessories with 1.5sqmm FR PVC insulated single core multistrand copper conductor for running earth including all accessories & connection as per direction of Engineer in charge. (Make of wire: Finolex/ Anchor/ Havell's/ L&T/ KDK) (Make of Modular Switches: Havell's/Legrande/Anchor-Panasonic/Schneider)
2. Recessed wiring to fan point with 1.5sqmm FR PVC insulated single core multistrand copper conductor of ISI marked with 20mm dia non-metallic PVC flexible conduit with 6Amp 250V modular type Switch with stepwise socket type fan regulator with modular box, board, cover & accessories etc with 1.5sqmm FR PVC insulated single core multistrand copper conductor for running earth including all accessories & connection as per direction of Engineer in charge. (Make of wire: Finolex/ Anchor/ Havell's/ L&T/ KDK) (Make of Modular Switches: Havell's/Legrande/Anchor-Panasonic/Schneider)
3. Recessed wiring to 6Amp plug switch point on the existing board including all accessories & connection as per direction of Engineer in charge.
4. Recessed wiring to 6Amp plug switch point on the separate board including all accessories & connection as per direction of Engineer in charge.
5. Recessed wiring to 16Amp plug switch point on the separate board including all accessories & connection as per direction of Engineer in charge.
6. Recessed wiring to 6Amp plug switch with indicator point on the separate Computer board including all accessories & connection as per direction of Engineer in charge
7. Supply & fixing of Bakelite cover and Dingdong bell/ Parrot type Musical bell
8. Supply & Wiring of AC Point to 40Amp SPMCB with the industrial socket outlet will fix near the AC machines.

9. **MAINS AND SUBMAINS.**

Wiring for mains and sub mains in a concealed manner in roof slab, floor and walls using PVC copper stranded wires in Polythene/ PVC pipes of 2mm wall thickness, under 4 mm floor as given below with continuous copper earth wire, necessary GI junction boxes, pull boxes of 2 mm thickness, fan boxes, and as require complete with all accessories as per the direction of Engineer-in-charge.

a) 2 X 6 + 1 X 2.5 Sq. mm PVC insulated copper wire as submain.

b) 2 X 4 +1 x 2.5 Sq.mm PVC insulated copper wire as submain.

c) 2 X 2.5 +1 x 1.5 Sq.mm PVC insulated copper wire as submain.

10. Supply, fixing, erecting, connecting and commissioning of 40Amp 100mA RCCB in complete shape with all accessories etc.(Make-Havells/L&T/Legrande/C&S)
11. Supply, fixing, erecting, connecting and commissioning of indoor type dust and vermin proof, readymade panel board along with ICDP switch, isolator switches to BDB with required changeover switch for providing generator input as per requirement and direction of Engineer-in-charge. .(Make of Isolator -Havells/L&T/Legrande/C&S)
12. Supply, fixing, erecting, connecting and commissioning of indoor type dust and vermin proof, readymade, double door type powder coated wall mounted Branch Distribution Boards suitable in complete shape. Outgoings-40A SP MCB, 10A SP MCB, 6A SP MCB as per requirement and direction of the Engineer-in-charge (Make: Havells/L&T/Legrande/C&S) for light load.
13. Excavation in all type of soil including rock of size 900mm x 900mm x 3050mm, supply of 50 mm dia 3000 mm length G.I watering pipe with funnel, one no. 40 x 5mm GI flat with nut bolted , 50kg common salt and 100 Kg coal dust per pit, putting the earthing with alternate layer of salt and coal dust, back filling with foreign soil, making earthing chamber with first class K.B Bricks, supply and putting of 450 mm X 450 mm C.I / RCC earth pit cover complete in all respect.
14. Supplying, laying underground, inside floors, in walls of 40mm x 5 mm size electrolyte GI earth strips as per site conditions and as per instruction of the engineer in charge complete with jointing the flats by welding with an overlap of 150 mm, painting the joint with bituminous paint, wrapping with H.T and insulating PVC tapes complete in all respect.

Electrical Installations:

Light Points

1. Ground Floor: 15 Double Fittings
2. Store Room: 6 Points
3. Guest Room: 6 Points
4. Conference Hall: 15 Points

Total: 42 Points

Fan Points

1. Ground Floor: 6 Points

2. Store Room: 2 Points
3. Guest Room: 2 Points
4. Conference Hall: 4 Points
5. Exhaust Fans in Bathrooms: 5 Points

Total: 19 Points

AC Points

1. Ground Floor: 6 Points
2. Guest Room: 2 Points
3. Conference Hall: 4 Points

Total: 12 Points

Guest Bathroom Geyser Point: 1 Point

Extra Plug Points

1. 5 Amps: 10 Points
2. 15 Amps: 6 Points

*On the basis of site requirement the above quantity may be varied.

Total plinth area = G.F+F.F+Headroom with pergolla
= 390.2 sqm.

SECTION-III
[LIST OF ANNEXURES]

The following schedules and Performa are annexed to this specification and contained in Section-III as referred to in the relevant clauses.

1	Declaration form	ANNEXURE-I
2	Abstract of terms and conditions to accompany Section-II of Part-I	ANNEXURE-II
3	Composite Bank Guarantee form for security deposit, payment and performance	ANNEXURE-III
4	Bidders information	ANNEXURE-IV

ANNEXURE-II

ABSTRACT OF GENERAL TERMS AND CONDITIONS OF CONTRACT [COMMERCIAL] TO ACCOMPANY PART-I

1(a)	Cost of Tender Document: D.D No & Date.	
1(b)	Earnest money furnished. D.D No. & Date.	
1(c)	Tender Processing Fee: D.D No. & Date.	
2	Contractor's work experience including user's certificate furnished	Yes/No
3	Completion of work :- Whether agreeable to OPTCL's desired completion period as indicated .	Yes/No
4	Guarantee:- Whether agreeable to OPTCL's terms. [As per clause-9 of Section-II]	Yes/No
5	Whether agreeable to furnish Composite B.G. in case his tender be successful [As per clause- 11 of Section-II]	Yes/No
6.	Terms of payment:- Whether agreeable to OPTCL's terms [As per clause-12 of Section-II]	Yes/No.
7.	Nature of price:- FIRM	Yes/No
8.	Penalty:- Whether agreeable to OPTCL's terms (As per clause-13 of Section-II)	Yes/No
9.	Validity: - Whether agreeable to OPTCL's terms [As per clause- 7 of Section-I]	Yes/No
10.	Whether declaration form duly filled in furnished.	Yes/No.
11	Whether scanned copy of Civil License furnished.	Yes/No.
12	Whether scanned copy of PAN card furnished.	Yes/No.
13	Whether scanned copy of Service Tax Regd. No. furnished.	Yes/No.

ANNEXURE-III

PROFORMA FOR COMPOSITE BANK GUARANTEE FOR SECURITY DEPOSIT
PAYMENT AND PERFORMANCE

This Guarantee Bond is executed this _____ day
of _____ 2015 by us the
_____ Bank at
_____ P.O. _____ P.S. _____

District _____ State _____

1. WHEREAS the ODISHA POWER TRANSMISSION CORPORATION LTD., a body corporate constituted under the Electricity Act, 2003 [hereinafter called “the OPTCL” which shall include its successors and assigns has placed orders No. _____ Date _____ [hereinafter called “The Agreement”] on M/s. _____ [Hereinafter called “The Contractor”] which shall include its successors & assigns for execution of the work?

AND WHERE AS the bidder has agreed to execute the work for OPTCL in terms of the said agreement AND

WHEREAS the OPTCL has agreed [1] to exempt the bidder from making payment of Security [2] to release 100% payment of the cost as per the said agreement and [3] to exempt from performance guarantee on furnishing by the bidder to OPTCL, a Composite bank Guarantee of the value of 10 % [ten percent] of the contract price of the said agreement.

NOW THEREFORE, in consideration of the OPTCL having agreed [1] to exempt the bidder from making payment of Security [2] releasing 100% payment to the bidder and [3] to exempt from furnishing performance

guarantee in terms of the said agreement as aforesaid, we, the _____ [Bank][hereinafter referred to as 'the Bank'] do hereby undertake to pay to the OPTCL an amount not exceeding Rs. _____ Rupees _____ against any loss or damage caused to or suffered by or would be caused to or suffered by the OPTCL by reason of any breach by the said Bidder [s] of any of the terms or conditions contained, in the said agreement.

2. We the (_____ Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on demand from the OPTCL stating that the amount claimed is due by way of loss or damage caused to or suffered by the OPTCL by reason of any breach by the said Supplier [s] of any of the terms or conditions, contained in the said agreement or by reason of the bidder's failure to perform the said agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ [Rupees _____]

3. We the _____ Bank} also undertake to pay to the OPTCL any money so demanded notwithstanding any dispute or disputes raised by the Contractor [s] in any suit or proceeding instituted/pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor [s] shall have no claim against us for making such payment.

4 We, (_____ Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and

that it shall continue to do so enforceable till all the dues of the OPTCL under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till General Manager , E.H.T.(O&M) Circle, OPTCL, Cuttack, certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor [s] and accordingly discharges this Guarantee.

Unless a demand or claim under this guarantee is made on us in writing on or before the [Date_____], we shall be discharged from all liability under this guarantee thereafter.

5. We,(_____Bank) further agree that the OPTCL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor [s] and we shall not be relieved from our liability by reason of any such variations or extension being granted to the said Contractor [s] or for any forbearance, act or omission on the part of the OPTCL or any indulgence by the OPTCL to the said Contractor [s] or by any such matter or thing whatsoever which under the law relating to sureties would but these provisions have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the name , style and constitution of the Bank and Contractor [s].
7. We,[_____Bank] lastly undertake not to revoke this guarantee during its currency except with the previous consent of the OPTCL in writing.
8. We the _____ Bank further agree that this guarantee shall also be invoked at our place of business at Cuttack (

indicate the name of the branch)in the state of ODISHA. Not with standing anything contained herein.

- 1) Our liability under this bank guarantee shall not exceed Rs.-----
----(Rupees-----).
- 2) The bank guarantee shall be valid up to dt.-----
- 3) We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only & only if you serve upon us at -----branch at Cuttack a written claim or demand on or before dt.-----.

Dated _____ Day of _____

For _____

[Indicate the name of Bank]

Witness ((Signature, names & address)

1.

2.

ANNEXURE-IV

BIDDER'S INFORMATION

SL NO The bidder shall furnish general information in the following format

NAME OF THE BIDDER

- 1 Address:-

- 2 City
- 3 Pin Code
- 4 Contact person's Name :-
- 5 Telephone No. office &
Residence:-
- 6 FAX No:-
- 7 EMAIL:-
- 8 HT/MV License
- 9 SERVICE TAX REGISTRATION
NO.
- 10 PAN NO.