

BID IDENTIFICATION NO: ACE/OTDC/08/2026-27.



**ODISHA TOURISM DEVELOPMENT CORPORATION LIMITED
(A Govt. of Odisha Undertaking)**

Panthanivas (Old Block): Lewis Road: Bhubaneshwar-14

COVER – I

TECHNICAL BID DOCUMENTS / DETAILED TENDER CALL NOTICE FOR THE WORK: -

“Infrastructure Development of Satapada in Puri District”

(Composite Tender)

Estimated Cost Put to Tender: **Rs. 2,33,24,439.00**

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ODISHA TOURISM DEVELOPMENT CORPORATION LIMITED
(A GOVT. OF ODISHA UNDERTAKING)
PANTHANIVAS (OLD BLOCK), LEWIS ROAD, BHUBANESHWAR-14
INVITATIONS FOR BIDS (IFB)
E-mail: ace.otdc@gmail.com

Letter No.

Date: 17.09.2026

BID IDENTIFICATION NO:ACE/OTDC/08/2026-27

The Additional Chief Engineer, O.T.D.C. Ltd., Bhubaneswar, on behalf of Governor of Odisha, invites bids in Percentage Rate in Double Cover system, ONLINE MODE only, for the works:

Sl No.	Name of the Work	Approximate Value of work. (Rs. In lakhs)	Amount of Bid security (1% of value of work) (Rs)	Cost of bid document + GST @18% (Rs)	Class of Contractor	Period of Completion
1	2	3	4	5	6	7
1	Infrastructure Development of Satapada in Puri District.	233.24	2,33,444.00	10,000/- +1800/- (Online)	“A” & “B” Class”	09 (Nine) Calendar Months
2	Infrastructure Development of Manika Patana (Bhabakundaleswar Temple) in Puri District	224.54	2,24,540.00	10,000/- +1800/- (Online)	“A” & “B” Class”	09 (Nine) Calendar Months
3	Development & Upgradation of Silver City Boat Club, Cuttack	544.24	5,44,240.00	10,000/- +1800/- (Online)	“A” Class”	09 (Nine) Calendar Months

Bid documents such as DTCN / BOQ etc. can be seen / downloaded from the Govt. Website i.e. www.tendersodisha.gov.in during the period from **Dt. 22.09.2026 to 17.00 Hours of Dt. 06.10.2026.**

1. Online bids shall be received **till 17.00 Hours of Dt. 06.10.2026.**
2. The technical bids will be opened at **11.30 Hours of Dt. 07.10.2026** the office of the Addl. Chief Engineer, O.T.D.C. Ltd, Bhubaneswar.
3. The authority reserves the right to reject any or all bids without assigning any reason thereof.
4. Any addendum / corrigendum / cancellation of tender can also be seen in the said websites.

Addl. Chief Engineer
O.T.D.C., Ltd. Bhubaneswar

CHECKLIST TO BE ENSURED BY THE BIDDER

Sl. No	Particulars	Reference to DTCN Clause No.	Whether furnished		Reference to Page no.
			Yes	No	
01.	Name Of the Bidder:				
02.	Cost of tender paper Rs. 10,000/- and GST @ 18% Rs. 1800.00 (Online)	No.4			
03.	E.M.D for Rs 2,33,244.00 (Online)	No. 20			
04.	Copy of valid Contractor Registration Certificate	No.5 (i) & 21			
05.	Registration No: (To verify the registration Certificate the following online portal to be followed: www.cdmsodisha.gov.in/public/contractor-profile-report.htm)				
06.	All the intending contractor to participate must have valid Goods and Service Tax (GST) registration with appropriate authority.	No.5 (i) & 21			
07.	GST Registration No: (To verify the GST registration Certificate the following online portal to be followed: https://services.gst.gov.in/services/searchtp)				
08.	Copy of PAN Card	No.5 (i) & 21			
09.	PAN Card No:				
10.	No Relationship Certificate in Schedule – A	No.35			
11.	Works Experience: List of projects under execution / executed that are similar in nature to the work	Schedule-B & Schedule -D			
12.	Turn over certificate (Bidder / Firm should have annual financial turnover of not less than 40% of the value of work put to tender in any one year in civil construction works during last five years and the turn over need to be certified by a registered Chartered Accountant.)	No. 112 (j)			
13.	Unique Document Identification Number (UDIN) for Practicing Chartered Accountants: (To verify the registration Certificate the following online portal to be followed: http://udin.icai.org/search-udin)				
14.	Information regarding current litigation, debarring / expelling of the tender or abandonment of the work by the tenderer (Schedule-E)	No.49			
15.	Affidavit (Schedule-F)	No.49			

16.	M.O.U. (Memorandum of Understanding duly notarized) with eligible registered electrical contractor having valid M.V./H.T.license.	No. 8 & 112(d) Schedule - J			
17.	Valid M.V./H.T license No: (To verify the Electrical registration Certificate the following online portal to be followed: https://eicelectricityodisha.nic.in/ELBO/Home.aspx)				
18.	Valid E.P.F. registration with up-to-date confirmed payment receipt (Mandatory)	No. 112 (k)			
19.	Valid E.P.F. registration No: (To verify the E.P.F registration Certificate and to know the payment status the following online portal to be followed: 1. www.epfindia.gov.in 2. https://unifiedportal-emp.epfindia.gov.in/publicPortal/no-auth/misReport/home/loadSearchTrrnHome)				
20.	BID CAPACITY FOR AMOUNT EQUAL & ABOVE 300 LAKH (Vide Works Department Office Memorandum No.6300 dtd.16.6.2011)	No. 112 (g)			
21.	The applicant should have completed the work of similar nature of worth in last five years and shall give the breakup of each work component wise with respective amount. 1. Three similar works each costing not less than 40% of the Amount put to tender amounting to RS. 93,29,776/- (Excluding GST). OR 2. Two similar works each costing not less than 50% of the Amount put to tender amounting to RS. 1,16,62,220/- (Excluding GST). OR 3. One similar work costing not less than 80% of the Amount put to tender amounting to RS. 1,86,59,551/- (Excluding GST).	No. 112 (f)			
22.	Qualification of Key personnel engaged. (Schedule (G))				
23.	Work Programme (in MS Project or Primavera)				

24.	Tools & Plants and machineries as per the requirement in Schedule-C (Minimum 80% marks to be obtained). (Proof of ownership of Tools & Plants and machineries is to be furnished in shape of copy of invoices / required sale deed in case of 2 nd purchase / required lease deed with owner ship documents of the leaser duly attested. The minimum lease period should be 18(Eighteen) months from the date of opening of the Technical Bid. In case of centering & shuttering materials certificate of the Executive Engineer/Superintending Engineer, or equivalent and higher rank officer of Govt. / Govt. under taking / PSU within 90 days of last date of receipt of tender is allowed.	SCHEDULE – C			
	List of plants and equipment				
(i)	Water Tanker of 3000-liter capacity mounted with Truck / Tractor-2Nos				
(ii)	Tractor-2Nos				
(iii)	Generator of minimum 25 KVA capacity				
(iv)	Concrete Mixer -2 Nos				
(v)	a. Concrete Vibrator: Needle type-4 Nos				
(vi)	b. Concrete Vibrator: Plate Type-2 Nos				
(vii)	Complete staging, shuttering, centering arrangement a. For wooden/Ply shuttering- Not older than 2 years. (No marks will be awarded if the shuttering material area is less than 500 sqm).				
(viii)	Water Pump 1 HP Capacity- 2Nos 2 HP Capacity- 1No				
25.	e-mail ID & Contact No.				

N.B: -The documents uploaded for one bid or part thereof shall not be considered during evaluation of other bid and each bid shall be evaluated as per the documents uploaded for the particular bid.

CONTRACT DATA**A. GENERAL INFORMATIONS**

Sl. No.	Item	Details
1	Name of the Work	Infrastructure Development of Satapada in Puri District.
2	Employer	Managing Director, O.T.D.C. Ltd., Bhubaneswar
3	Employer's Representative	Additional Chief Engineer, O.T.D.C. Ltd., Bhubaneswar.
4	Estimated Cost	Rs. 2,33,24,439.00

B. BID INFORMATION

1	Intended completion period/ Time period assigned for Completion	9 (Nine) Calendar Months.
2	Last Date & time of submission of Bid	Date: 28.09.2026
3		Time 17.00 hours
4	Date of opening	Date: 29.09.2026
		Time: 11.30 A.M
5	Cost of Bid Documents	Rs. 10,000/- + Rs. 1800/- (GST) (Online)
6	Bid Security	E.M.D for @ 1% Rs 2,33,244.00 (Online).
7	Bid validity period	180 days
8	Currency of Contract	Indian Rupee
9	Language of Contract	English

Procedure to participate in online bidding e-procurement

1. **PARTICIPATING IN THE BID IN THE E-PROCUREMENT PORTAL:** The Contractor/Bidder intending to participate in the bid is required to register in the Portal using his /her active personal/ official e-mail ID as his Login ID and attach his/her valid Digital Signature Certificate (DSC) to his/her unique Login ID. The DSC used must be of appropriate class (Class II or Class III) issued from a registered Certifying Authority such as n-Code, Sify, TCS, MTNL etc. He/ She has to submit the relevant information as asked for about the firm/ contractor. The portal registration of the bidder/ firm is to be authenticated by the State Procurement Cell after verification of original valid certificates/ documents such as (i) PAN and (II) Registration Certificate (RC)/ GST Registration Certificate and GSTIN (for procurement of goods) of the concerned bidder. The time GSTIN. Any change of information by the bidder is to be re-authenticated by the State Procurement Cell. After successful authentication bidder can participated in the online bidding process.

Contractor not regisertered with Government of Odisha, can participate in the e-procurement after necessary enrolment in the portal but have to subsequently register themselves with the appropriate registering authority of the Sate Government before award of the work as per prevalent registration norms of the State.

- a. To log on to the portal the Contractor/Bidder is required to type his/her *username* and password. *The system will again ask to* select the DSC and confirm it with the password of DSC. For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective CAs stored in system database. The system checks the unique ID, password and DSC combination and authenticates the login process for use of portal.
 - b. The tender documents uploaded by the Tender Inviting Officer in the website <https://tendersodisha.gov.in> will appear in the section of "Upcoming Tender" before the due date of tender sale. Once the due date has arrived, the tender will move to "Active Tender" Section of the *homepage*. Only a small notification will be published in the newspaper specifying the work details along with *mention* of the specific website for details. The publication of the tender will be for specific period of time till the last date of submission of bids as mentioned in the 'Invitation for Bid' after which the same will be removed from the list of Active tenders. Any bidder can view or down load the bid documents from the web site.
 - c. Contractor exempted from payment of EMD will be able to participate in the tender directly by uploading documentary evidences towards his eligibility for such exemption.
 - d. The *software* application has the provision of payment of cost of tender document through payment gateways of *authorized* bankers by directly debiting the account of the bidders.
- 1.1. Furnishing scanned copy of such documents is mandatory along with the tender documents otherwise his/her bid shall be declared as non-responsive and thus liable for rejection. Bidders participating through Joint Venture shall declare the authorized signatory through Memorandum of Understanding duly registered and enroll in the portal in the name and style of the joint venture company. It is mandatory that the DSC issued in the name of the authorized signatory is used in the portal.

- 1.2. In the case of any failure, malfunction, or breakdown of the electronic system used during the e-procurement process, the tender inviting officer shall not accept any responsibility for failures or breakdowns other than in those systems strictly within their own control.
- 1.3. Any third party/company/person under a service contract for operation of e-procurement system in the State or his/their subsidiaries or their parent companies shall be ineligible to participate in the procurement processes that are undertaken through the e-procurement system irrespective of who operates the system.
- 1.4. For submission of Bids through the E-Procurement Portal, the bidder shall upload the scanned copy/copies of document in prescribed format wherever warranted in support of eligibility criteria and qualification information. The on-line bidder shall have to produce the original documents in support of the scanned copies and statements uploaded in the portal before the specified date as per DTCN.
- 1.5. Each bidder shall submit only one bid for one package. A bid is said to be complete if accompanied by cost of bid document and appropriate bid security. The system shall consider only the last bid submitted through the E-Procurement portal.
- 1.6. The bidder may ask question related to tender online in the e-procurement portal using his/her DSC, provided the questions are raised within the period of seeking clarification as mentioned in tender call notice/Bid. The Officer inviting the Bid/ Procurement Officer-Publisher will clarify queries related to the tender.
- 1.7. The details of drawings and documents pertaining to the works available with the officer inviting the Bid as well as in the office of the Addl. Chief Engineer, OTDC Ltd., OTDC Ltd. as mentioned in the Contract Data will be open for inspection by the bidders. The bidder is required to download all the documents for preparation of his bid. It is not necessary for the part of the Bidder to upload other Bid documents (after signing) while uploading his bid. He is required to upload documents related to his eligibility criteria and qualification information and Bill of Quantities duly filled in. It is assumed that while participating in the bid, the bidder has referred all the drawings and documents. Seeking any revision of rates or backing out of the bid claiming for not having referred to any or all documents provided in the Bid by the Officer Inviting the Bid will be construed as plea to disrupt the bidding process and in such cases the bid security shall be forfeited / Action will be taken as per Bid Security Declaration in Schedule-K vide F.D O.M No.8943 dtd.18.03.2021.
- 1.8. Any addendum / corrigendum/ cancellation of tender shall be published in the website <https://tendersodisha.gov.in> , notice board and through paper publication and such notice shall form part of the bidding documents.
- 1.8.1. The system generates a mail to those bidders who have already uploaded their tenders and those bidders if they wish can modify their tenders. The bidders are required to check the website till last date and time of bid submission for any addendum/ corrigendum/ cancellation thereof. Tender inviting authority is not responsible for communication failure of system generated mail.
All the volumes/documents shall be uploaded / provided in the portal by the Officer inviting the bid. The bidder shall carefully go through the document and prepare the required documents and upload the scanned documents in Portable Document Format to the portal in the designated locations of Technical Bid. He will fill up the rates of items or percentage in the BOQ downloaded for the work in designated Cell and upload the same in designated locations of Financial

Bid. Bidders are to submit only the original BoQ uploaded by publisher after entering the relevant fields without any alteration/deletion/modification. Multiple BoQ submission shall lead to cancellation of bid. In case of item rate tender, bidders shall fill in their rates other than zero value in the specified cells. In the percentage rate tender, the bidder quoting Zero value is valid and will be taken as Schedule of Rates. Submission of document shall be affected by using DSC of appropriate class.

2. PAYMENT OF EMD/ BID SECURITY AND COST OF BID DOCUMENTS: The Bidder shall furnish, as part of his Bid, a Bid security for the amount mentioned under NIT/Contract Data in online mode. Non-submission of bid

security within the designated period shall debar the bidder from participating in the on-line bidding system and his portal registration shall be cancelled. His name shall also be informed to the registering authority for cancellation of his registration.

2.1 Deleted.

2.2 Deleted.

- 2.3 The tender accepting authority will verify the originals of all the scanned documents of the successful lowest bidder only within 5 days of opening of the tender (price bid). In the eventuality of failure on the part of the lowest successful bidder to procedure the original documents, he will be debarred in future from participating in tender for 3 years and will be black listed by the competent authority. In such as situation, successful L-2 bidder will be required to produce his original documents for consideration of his tender at the negotiated rate equal to L1 bidder.

- 2.4 Contractor exempted from payment of EMD will be able to participate in the tender directly by uploading documentary evidences towards his eligibility for such exemption.

- 2.5 Government of Odisha has introduced e-payment gateway in to the portal for payment of cost of Bid and Bid Security/ Earnest Money Deposit. The process of using e-payment gateway is mentioned in the **"Procedure for Electronic receipt, accounting and reporting of Cost of Tender Paper and Earnest Money Deposit on submission of bids"**.

3. FORMAT AND SIGNING OF BID: (Logging to the Portal)-The Contractor/ Bidder is required to type his/her Login ID and Password. The system will again ask to select the DSC and confirm it with the password of DSC as a second stage authentication. For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective CAs stored in system database. The system checks the unique Login ID, Password and DSC combination and authenticates the login process for use of portal.

The bidder can download the tender of his choice and save it in his system and undertake the necessary preparatory work off-line and upload the completed tender at his convenience within the final date and time of submission. The bidder shall only submit single copy of the required documents and Price Bid in the portal. In the Financial bid, the bidder cannot leave any figure blank. He has to only write the figures, the words will be self-generated. The Bidders are advised to up load the completed Bid document well ahead of the last date & time of receipt to avoid any last moment problem of power failures etc.

- 3.1. The Bidder shall go through the Bid carefully and list the documents those are asked for submission. He shall prepare all documents including Declaration form, price bid etc. and store in the system.

- 3.2. The bidder shall log on to the portal with his DSC and move to the desired tender for up loading the documents in appropriate place one by one simultaneously checking the documents. Once the Bidder makes sure that all the documents have been up-loaded in appropriate place, he clicks the submit button to submit the bid to the portal.
- 3.2.1. The bids once submitted cannot be retrieved or corrected. Tender cannot be pre-opened and cannot be submitted after due date and time. Therefore, only after satisfying that all the documents have been uploaded, the Bidder should activate submit button.
- 3.2.2. In the e-procurement process each process is time stamped. The system can identify each individual who has entered in to the portal for any bid and the time of entering in to the portal.
- 3.2.3. The Bidder should ensure clarity of the document up loaded by him to the portal especially the scanned documents by taking out sample printing. Non-submission of legible documents may render the bid non-responsive. However, the Officer inviting the Bid if so, desires can ask for legible copies or original copies for verification with in a stipulated period provided such document in no way alters the Bidder's price bid. If the Bidder fails to submit the original documents with in the stipulated date, his bid security shall be forfeited.

SUBMISSION OF BIDS: -

- 3.3. The bidder shall carefully go through the tender and prepare the required documents. The bid shall have a Technical Bid and a Financial Bid. The Technical bid generally consists of GSTIN, PAN, Registration Certificate, Affidavits, Profit Loss statement, Joint venture agreement, List of similar nature of works, work in hand, list of machineries and any other information required by OIT. The Financial Bid shall consist of the Bill of Quantities (BOQ) and any other price related information/ undertaking including rebates.
- 3.4. Bidders are to submit only the original BOQ (in .xls format) uploaded by Procurement Officer Publisher (Officer Inviting Tender) after entering the relevant fields without any alteration/ deletion/ modification. Multiple BOQ submission by bidder shall lead to cancellation of bid. In case of items rate tender, bidders shall fill in their rates other than zero value in the specified cells without keeping it blank. In the percentage rate tender the bidder quoting zero percentage is valid and will be taken at par with the estimated rate of the work put to tender.
- 3.5. The bidder shall upload the scanned copy/ copies of document in support of eligibility criteria and qualification information in prescribed format in Portable Document Format (PDF) to the portal in the designated locations of Technical Bid.
- 3.6. The bidder shall write his name in the space provided in the specified location in the Protected Bill of Quantities (BOQ) published by the Officer Inviting Tender. The bidder shall type rates in figure only in the rate column of respective items(s) without any blank cell in the rate column in case of item rate tender and type percentage excess or less up to two decimal places only in case of percentage rate tender.
- 3.7. The bidder shall log to the portal with his/ her DSC and move to the desired tender for up loading the documents in appropriate place one by one simultaneously checking the documents.
- 3.8. Bids cannot be submitted after due date and time. The bids once submitted cannot be viewed, retrieved or corrected. The Bidder should ensure correctness of the Bid prior to uploading and take print out of the system generated summery of submission to confirm successful uploading of bid. The bids cannot be opened even

- by the OIT or the Procurement Officer Publisher/ opener before the due date and time of opening.
- 3.9. Each process in the e-procurement is time stamped and the system can defect the time of log in of each user including the Bidder.
 - 3.10. The Bidder should ensure clarity/ legibility of the document uploaded by him to the portal.
 - 3.11. The system shall require all the mandatory forms and fields filled up by the contractor during the process of submission of the bid/ tender.
 - 3.12. The bidder should check the system generated confirmation statement on the status of the submission.
 - 3.13. The bidder should upload sufficiently ahead of the bid closure time to avoid traffic rush and failure in the network.
 - 3.14. The Tender Inviting Officer is not responsible for any failure, malfunction or breakdown of the electronic system used during the e-procurement process.
 - 3.15. The Bidder is required to upload documents related to his eligibility criteria and qualification information and Bill of Quantity duly filled in. It is not necessary for the part of the bidder to upload the drawing and the other Bid documents (after signing) while uploading his bid. It is assumed that the bidder has referred all the drawings and documents uploaded by the Officer Inviting the Bid.
 - 3.16. The Bidder will not be able to submit his bid after expiry of the date and time of submission of bid (server time). The date and time of bid submission shall remain unaltered even if the specified date for the submission of bids declared as a holiday for the Officer Inviting the Bid.
 - 3.17. The 'Online bidder' shall digitally sign on all statements, documents, certificates uploaded by him, owning responsibility for their correctness/ authenticity as per IT ACT 2000. If any of the information furnished by the bidder is found to be false/ fabricated/ bogus, his EMD/BID Security shall stand forfeited and his registration in the portal shall be blocked and the bidder is liable to be blacklisted.

4. SECURITY OF BID SUBMISSION:

- 4.1. All bid data uploaded by the Bidder to the portal will be encrypted by the DSC of the opener(s). The system shall require all the mandatory forms and fields filled up by the contractor during the process of submission of the bid/tender.
- 4.2. The Bid shall be received in encrypted format by the system which can only be decrypted / opened by the authorized openers only on or after the due date and time.

5. DEADLINE FOR SUBMISSION OF THE BIDS:

- 5.1. The online bidding will remain active till the last date and time of the bid submission. Once the date and time (Server date and time) is over, the bidder will not be able to submit the bid. The date & time of bid submission shall remain unaltered even if the specified date for the submission of bids declared as a holiday for the Officer inviting the Bid.

RESUBMISSION AND WITHDRAWAL OF BIDS:

- 5.2. Resubmission of bid by the Bidders for any number of times before the final date and time of submission is allowed.
- 5.3. Resubmission of bid shall require uploading of all documents including price bid afresh.
- 5.4. If the bidder fails to submit his modified bids within the pre-defined time of receipt, the system shall consider only the last bid submitted.

6. LATE BIDS:

- 6.1. The system shall reject submission of any bid through portal after closure of the receipt time. For all purpose the server time displayed in the e-procurement portal shall be the time to be followed by the bidder and concerned officers.

7. MODIFICATION AND WITHDRAWAL OF BIDS:

- 7.1. In the E-Procurement Portal, it is allowed to modify the bid any number of times before the final date and time of submission. The bidder shall have to log on to the system and resubmit the documents as asked for by the system including the price bid. In doing so, the bids already submitted by the bidder will be removed automatically from the system and the latest bid only will be admitted. But the bidder should avoid modification of bid at the last moment to avoid system failure or malfunction of internet or traffic jam or power failure. If the bidder fails to submit his modified bids within the designated time of receipt, the bid already in the system shall be taken for evaluation.
- 7.2. In the E-Procurement Portal, withdrawal of bid is allowed. But in such case, he has to write a letter with appropriate reasons for his withdrawal addressed to the Officer inviting the bid and up load the scanned document to portal in the respective bid before the closure date and time of receipt of the bid. The system shall not allow any withdrawal after expiry of the closure time of the bid.

8. OPENING OF THE BID:

- 8.1. Bid opening date is specified during tender creation or can be extended with corrigendum. This date is available in IFB, tender document as well as the home page of portal. Bid opening can be done by the authorized users which are defined during the tender publication / approval stage. The bids are encrypted using their public keys and can be decrypted only on or after the Bid Opening due date and time. The bid openers private key will be required to open the bids and all the openers have to log on to the portal during that time.
 - 8.1.1. The bidders who participated in the on-line bidding can witness opening of the bid from any system logging on to the portal with the DSC away from opening place. Contractors are not required to be present during the bid opening at the opening location if they so desire.
 - 8.1.2. Each activity is date and time stamped with user details. For time stamping, server time is taken as the reference.
- 8.2. In the event of the specified date of bid opening being declared a holiday for the Officer inviting the Bid/Engineer-in-Charge, the bids will be opened at the appointed time on the next working day.
- 8.3. In case bids are invited for more than one package, the order for opening of the "Bid" shall be that in which they appear in the "Invitation for Bid".
- 8.4. The Bid openers; who have been pre-defined shall log on to the portal with their respective DSC. Unless all the Officers who have been declared as Opening officers, log on the portal with their DSC the Tender cannot be opened.

- 8.5. In case of non-responsive tender, the officer Inviting tender should complete the e-Procurement process by uploading the official letter for cancellation/ re-tender.

EVALUATION OF BIDS: -

All the opened bids shall be downloaded and printed for taking up evaluation. The officer authorized to open the tender shall sign and number on each page of the documents downloaded and furnish a certificate that **“the documents as available in the portal containing..... nos. of pages”**.

- 8.5.1. After opening of technical bid, the bidder may be asked in writing / online (in their registered e-mail ID) to clarify on the uploaded documents provided in the Technical Bid, if necessary, with respect to any doubts or illegible documents required for Technical Evaluation. **The Officer Inviting Tender may ask for any other document of historical nature during Technical Evaluation of the tender.** Provided in all such cases, furnishing of any document in no way alters the bidders price bid. Non-submission of legible documents may render the bid non-responsive. The authority inviting bid may reserve the right to accept any additional document.
- 8.5.2. The bidders will respond in not more than 7 days of issue of the clarification letter, failing which the bid of the bidder will be evaluated on its own merit
- 8.5.3. Immediately, on receipt of these clarifications, the Evaluating Officers; predefined in the system for the bid, will finalize the list of responsive bidders. They will log on to the site with their DSC and record their comments on the technical evaluation page in the system. The Officer Inviting the Bid if also the accepting authority, shall log on to the system with his digital signature and check the technical evaluation. He can either accept or pass on to the evaluating officers for re-evaluation. Upon acceptance of technical evaluation by the Accepting authority in the system, the system shall automatically generate letter to all the responsive bidders and the system shall forward the letter to all the responsive bidder that their technical bid has been evaluated responsive with respect to the data/information furnished by him and the letter shall also intimate him the date & time of opening of financial bid. The system shall also inform the non-responsive bidders in their e-mail ID that their bid has been found non-responsive.
- 8.6. The Technical evaluation of all the bids shall be carried out up as per the information furnished by the Bidders. But evaluation of the bid does not exonerate the bidders from checking their original documents and if at a later date the bidder is found to have misled the evaluation through wrong information, action as per relevant clause of DTCN shall be taken against the bidder/contractor.
- 8.7 The Procurement Officer-Evaluators will evaluate bid and finalized list of responsive bidders.
Opening of price bid and evaluation of lowest bidder is subject to satisfaction of other qualification information.
- 8.7.1 The financial bids of the technically responsive bidders shall be opened on the due date of opening. The Procurement Officer-Openers shall log on to the system in sequence and open the financial bids.
- 8.7.2 The Financial Bid will be opened on the notified date & time in the presence of bidders or their authorised representative who wish to be present.
- 8.7.3 At the time of opening of “Financial Bid”, the names of the bidders whose technical

bids were found responsive will be announced and the bids of only those bidders will be opened. The remaining bids will be rejected.

- 8.7.4 The responsive bidders' name, the bid prices, the item wise rates, the total amount of each item in case the item rate tender and percentage above or less in case of percentage rate tenders will be announced. any discounts and withdrawals, and such other details as the officer inviting the tender may consider appropriate, will be announced by him or his authorized representatives at the time of opening.
- 8.7.5 Rebate/discount offer if any uploaded to the system shall be declared and recorded first.
- 8.7.6 The Financial bid of the bidders shall be opened one by one by the designated officers. The system shall auto-generate the Comparative statement.
- 8.7.7 The Bidder can witness the principal activities and view the documents/summary reports for that particular work by logging on to the portal with his DSC from anywhere.
- 8.7.8 Procurement Officer-Openers shall sign on each page of the download BOQ and the Comparative Statement and furnish a certificate to that respect.
- 8.7.9 System provides an option to Procurement Officer Publisher for reconsidering the rejected bid with the approval of concern **Addl. Chief Engineer, O.T.D.C. Ltd., Odisha/ Head of Department.**

9. CLARIFICATION AND NEGOTIATION OF BIDS:

- 9.1. For examination, evaluation, and comparison of bids, the officer inviting the bid may, at his discretion, ask the lowest bidder for clarification of his rates including reduction of rate on negotiation and breakdowns of unit rates.
- 9.2. On opening of the price bid the system shall arrange the financial bids in order of their value (L1 first, followed by L2, L3) for subsequent evaluation. The evaluation status (Sheet) will be visible to all the participating bidders after opening on their respective logins. Each activity is recorded in the system with date and time stamping.

10. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT:

- 10.1. In the E-Procurement Portal, the system shall generate the template of award letter and the Officer Inviting the Bid shall mention the amount of Performance Security and additional security required to be furnished in the letter and intimate the bidders in his e-mail ID.
- 10.2. The Employer/ Engineer-in-Charge shall notify acceptance of the work prior to expiry of the validity period by cable, telex or facsimile or e-mail confirmed by registered letter. This letter of Acceptance will state the sum that the Engineer-in-Charge will pay the contractor in consideration of execution and completion of the works by the contractor as prescribed by the contract and the amount of performance security and Additional Performance Security required to be furnished. The issue of the letter of Acceptance shall be treated as closure of the Bid process and commencement of the contract.
- 10.3. The Contractor after furnishing the required acceptable Performance Security and Additional Performance Security, "Letter of Proceed" or "Work Order" shall be issued by the Engineer-in-Charge with copy thereof to the Procurement Officer-Publisher. The Procurement Officer-Publisher shall upload the summary and declare the process as complete.
- 10.4. If the L1 bidder does not turn up for agreement after finalisation of the tender then he

shall be debarred from participation in bidding for three years and action will be taken to blacklist the contractor. Besides the consortium/ JV/firm where such an agency/ firm already happens to be or is going to be a partner/ member/ proprietor, he/ they shall neither be allowed for participation in bidding for three years nor his/ their application will be considered for registration and action will be initiated to blacklist him/ them. In that case, the L2 bidder, if fulfils other required criteria would be called for drawing agreement for execution of work subject to condition that the L2 bidder negotiates at par with the quoted by the L1 bidder, otherwise the tender will be cancelled.

11. BLOCKING OF PORTAL REGISTRATION

- 1.1 If the registration Certificate of the contractor is cancelled/ suspended by the registering authority/ blacklisted by the competent authority his portal registration shall be blocked automatically on receipt of information to that effect.
- 1.2 The portal registration blocked in the ground mentioned in the above Para- 11.1 shall be unblocked automatically in receipt of revocation order of cancellation/ suspension/ blacklisting from the concerned authority.
- 1.3 The Officer Inviting Tender shall make due inquiry and issue show cause notice to the concerned contractor who in turn shall furnish his reply, if any, within a fortnight from the date of issue of show cause notice. Thereafter the Officer Inviting Tender is required to issue an intimation to the defaulting bidder about his unsatisfactory reply and recommend to the Chief Manager (Tech) for blocking of portal registration within 10 days of intimation to the defaulting bidder regarding his unsatisfactory reply with intimation to the Registering Authority and concerned **Addl. Chief Engineer, O.T.D.C. Ltd.,** Odisha / Heads of Office if any of the following provisions are violated.
 - 1.3.1 Fails to furnish original Technical Documents before the designated officer within the stipulated date and time.
 - 1.3.2 Backs out from the bid on any day after the last date of receipt of tender till expiry of the bid validity period (including till the extended bid validity period)
 - 1.3.3 Fails to execute the agreement within the stipulated date.
 - 1.3.4 If any of the information furnished by the bidder is found to be false/ fabricated/ bogus.

Accordingly, the officer Inviting Tender shall recommend to the Chief Manager (Tech) State Procurement Cell, Odisha for blocking of portal registration of bidder and simultaneously action shall also be initiated by OFFICER INVITING TENDER for blacklisting as per Appendix-XXXIV of OPWD code Volume-II.

The minimum period of blocking of Portal Registration shall in no case be less than 180 days.

Procedure for Electronic receipt, accounting and reporting of Cost of Tender Paper and Earnest Money Deposit on submission of bids

1. The State Government have formulated rules and procedures for electronic receipt, accounting and reporting of the receipt- of Cost of Tender Paper and Earnest Money Deposit on submission of bids through the e-procurement portal of Government of Odisha i.e. "<https://tendersodisha.gov.in>".
2. Electronic receipt of cost of tender paper has been successfully tested through SBI payment gateway. Now it has been decided to introduce electronic receipt of **Cost of Tender Paper and Earnest Money Deposit on submission of bids** through payment gateway of designated banks such as SBI/ICICI Bank/HDFC Bank for all Government

Departments, State PSUs. Statutory Corporations, Autonomous Bodies and Local Bodies etc. in phases (ANNEXURE-I). The process outlines as well as accounting and reporting structure are indicated below:

- a) It will be carried out through a single banking transaction by the bidder for multiple payments like **Cost of Tender Paper and Earnest Money Deposit on submission of bids**.
 - b) Various payment modes like Internet banking/ NEFT/RTGS of Designated Banks and their Aggregator Banks as well can be accessed by the intending bidders.
 - c) Reporting and accounting of the e-receipts will be made from a single source.
 - d) Credit of receipts into the Government accounts and to the designated Bank account of the participating entities indicated in Para 2 above would be faster.
3. Only those bidders who successfully remit their **Cost of Tender Paper and Earnest Money Deposit on submission of bids would be eligible to** participate in the tender/bid process. The bidders with pending or failure payment status shall not be able to submit their bid. Tender inviting authority, State Procurement Cell, NIC, the designated Banks shall not be held responsible for such pendency or failure.
4. **Banking arrangement:**
- a) Designated Banks (SBI/ICICI Bank/HDFC Bank) payment gateway are being integrated with e-Procurement portal of Government of Odisha (<https://tendersodisha.gov.in>)
 - b) The Designated Banks participating in **electronic receipt, accounting and reporting of Cost of Tender Paper and Earnest Money Deposit on submission of bids** will nominate a Focal Point Branch called e-FPB, who is authorized to collect and collate all e-Receipts. Each such branch will act as the Receiving branch and Focal Point Branch notwithstanding the fact that the bidder might have debited his account in any of the bank's branches while making payment.
5. **Procedures of bid submission using electronic payment of tender paper cost and EMD by bidder:**
- a) **Log on to e-Procurement Portal:** The bidders have to log onto the Odisha e-Procurement portal (<https://tendersodisha.gov.in>) using his/her digital signature certificate and then search and then select the required active tender from the "Search Active Tender" option. Now, submit button can be clicked against the selected tender so that it comes to the "My Tenders" section.
 - b) **Uploading of Prequalification/Technical/Financial bid:** The bidders have to upload the required Prequalification /Technical/Financial bid, as mentioned in the bidding document and in line with Works Department office memorandum no.7885, dt.23.07.2013.
 - c) **Electronic payment of tender paper cost and EMD:** Then the bidders have to select and submit the bank name as available in the payment options
- i. A bidder shall make electronic payment using his/her internet banking enabled account with designated Banks or their aggregator banks.
 - ii. A bidder having account in other Banks can make payment using NEFT/RTGS facility of designated Banks.
- Online NEFT/RTGS payment using internet banking of the bank in which the bidder holds his account, by adding the account number as mentioned in the challan as an interbank beneficiary.
- d) **Bid submission:** Only after receipt of intimation at the e-Procurement portal regarding successful transaction by bidder the system will activate the 'Freeze Bid Submission' button to conclude the bid submission process.
 - e) **System generated acknowledgement receipt for successful bid submission:** System will generate an acknowledgement receipt for successful bid submission. The

bidder should make a note of '**Bid ID**' generated in the acknowledgement receipt for tracking their bid status.

6. Settlement of Cost of Tender Paper;

a) **Cost of Tender Paper:** In respect of Government receipts on account of **Cost of Tender Paper**, the e-Procurement portal shall generate a MIS for the State Procurement Cell (SPC). The MIS will contain an abstract of the cost of tender paper collected with reference to **Bid Identification Number**. The State Procurement Cell shall generate Bank-wise-head-wise challans separately for **Cost of Tender Paper** and instruct the designated Banks to remit the money to the State Government account under different heads. In respect of the cost of tender paper received through the e-procurement portal, the remittance to the Cyber Treasury account will be made to the Head of Account 0075-Misc, General Services-800-Other Receipts -0097-Misc. Receipts-02237-Cost of Tender Paper.

b) For the time being, the State Procurement Cell (SPC) will use over the counter payment facility of the Odisha Treasury portal. Thereafter, remittance through NEFT & RTGS will be facilitated through the Odisha Treasury portal.

c) Similarly, in case of State PSUs, Statutory Corporations, Autonomous Bodies and Local Bodies etc., **Cost of Tender Paper**, the e-Procurement portal shall generate a MIS for the State Procurement Cell (SPC). The MIS will contain an abstract of the cost of tender paper collected with reference to **Bid Identification Number**. The State Procurement Cell shall generate Bank-wise list of challans and instruct the designated Banks to remit the money through the Odisha Treasury portal. The cost of tender papers will be credited to the registered Bank account of the concerned State PSUs, Statutory Corporations, Autonomous Bodies and Local Bodies etc.

d) Bank will refund (in case the Tender Inviting Authority (TIA) issues such instructions) the tender fee, EMD to the bidder, in case the tender is cancelled before opening of Bid as per direction received from TIA through e-procurement system.

e) Back-end Transaction Matrix of Electronic receipt of Cost of Tender Paper and Earnest Money Deposit on submission of bids is enclosed in the Annexure.

7. Settlement of Earnest Money Deposit on submission of bids:

a) The Bank will remit the **Earnest Money Deposit on submission/cancellation of bids** to respective bidder's accounts as per direction received from TIA through e-procurement system.

8. Forfeiture of EMD:

Forfeiture of **Earnest Money Deposit on submission of bid** of defaulting bidder is occasioned for various reasons.

a) In case the **Earnest Money Deposit on submission of bid** is forfeited, the e-Procurement portal will direct the Bank to transfer the EMD value from the Pooling Account of SPC to the registered account of the tender inviting authority.

b) The Tender inviting authorities of the Government Departments will deposit the forfeited **Earnest Money Deposit on submission of bid**, in the State Government Treasury under the appropriate head (8782-Cash Remittances and Adjustments between the officers rendering accounts to the same Accounts Officer-102-P.W.Remittances-1683-Remittances-91028-Remittances into Treasury) after taking the amount as a revenue receipt in their Cash Book under the head 0075-Misc. General Services-00-101 - Unclaimed Deposits-0097-Misc, Receipts-02080-Misc. Deposits and submit the detail account to DAG (Puri) as a deposit of the Division.

c) By clicking submit button, system will initiate the forfeiture of EMD. System will not allow the evaluator to edit the initiation after clicking the submit button. Forfeiture option can be carried out in phased manner like one bidder at a time.

9. Role of the Banks:

- a) Make necessary provision / customizations at their end to enable the provision for online payments / refunds as per this document.
- b) Provide necessary real-time message to bidders regarding successful or unsuccessful transactions during online payment processes and redirect them to e-Procurement website with necessary transaction reference details enabling them to submit their bids.
- c) The bank shall ensure transfer of funds from the pooling account to the Government Head/current account of PSUs/ULBs within the next bank working day as per the directions generated from e-Procurement portal.
- d) Bank should provide timely reports and reference details to NIC enabling them to carry out their role as stated below.
- e) e) Refund of amount to bidders as per the XML file provided by e-Procurement system on the next bank working day from the date of generation of the XML file and also provide a confirmation to NIC on the same.

10. Role of State Procurement Cell:

- a) Communicate requirements of Government departments/ State PSUs/ Autonomous Bodies/ ULBs online payment requirements to National Informatics Centre / the authorized Banks for mapping/ customization.
- b) In every working day, the State Procurement Cell shall generate MIS from the e-Procurement portal to ascertain the tender paper cost received in the e-Tendering process separately bank-wise for the Government Department and the PSUs/ULBs. The SPC shall generate bank-wise separate online challans from the Odisha Treasury portal and make the remittance through over-the-counter facility or NEFT/RTGS (as and when this functionality is available in Treasury portal) and issue instruction to the bank for remittance of the receipt to the State Government account.
- c) The State Procurement Cell shall be responsible for providing challan details and MIS in respect of the remittance towards tender paper cost to the Tender inviting authorities for their record.
- d) State Procurement Cell shall monitor the progress of e-Tendering by different Government departments / State PSUs/ Autonomous Bodies / ULBs through an MIS. State Procurement Cell shall monitor and send monthly progress reports to the Government.
- e) The e-Procurement system will generate a consolidated refund & settlement XML file as an end of the day activity.
- f) e-procurement system will provide a web service for payment gateway (PG) provider to pull the encrypted refund and settlement details in XML file against a day.
- g) Similarly, payment gateway (PG) provider will provide a web service to pull the refund and settlement status against a day

- h) e-procurement system will update the status accordingly for reconciliation report.

11. Role of National Informatics Centre:

- a) Customize e-Procurement software and web-pages of Government of Odisha (<https://tendersodisha.gov.in>) to enable the provision for electronic payment.
- b) The NIC, Odisha will modify / rectify the errors in electronic data relating to the Chart of Account.
- c) NIC will provide an interface to organizations to download the electronic receipt data.
- d) Enable automatic generation of daily XML files from e-Procurement system and ensure delivery of the same to the authorized Banks for enabling automatic refund/settlement of funds.
- e) NIC shall enable the e-Procurement portal to generate MIS as required for the State Procurement Cell in order to make remittance of the tender paper cost to the State Government account using the Odisha Treasury portal.

12. Role of Cyber Treasury:

- a) The cost of the tender paper deposited by the SPC using the Odisha Treasury Portal which will be accounted for by the Cyber Treasury and it shall submit the accounts to A.G (O) as per the established process.
- b) The Cyber Treasury will provide MIS as required to the SPC for the purpose of accounting and reconciliation of the electronic remittances made to the State Government account.

13. Redressal of Public grievances:

- a) The State Procurement Cell, Odisha, National Informatics Centre, Odisha and the e-FPB will have an effective procedure for dealing with, public complaint for e-Receipt related matters. In case, any mistake is detected by any of the stakeholders in reporting of receipt of tender paper cost and EMD, either Suo moto or on being brought to its notice, the State Procurement Cell, Odisha, National Informatics Centre, Odisha unit, Cyber Treasury and the bank will promptly take steps for rectification. The e-Focal Point Branch of the participating Banks, National Informatics Centre, Odisha and the State Procurement Cell, Odisha will notify the contact number and address of the Help Desk for resolution of any dispute regarding e-Receipt.

14. Applicability and modification of existing rules / orders:

The modalities prescribed in this Office Memorandum for downloading of tender paper, submission and rejection of bid, acceptance of Bids as well as refund and forfeiture of earnest deposit will be applicable for electronic submission of bids through e-procurement portal. Existing provisions regulating cost of tender paper, earnest money deposit in OPWD Code and OGFR would stand modified to the extent prescribed.

- 15. These arrangements would be made effective after signing of MoU between the designated Banks and the State Procurement Cell, firming up of Banking arrangements and technical integration between designated Bank and e-Procurement Portal.

ANNEXURE-I**Back-end Transaction Matrix of Electronic receipt and remittance of Cost of Tender Paper and Earnest Money Deposit on submission of bids.**

	Cost of Tender Paper on submission of bids	Earnest Money Deposit on submission of bids
Government Departments	I. The payment towards the cost of Tender Paper, in case Government Departments, shall be collected in separate Pooling accounts opened in Focal Point Branch called e-FPB of respective designated banks [as stated in Para 2] at Bhubaneswar on T+1_day. II. With reference to the Notice Inviting Tender/ Bid Identification Number, the amount so realized is to be remitted to Government Account under the Head of Account 0075-Misc. General Services-800-Other Receipts-0097-Misc. Receipts-02237-Cost of Tender Paper through Odisha Treasury Portal after opening of	I. In case of tenders of Government Departments, amount towards Earnest Money Deposit on submission of bids shall be collected in a pooling account opened for this purpose at Focal Point Branch called e-FPB of respective designated banks at Bhubaneswar and the banks will remit the amount to respective bidder's account within two working days on receipt of instruction from TIA through refund and settlement of e-procurement system.

	the bid.	II. In case of forfeiture of Earnest Money Deposit on submission of bids, the e-Procurement portal will direct the Bank to transfer the EMD value from the Pooling Account of SPC to the registered account of the tender inviting authority within two working days of receipt of instruction from TIA.
	Cost of Tender Paper on submission of bids	Earnest Money Deposit on submission of bids
State PSUs, Statutory Corporations, Autonomous Bodies and Local Bodies.	I. In case of State PSUs, Statutory corporations, Autonomous Bodies and Local Bodies etc. the amount towards Cost of Tender Paper, on submission of bids shall be collected in separated pooling accounts opened in Focal Point Branch called e-FPB of respective designated Banks at Bhubaneswar on T+1 days. II. The Paper cost will be transferred to the respective current accounts of concerned State PSUs, Statutory Corporation, Autonomous Bodies and Local Bodies etc. after opening of bid.	I. Amount towards EMD on submission of bids shall be collected in a separate pooling account of Focal Point Branch called e-FPB of respective designated banks at Bhubaneswar and the banks will remit the amount to respective bidder's account on receipt of instruction from TIA through refund and settlement of e-procurement system within two working days from receipt of such instruction. II. In case of forfeiture of Earnest Money deposit on submission of bids, the e-Procurement portal will direct the Bank to transfer the EMD value from the Pooling Account of SPC to the registered account of the tender inviting authority within two working days of receipt of instruction from TIA.

Instruction to Bidders (ITB) e-procurement

1. NOTICE INVITING BID AND OBTAINING BID DOCUMENTS:

- 1.1. The authority belonging to the major discipline is competent to invite tender of composite bids. He will also nominate the Addl. Chief Engineer, OTDC Ltd. who will deal with all matters relating to the bids in the invitation of bids.
- 1.2. For composite tender, estimated cost of each component should be clearly indicated in addition to combined estimated cost put to tender. The eligibility of bidders will correspond to the combined estimated cost of different components put to tender.
- 1.3. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules /amendments issued there under from time to time. If he fails to do so, it will be considered a breach of the contract and the Addl. Chief Engineer, OTDC Ltd./Superintending Engineer, OTDC Ltd. may at his discretion without prejudice to any other right or remedy available under law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation of the provisions of the said Act by him.
- 1.4. The contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Tender and of the rates and prices quoted in the Bill of Quantities, all of which shall, except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, plant & services or of contingencies for which there is a Provisional Sum) and all matters and things necessary for the proper execution and completion of the work and the remedying of any defects therein.
- 1.5. The successful bidder shall complete the works by the intended completion date specified in the Contract data.
- 1.6. Throughout these bidding documents, the terms " bid and tender " EMD and Bid Security and their derivatives (bidder / tenderer, bidding / tendering, etc.) are synonymous.
- 1.7. In case the tender for composite work includes in addition to main work / building work all other ancillary works such as sanitary and water supply installations, drainage installation, electrical work, Firefighting installation, horticulture work, roads and paths and gate works in dams and canals etc. , the bidder apart from being a registered civil Contractor of appropriate class must associate himself with agencies of appropriate class those who is eligible to tender for sanitary and water supply drainage, electrical, Firefighting installation and horticulture works in the composite tender. Intending purchasers are not required to produce any documents viz. copy of Registration, GST Registration certificate & GSTIN etc, at the time of purchase of tender documents but will be required for verification purpose at later stage. Furnishing copy of such documents is mandatory along with the tender documents otherwise his/her bid shall be declared as non-responsive and thus liable for rejection. The L1 Bidder is required to attend the officer inviting the bid for **verification of original documents** within **five days** of opening the Price bid.
- 1.8. PARTICIPATING IN THE BID IN THE E-PROCUREMENT PORTAL: The Contractor/ Bidder intending to participate in the bid is required to register in the Portal with some information about the firm/Contractor. This is a onetime activity for registering in Portal. During registration, the contractor has to attach a Digital Signature Certificate (DSC) to his / her unique user ID. The DSC used must be of appropriate class (Class II or Class III) issued from a registered Certifying Authority such as n-Code, Sify, TCS, MTNL e-Mudra etc.
 - 1.8.1. To log on to the portal the Contractor/Bidder is required to type his/her *username* and password. *The system will again ask to* select the DSC and confirm it with the password of

DSC. For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective CAs stored in system database. The system checks the unique ID, password and DSC combination and authenticates the login process for use of portal.

- 1.8.2. The tender documents uploaded by the Tender Inviting Officer in the website **www.tendersodisha.gov.in** will appear in the section of "Upcoming Tender" before the due date of tender sale. Once the due date has arrived, the tender will move to "Active Tender" Section of the *homepage*. Only a small notification will be published in the newspaper specifying the work details along with mention of the specific website for details. The publication of the tender will be for specific period of time till the last date of submission of bids as mentioned in the 'Invitation for Bid' after which the same will be removed from the list of Active tenders. Any bidder can view or down load the bid documents from the web site.
- 1.8.3. Contractor exempted from payment of EMD will be able to participate in the tender directly by uploading documentary evidences towards his eligibility for such exemption.
- 1.8.4. If the software application has the provision of payment of cost of tender document through payment gateways of *authorized* bankers by directly debiting the account of the bidders, bidders will be required to avail on-line payment.
- 1.9. The bidders are to participate in the bid on-line.
- 1.10. **DELETED.**
- 1.11. In the case of any failure, malfunction, or breakdown of the electronic system used during the e-procurement process, the tender inviting officer shall not accept any responsibility for failures or breakdowns other than in those systems strictly within their own control.
- 1.12. Any third party/company/person under a service contract for operation of e-procurement system in the State or his/their subsidiaries or their parent companies shall be ineligible to participate in the procurement processes that are undertaken through the e-procurement system irrespective of who operates the system.

2. ELIGIBLE BIDDERS:

- 2.1. This Bid is open to **all** Contractors of the class mentioned in the *Invitation for Bids* registered with the State Governments and Contractors of Equivalent Grade/ Class Registered with Central Government/ MES/ Railways for execution of civil works. The Bidders are required to enclose the proof of registration from the registering authority along with the Bid subject only to the registration in the portal using his/her DSC for on-line bids.
Contractors not registered with Govt. of Odisha can participate in the e-procurement after necessary enrolment in the portal but have to subsequently register themselves with the appropriate registering authority of the state Govt. before award of the work as per prevalent registration norms of the state.
- 2.2. All bidders *shall* provide a statement that the bidder is neither associated, nor has been associated, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Engineer-in-Charge to provide consulting services for the preparation or supervision of the works, and any of its affiliates shall not be eligible to bid.
- 2.3. If the bidder has a relative employed as an Officer in the rank of an Assistant Engineer/Under Secretary and above in the Government of Odisha in the concerned Department, he shall inform the same in **Schedule-I** of the bid document mentioning the exact details in a covering letter along with the tender, failing which his bid will not be considered. Also if the fact of relationship subsequently comes to light, his contract will be

rescinded. The bid security or the performance security will be forfeited and he shall be liable to make good any loss or damage resulting from such cancellation. In case the bidder has no relationship with any of the officers mentioned above he shall have to furnish with his bid an undertaking to that effect.

- 2.4. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazette officer in the concerned Department. Any breach of this condition by the contractor would render him liable for penal action for suppression of facts.
- 2.5. No Engineer of gazette rank or other gazette officer employed in Engineering or Administrative duties in an Engineering Department of the Government of Odisha is allowed to work for contractor for a period of two years after his retirement from Government service, without prior permission of the Government of Odisha in writing. Such a contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of Odisha as aforesaid before submission of the tender for engagement in the contractor's service.

3. QUALIFICATION CRITERIA:

- 3.1. For submission of Bids through the E-Procurement Portal, the bidder shall up-load the scanned copy/copies of documents listed under clause 3.2 in prescribed format wherever warranted in support of eligibility criteria and qualification information. **The L-1 bidder shall have to produce the original documents in support of the scanned copies and statements uploaded in the portal within 5 days of opening of price bid.** The Bids from Joint ventures are not acceptable.
- 3.2. The bid shall include following information and documents.
 - a. **Cost of tender paper Rs. 10,000.00 and GST @ 18% Rs. 1800.00(Online).**
 - b. **Scanned copy of valid Contractor Registration Certificate, GST Registration Certificate, GSTIN, PAN card along with the tender documents and the L-1 bidder has to furnish the Original Registration certificate, GSTIN and Pan card for verification within (5) Five days of opening of Cover-II of the tender before Additional Chief Engineer, O.T.D.C. Ltd., Bhubaneswar as per Clause No-1, 5(i) and 21 of DTCN. The contractor belonging to outside state of Odisha and not started business should submit an undertaking in the form of an Affidavit indicating therein that they are not registered under Odisha GST as they have not started any business in the state and they have no liability under the Act. But before award of final contract, such bidders will have to produce the GST Registration certificate.**
 - c. The agency having a valid M.V./H.T. License/ M.O.U. (Memorandum of Understanding duly notarized) with eligible registered electrical contractor having valid M.V./H.T.license. **Clause No.8 of DTCN and Schedule-J need to be furnished.**
 - d. **Evidence of ownerships of machineries/ equipment as per Clause No.7 of DTCN and need to be furnished by the bidder in Schedule-C.**
 - e. **Joint Ventures are not accepted.**
 - f. **Bidder / Firm should furnish list of similar works executed during last five years stating the Agreement No., date of commencement, stipulated date of completion and actual date of completion duly certified by the respective employer. The applicant should have completed similar nature work as per Clause no. 112 (f) in last five years under authority of State / Central Government, State / Central Government undertaking / Statutory Bodies Constituted under the Statute of the Central / State Government.** The certificate to that effect has to be obtained from an officer not below the rank of Executive Engineer/Superintending Engineer, concerned with the work under report.

- g. Turn over certificate (Bidder / Firm should have annual financial turnover of not less than 40% of the value of work put to tender in any one year in civil construction works during last five years and the turn over need to be certified by a registered Chartered Accountant.)
- h. Valid EPF registration certificate with up-to-date payment receipt. (Mandatory)

3.3 **DELETED**

3.4 The Bidders are subject to be disqualified if they have:

- a. Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- b. Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
- c. Participated in the previous bidding for the same work and had quoted unreasonable prices and could not furnish rational justification to the Engineer-in-Charge.
- d. Indulged in unlawful & corrupt means in obtaining bids.
- e. Been black listed/their registrations by the competent authority.

4. ONE BID PER BIDDER:

- 4.1. Each bidder shall submit only one bid for one package. A bid is said to be responsive if accompanied by cost of bid document and appropriate bid security. The system shall consider only the last bid submitted through the E-Procurement portal.

5. COST OF BIDDING:

- 5.1. The bidder shall bear all costs associated with the preparation and submission of his bid, and the Engineer-in-Charge will in no case be responsible and liable for those costs.
- 5.2. All the rates and prices in the bid shall cover all taxes, GST Registration certificate & GSTIN, ferry, tollage charges and royalties and any other charges except GST.
- 5.3. The rate of royalties and taxes prevailing on the date of measurement shall be considered while making deductions in the bills.
- 5.4. The successful bidder shall make his own arrangement for all materials unless otherwise specified in the conditions of contract.

6. SITE VISIT:

- 6.1. Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A Bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The Bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of work.

- 6.2. The bidder, in preparing the bid, shall rely on site Investigation Reports referred to in the Contract Data, supplemented by any information available to the bidder.
- 6.3. The Officer inviting the bid / Engineer-in-Charge will clarify queries on the Contract Data on requisition by the intending Bidder. The bidder may ask question in the e-procurement portal using his DSC; provided the questions are raised before the date mentioned in the home page under critical dates.

B. BIDDING DOCUMENTS

7. GENERAL INSTRUCTIONS:

- 7.1. The description of the work is as mentioned under Invitation for Bid.
- 7.2. The bids uploaded by the Tender Inviting Officer may consist of general arrangements drawings or typical sections of the project. Bidder may down load these drawings and take out the print for detail study. Any other drawings and documents pertaining to the works available with the officer inviting the Bid as well as in the office of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. as mentioned in the contract data will be open for inspection during working hours on all working days by the bidders. The bidder is required to down-load all the documents including the drawings for preparation of his bid. It is not necessary on the part of the Bidder to up-load the drawings other Bid documents (after signing) while up-loading his bid. He is required to up load documents related to his qualification information and Bill of Quantities duly filled in. It is assumed that while participating in the bid, the bidder has referred to all the drawings and documents uploaded by the Officer Inviting the Bids. Seeking any revision of rates or backing out of the bid claiming for not having referred to any or all documents provided in the Bid document by the Officer Inviting the Bids will be construed as plea to disrupt the bidding process and in such cases the bid security shall be forfeited.
- 7.3. The bidder is expected to examine carefully all instructions, conditions of contract, contract data, forms, terms, and technical specifications, bill of quantities, forms, Annexes and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk.

8. CLARIFICATION OF BIDDING DOCUMENTS:

- 8.1. Bid documents consisting of drawings, plans, specifications, the schedule of quantities of the various items of work to be done and the set of terms & conditions of contract to be complied with by the contractor who intends to bid and other necessary Documents can be seen in the office of the officer inviting the Bid during office hours every day except on Sundays & Public Holidays till last date of sale of tender paper.
- 8.2. **No paper copy of the bid shall be sold.**
- 8.3. The Contract Data to bid shall be filled and completed in the office of Officer inviting bid before issue of bid documents. If the documents are issued to the intending bidder without having been so filled in & completed, he shall request the officer inviting the bid to have this done before he completes and delivers his bid.
- 8.4. **The bidder can seek clarification on the bids** which he received earlier than 15 days prior to the deadline for submission of bids. The Employer's response will be forwarded through the e-mail ID of the enquirer.
- 8.5. **PRE-BID MEETING: DELETED**

9. AMENDMENT OF BIDDING DOCUMENTS:

- 9.1. Before **the** deadline for submission of bids, the officer inviting the Bid may modify the bidding documents by issuing addenda.
- 9.2. Any **addendum** thus issued shall be part of the bidding documents and shall be notified in the website **www.tendersOdisha.gov.in** / notice board and through paper publication.

- 9.3. To give **prospective** bidders reasonable time in which to take an addendum into account in preparing their bids, the Officer inviting the Bid if also happens to be the Engineer-in-Charge with the permission of the higher authority may, at his discretion, extend as necessary the dead line for submission of bids.

C. PREPARATION OF BIDS

10. LANGUAGE OF THE BID:

- 10.1. All documents relating to the Bid shall be in the English / Hindi / Oriya language. Bids submitted in any other language shall be summarily rejected.

11. DOCUMENTS COMPRISING THE BID:

- 11.1. Following documents will be deemed to be part of the bid even if not submitted with the bid.

- (i) Invitation for Bids (IFB)
- (ii) Instructions to bidders (ITB)
- (iii) Conditions of Contract
- (iv) Contract Data
- (v) Specifications
- (vi) Drawings

- 11.2. All the volumes/documents shall be provided in the portal by the Officer inviting the bid. The bidder shall carefully go through the document and prepare the required documents and up load the scanned documents in Portable Document Format to the portal in the designated locations of Technical Bid. He will fill up the percentage rate in the BOQ down loaded for the work in designated Cell and up-load the same in designated locations of Financial Bid. Submission of document shall be effected by using DSC of appropriate class.

- A. **Cost of “Bid document” & “Bid Security”** shall be remitted online using e-procurement Gateway.

- B. **“Technical Bid”** shall comprise.

- (i) Declaration under the Official Secret Act, 1923
- (ii) Qualification Information and supporting documents,
- (iii) Certificates, undertakings, affidavits,

- C. **“Financial Bid”** shall comprise.

- (i) Priced Bill of Quantities

12. PROPOSAL BY THE BIDDER:

- 12.1. **In the E-Procurement Portal**, an intelligent Bill of Quantity in Microsoft Excel format shall be made available to the bidder.
- 12.2. For **Item rate** tenders, the bidder shall fill in rates in figures and should not leave any cell blank. The line-item total in words and the total amount shall be calculated by the system and shall be visible to the bidder.
- 12.3. In case of **percentage rate** tender, the bidder will only fill in the designated cell and activate “less” or “excess” to indicate how much his price offer is excess or less (**Up to two decimal Place**) than the estimated amount.
- 12.4. The **bidder** shall bid for the whole works as described in the Bill of Quantities.
- 12.5. Bidders **shall** submit offers that fully comply with the requirements of the bidding documents, Including the Conditions of Contract basic technical design as indicated in the drawing and specification. **Conditional offer or alternative offers will not be considered** in the process of bid evaluation.
- 12.6. All duties, taxes, excluding GST including Building and other Construction Workers Welfare Cess @ 1% payable by the contractor under the contract, or for any other cause shall be included in the rates, prices submitted by the bidder. Taxes on material in respect

of this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same except GST payable for works contract.

12.7. In the case of any bid where unit rate of any item/items appear unrealistic, such bid will be considered as unbalanced and in case the bidder is unable to provide satisfactory explanation such a tender is liable to be disqualified and rejected.

12.8. Bidders while quoting their offers shall consider the following as regards price adjustment towards **Cement&Steel** and escalation of **all components** of work **as per Sub-Clause 31 of Condition of P-1 Contract**.

12.9. **Deleted.**

12.10. **Deleted.**

12.11. **Deleted.**

12.12. **Deleted**

12.13. The contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Tender and of the rates and prices stated in the Bill of Quantities, all of which shall, except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, plant & services or of contingencies for which there is a **Provisional** Sum) and all matters and things necessary for the proper execution and completion of the work and the remedying of any defects therein.

12.14. The **contractor shall** conform in all respects, by giving all notices and paying all fees, with the provisions of:

- i) Any national or State Statute, Ordinance, or other Law, or any regulation, or bye-law of any local or other duly constituted authority in relation to the execution and completion of the works and remedying of any defects therein, and
- ii) The rules and regulations of all public bodies and companies whose property rights are affected or may be affected in any way by the works.

12.15. **FOR COMPOSITE BIDS: DELETED.**

13. CURRENCIES OF BID AND PAYMENT:

13.1. The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees. All payments shall be made in Indian Rupees.

14. VALIDITY:

14.1. Bids shall remain valid for a period not less than **180 days** or the period mentioned in the Contract Data, after the deadline date for submission of bid as specified in the notice inviting the Bids. A Bid valid for a shorter period shall be rejected by the Engineer-in-charge as non-responsive.

14.2. In exceptional circumstances, prior to expiry of the original time limit, the Officer inviting the Bid may request the bidders to extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable or by e-mail.

14.3. **DELETED.**

15. BID SECURITY:

15.1. The Bidder shall remit a bid security for the amount mentioned under Contract Data.

The successful lowest bidder will produce the original of all scanned documents for verification within 5 days of opening of the tender (Price Bid). In the eventuality of failure on the part of the lowest successful bidder to produce the original documents, he will be debarred in future from participating in tender for three years and will be blacklisted by the competent authority. In such a situation, successful L-2 bidder will be required to produce his original documents for consideration of his/her tender at the negotiated rate equal to L-1 bidder.

15.1.1. **DELETED**

15.1.2. **DELETED.**

15.1.3. **DELETED**

15.2. The Bid shall be declared non-responsive and shall be rejected if submitted without an acceptable Bid Security and not secured as indicated in Sub-Clauses 15.1.

15.3. Combined bid security for more than one work is not acceptable.

15.4. In the case of Government Undertakings, Co-operatives Societies, Diploma or Degree holders in Engineering who are registered with the Government of Odisha, the rules framed by government from time to time about Cost of Bid documents, Bid security, performance security will apply.

15.5. The bid Security of unsuccessful bidders will be returned within 28 days of the end of the validity period specified in Sub-Clause 14.1.

15.6. The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security and Additional Performance security if any

15.7. The Bid Security may be forfeited

15.7.1. If the bidder withdraws the bid after opening of the bid but within the period of validity.

15.7.2. If the Bidder seeks any revision of rates or backs out of the bid claiming for not having referred to any or all documents provided in the Bid by the Officer Inviting the Bids.

15.7.3. DELETED.

15.7.3. In the case of a successful bidder, if the bidder fails within the specified time limit to Sign the Agreement; or furnish the required Performance Security including additional performance security if any.

15. **FORMAT AND SIGNING OF BID:**

15.7. The bidder can download the tender of his choice and save it in his system and undertake the necessary preparatory work off-line and upload the completed tender at his convenience within the final date and time of submission. The bidder shall only submit single copy of the required documents and Price Bid in the portal. In the Financial bid, the bidder cannot leave any figure blank. He has to only write the figures; the words will be self-generated. The Bidders are advised to up-load the completed Bid document well ahead of the last date & time of receipt to avoid any last moment problem of power failures etc.

15.8. The Bidder shall go through the Bid carefully and list the documents those are asked for submission. He shall prepare all documents including cost of Bid Document, Bid Security, Declaration form, price bid etc. and store in the system.

15.9. The bidder shall log on to the portal with his DSC and move to the desired tender for up-loading the documents in appropriate place one by one simultaneously checking the documents. Once the Bidder makes sure that all the documents have been up-loaded in appropriate place, he clicks the submit button to submit the bid to the portal.

15.9.1. Tender cannot be pre-opened and cannot be submitted after due date and time. Therefore, only after satisfying that all the documents have been uploaded, the Bidder should activate submit button.

15.9.2. In the e-procurement process, each process is time stamped. The system can identify each individual who has entered into the portal for any bid and the time of entering into the portal.

15.9.3. The Bidder should ensure clarity of the document up-loaded by him to the portal, especially the scanned documents by taking out sample printing. Non-submission of legible documents may render the bid non-responsive. However, the Officer inviting the Bids if so desires, **can ask for legible copies for clarification within a stipulated period of 7 days**, provided such document in no way alters the Bidder's price bid. **If the Bidder fails to**

submit Such documents with in the stipulated date, his bid shall be evaluated on its own merit.

D. SUBMISSION OF BIDS

16. SECURITY OF BID SUBMISSION:

- 16.9. All bid data uploaded by the Bidder to the portal will be encrypted by the DSC of the opener(s). The system shall require all the mandatory forms and fields filled up by the contractor during the process of submission of the bid/tender.
- 16.10. The Bid shall be received in encrypted format by the system which can only be decrypted / opened by the authorized openers only on or after the due date and time.

17. DEADLINE FOR SUBMISSION OF THE BIDS :

- 17.9. The online bidding will remain active till the last date and time of the bid submission. Once the date and time (Server date and time) is over, the bidder will not be able to submit the bid. The date & time of bid submission shall remain unaltered even if the specified date for the submission of bids declared a holiday for the Officer inviting the Bid.
- 17.10. The officer inviting the bid may extend the deadline for submission of bids by issuing an amendment in accordance with Sub-Clause 9.3, in which case all rights and obligations of the officer inviting the bid & Engineer-in-Charge and the bidders previously subject to the original deadline will then be subject to the new deadline.

18. LATE BIDS :

- 18.9. The system shall reject submission of any bid through portal after closure of the receipt time. For all purpose the server time displayed in the e-procurement portal shall be the time to be followed by the bidder and concerned officers.

19. MODIFICATION AND WITHDRAWAL OF BIDS :

- 19.9. In the E-Procurement Portal, it is allowed to modify the bid any number of times before the final date and time of submission. The bidder shall have to log on to the system and resubmit the documents as asked for by the system including the price bid. In doing so, the bids already submitted by the bidder will be removed automatically from the system and the latest bid only will be admitted. But the bidder should avoid modification of bid at the last moment to avoid system failure or malfunction of internet or traffic jam or power failure. If the bidder fails to submit his modified bids within the designated time of receipt, the bid already in the system shall be taken for evaluation.
- 19.10. In the E-Procurement Portal, with-drawl of bid is allowed. But in such case, he has to write a letter with appropriate reasons for his withdrawal addressed to the Officer inviting the bid and up load the scanned document to portal in the respective bid before the closure of receipt of the bid. The system shall not allow any withdrawal after expiry of the closure time of the bid.

E. OPENING AND EVALUATION

20. OPENING OF THE BID:

- 20.9. Bid opening dates are specified during tender creation or can be extended vide corrigendum. These dates are available in IFB, tender document as well as the home page of portal. Bid opening can be done by the authorized users which are defined during the tender publication / approval stage. The bids are encrypted using their public keys and can be decrypted only on or after the Bid Opening due date. The bid openers private key will be required to open the bids and all the openers have to log on to the portal during that time.
- 20.9.1. The bidders who participated in the on-line bidding can witness opening of the bid from any system logging on to the portal with the DSC away from opening place. Contractors are not required to be present during the bid opening at the opening location if they so desire.

- 20.9.2. Each activity is date and time stamped with **user** details. For time stamping, server time is taken as the reference.
- 20.10. In the event of the specified date of bid opening being declared a holiday for the Officer inviting the Bid/Engineer-in-Charge, the bids will be opened at the appointed time on the **next working day**.
- 20.11. In case bids are invited for more than one package, the order for opening of the "Bid" shall be that in which they appear in the "Invitation for Bid".
- 20.12. The Bid openers; who have been pre-defined shall log on to the portal with their respective DSC. Unless all the Officers who have been declared as Opening officers, log on the portal with their DSC the Tender cannot be opened.
- 20.12.1. **After receipt of confirmation of the bid security**, the bidder will be asked in writing to clarify his technical bid, if necessary.
- 20.12.2. The bidders will respond in **not more than 7 days** of issue of the clarification letter, which will also indicate the date, time and venue of opening of the Financial Bid.
- 20.12.3. Immediately on receipt of these clarifications, the Evaluating Officers; predefined in the system for the bid, will finalize the list of responsive bidders. They will log on to the site with their DSC and record their comments on the technical evaluation page in the system. The Officer Inviting the Bid if also the accepting authority, shall log on to the system with his digital signature and check the technical evaluation. He can either accept or pass on to the evaluating officers for re-evaluation. Upon acceptance of technical evaluation by the Accepting authority in the system, the system shall automatically generate letter to all the responsive bidders and the system shall forward the letter to all the responsive bidder that their technical bid has been evaluated responsive with respect to the data/information furnished by him and the letter shall also intimate him the date & time of opening of financial bid. The system shall also inform the non-responsive bidders in their email ID that their bid has been found non-responsive.
- 20.13. The Technical evaluation of all the bids will be taken up as per the information furnished by the Bidders. **If any of the information/ statements/documents/certificates furnished by the bidder is found to be false/fabricated/bogus, his EMD/Bid Security shall stand forfeited and his registration in the portal shall be blocked and the bidder is liable to be blacklisted.**
- 20.14. After **technical evaluation** of the bidders and selection of the qualified bidders, the financial bids of the technically qualified bidders shall be opened on the due date of opening. Members of the bid opening committee log on to the system in sequence and open the financial bids for the technically qualified bidders. The opening of financial bid by the opening officer using their DSC shall decrypt the financial bids.
- 20.14.1. Opening of price bid and evaluation of lowest bidder is subject to satisfaction of other qualification information asked for in the bid pursuant to Clause-3.
- 20.14.2. The Officer inviting Bid shall ensure that all the Bidders are individually intimated about the date, time & venue of opening of the financial bid along with the responsiveness of the Technical Bid.
- 20.14.3. The Financial Bid will be opened on the notified date & time in the presence of bidders or their authorized representative who wish to be present.
- 20.14.4. At the time of opening of "Financial Bid", the names of the bidders whose bids were found responsive in accordance with Sub-Clause 24.1 will be announced. The bids of only those bidders will be opened. The remaining bids will be rejected.
- 20.14.5. The responsive bidders' names, the bid prices, the item wise rates the total amount of each item, any discounts and withdrawals, and such other details as the officer inviting the tender may consider appropriate, will be announced by him or his authorized representatives at the opening.

- 20.14.6. Special conditions and/or rebate/discount offer if any uploaded to the system shall be declared and recorded first.
- 20.14.7. The Financial bid of the bidders shall be opened one by one by the designated officers. **The system shall auto-generate the Comparative statement.**
- 20.14.8. The Bidder can witness the principal activities and view the documents/summary reports for that particular work by logging on to the portal with his DSC from anywhere.
21. **PROCESS TO BE CONFIDENTIAL:**
- 21.9. Information relating to the examination, clarification, evaluation, and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process until the award to the successful bidder has been announced. Any effort by a bidder to influence the officer inviting the bid, processing of bids or award decisions may result in the rejection of his bid.
22. **CLARIFICATION OF BIDS:**
- 22.9. To assist in the examination, evaluation, and comparison of bids, the officer inviting the bid may, at his discretion, ask any bidder for clarification of his rates including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable or by e-mail, but no change in the bid price or substance of the bid shall be sought, offered.
- 22.10. Subject to sub-clause 23.1, no bidder shall contact the officer inviting the bid on any matter relating to his bid from the time of the opening to the time the contract is awarded. If the bidder wishes to bring additional information to the notice of the officer inviting the bid, it should do so in writing.
23. **EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS:**
- 23.9. During the detailed evaluation of "Technical Bids", the officer inviting the bid will determine whether each bid:-
- 23.9.1. Whether the Bid security is confirmed by issuing institution/bank.
- 23.9.2. Has submitted legible documents for evaluation
- 23.9.3. Meets the eligibility criteria defined in *Clause 3* and;
- 23.9.4. Is substantially responsive to the requirements of the bidding documents.
- 23.10. During the detailed evaluation of the "Financial Bid", the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e., priced bill of quantities, technical specifications and drawings.
- 23.11. A substantially responsive "Financial Bids" is one, which conforms to all the terms, conditions, and specifications of the bidding documents, without material deviation or reservation. A material deviation or reservation is one
- 23.11.1. Which affects in any substantial way the scope, quality, or performance of the works?
- 23.11.2. Which limits in any substantial way, inconsistent with the bidding documents, the right of the officer inviting the bid or the bidder's obligations under the contract or
- 23.11.3. Whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.
- 23.12. If a "Financial Bid" is not substantially responsive, it will be rejected by the officer inviting the bid, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.
- 23.13. On opening of the price bid the system shall arrange the financial bids in order of their value (L1 first, followed by L2, L3) for subsequent evaluation. The evaluation status (Sheet) will be visible to all the participating bidders after opening on their respective logins. Each activity is recorded in the system with date and time stamping.
24. **EVALUATION OF BIDS: DELETED**
- 24.9. If the officer **inviting** the Bid in his opinion judges that the price quoted by the lowest qualified bidder is high or a special condition imposed by the bidder is to be withdrawn, the

bidder shall be invited for negotiation by the officer inviting the Bid or by an officer authorised by him in writing. **Negotiations** of financial bid with **only the lowest bidder** shall be carried out, if necessary. Negotiation of bid will be carried out by manual way.

24.10. **DELETED.**

24.11. **DELETED**

24.12. **DELETED.**

24.13. **DELETED.**

F. AWARD OF CONTRACT

25. AWARD CRITERIA:

25.9. The officer inviting the bid will award the contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents and who has offered the lowest evaluated price.

25.10. On acceptance of the tender, the Contractor shall name in writing his accredited representative(s) who would be responsible for taking instructions from the Engineer-in-Charge.

25.11. Competent Authority on behalf of Governor of Odisha reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.

25.12. The successful bidder registered under other State Government / MES / Railways / CPWD in equivalent rank has to register under state PWD before signing of the agreement.

26. OPTIONS IF THE BIDDER BACKS OUT FROM BIDDING PROCESS :

26.9. In case the 1st lowest Bidder or even the next lowest Bidder withdraw in series one by one, thereby facilitating a particular Bidder for award, then they shall be penalized with adequate disincentives with forfeiture of EMD/Bid Security unless adequate justification for such back out is furnished. Appropriate action for blacklisting the bidder shall also be taken apart from dis-incentivizing the bidder.

27. The bidding process shall be deemed to be complete till the date of issue of letter of acceptance. If the bidder fails to sign the agreement within the stipulated period mentioned under clause 29.2, his bid security shall stand forfeited

28. RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS :

28.9. The competent authority on behalf of the Governor of Odisha does not bind him to accept the lowest or any other tender and reserves to him the authority to reject any or all the tenders received without assigning any reason.

28.10. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.

29. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT:

29.9. In the E-Procurement Portal, the system shall generate the template of award letter and the Officer Inviting the Bid shall mention the amount of Performance Security and additional security required to be furnished in the letter and intimate the bidders in his e-mail ID. The issue of the letter of acceptance shall be treated as closure of the Bid process and commencement of the contract.

29.10. The bidder shall within 15 days of issue of letter of acceptance, furnish the Performance security & additional Performance security (if any) in the prescribed form & the work programmed & shall sign the agreement in prescribed format, failing which the Engineer-in-Charge shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the Bid Security absolutely. The agreement will incorporate all agreements between the officer inviting the bid and the successful bidder.

If L1 bidder does not turn up for agreement after finalization of the tender, then he shall be debarred from participation in bidding for three years and action will be taken to blacklist the contractor. In that case, the L2 bidder, if fulfils, other required criteria would be called

for drawing agreement for execution of work subject to the condition that L2 bidder negotiates at par with the rate quoted by the L1 bidder otherwise the tender will be cancelled. In case a contractor is black listed, it will be widely published and intimated to all departments of Government and also to Govt. of India agencies working in the state.

(Amendment to Para-3.5.14 Note-I of OPWD Code Vol.-I by inclusion).

- 29.10.1. Following documents shall form part of the agreement.
- 29.10.1.A. The notice inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming the bid as issued at the time of invitation of bid and acceptance thereof together with any correspondence & documents leading thereto & required amount of performance security including additional performance security as per sub clause 29.2 hereof.
- 29.10.1.B. Standard Bid Document P.W.D. Form **P-1**
- 29.11. The letter to proceed with the work shall be issued by Engineer-in-charge only after signing of the agreement. The notification of award will constitute the formation of the contract subject only to the furnishing of performance security and additional performance security in accordance with the provisions of the agreement.
- 29.12. On acceptance of the composite bids by the competent authority the letter of award will be issued by the Engineer-in-Charge of the major component of the work on behalf of the Governor of Odisha.
- 29.13. Upon signing of the agreement by the successful bidder, the Engineer-in-Charge will promptly notify the other bidders that their bids have been unsuccessful.
- 30. **CORRUPT OR FRAUDULENT PRACTICES:**
- 30.9. The Engineer-in-Charge will reject a proposal for award if he determines that the bidder recommended for award has been engaged in corrupt or fraudulent practices in competing for the contract in question. He will report to the Officer Inviting Bid / next higher authority.
- 30.10. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.

DETAILED TENDER CALL NOTICE

Sealed **percentage rate** bids are invited **online in double cover system** from the Class of eligible contractors registered with the State Government and contractors of equivalent Grade / class registered with Central Government / MES / Railways having registration for Civil, Electrical and P.H. works for execution of Civil / E.I. / P.H. works on production of definite proof from the appropriate authority in prescribed form to be eventually drawn in P.W.D. FORM P-1 for the work **"Infrastructure Development of Satapada in Puri District."** at an estimated cost of **Rs. 2,33,24,439.00 (Rupees Two Crore Thirty-three Lakhs Twenty-four Thousand Four Hundred Thirty-nine) Only (Excluding GST).** Contractors not registered with Govt. of Odisha can participate in the e-procurement after necessary enrolment in the portal but have to subsequently register themselves with the appropriate registering authority of the state Govt. before award of the work as per prevalent registration norms of the state.

- a) This tender is of composite nature and consisting of Civil works, Electrical and PH works.
 - b) This detailed Tender Call Notice along with the clauses mentioned herein shall form a part of the contract and agreement.
1. The Bid documents are available on official website of Government: <https://www.tendersodisha.gov.in> from **Dt. 18.09.2026 to 17:00 hours of Dt. 28.09.2026.** The last date and time of submission of Bid is as per contract data.
 2. The Technical Bid documents (**Cover-I**) will be opened by the assigned officer in the office of the Engineer-in-Chief (Civil), Odisha, Bhubaneswar at **11.30 Hours on dt. 29.09.2026** in the presence of the bidders or their authorized representatives who wish to attend. After evaluation of the documents contained in Cover-I, the Cover-II containing price bid/s of the technically responsive bidder/s will be opened. The date, time and place of opening the price bid will be intimated to the eligible qualified bidders through system generated E-mails.
 3. The cost of Bid documents is to be remitted online through e-payment gateway for **Rs. 10,000.00 and GST @ 18% Rs. 1800.00 (Online)** towards the paper cost of each bid respectively.
 4. The bid is to be submitted in two covers.
 - i) **Cover-I** is to contain scanned copy of Contractor Registration Certificate, GST Registration Certificate, GSTIN, PAN, Profit Loss statement, M.O.U. (Memorandum of Understanding duly notarized) with eligible registered electrical contractor having valid M.V./H.T. license, List of similar nature of works, work in hand, list of machineries, affidavit, and all other documents required as per the relevant clauses of this DTCN. The contractor belonging to outside state of Odisha and not started business should submit an undertaking in the form of an Affidavit indicating therein that they are not registered under Odisha GSTIN as they have not started any business in the state and they have no liability under the Act. But before award of final contract, such bidders will have to produce the Odisha GSTIN.
 - ii) **Cover-II** is to contain the **PRICE BID** duly filled in and signed by the bidder as per the relevant clauses of this DTCN.
 6. Furnishing scanned legible copy of Original Contractor Registration certificate, valid GSTIN, PAN card along with the Technical Bid is mandatory otherwise his/ her bid shall be declared as non-responsive and thus liable for rejection.
 7. (i) **The Contractors are required to furnish scanned copy of evidence of ownership showing the possession of principal machineries/equipment**

- as per Schedule-C for which contractor shall have to secure minimum 80% of marks failing which the tender shall be liable for rejection.
- (ii) In case the contractor proposes to engage machineries and equipment as asked for in the tender document, owned or hired but deployed outside the State, the entire bid security shall stand forfeited in case the contractor fails to mobilize the machineries within a period as to be able to execute an item of work as per original programme which will be part of the agreement.
 - (iii) The contractor intending to hire/lease equipment/machineries are required to furnish proof of ownership from the company/ person providing equipment/ machineries on hire/lease along with contracts/ agreements/lease deed and duration of such contract. The contracts/agreements/lease deed should be on long term basis for a minimum period of 18 (Eighteen) months as mentioned in contract data/check list from the last date of receipt of Bid documents.
8. The civil contractor in order to take part in the composite tender should enter into an M.O.U. (Memorandum of Understanding duly notarized) with eligible registered electrical contractor having valid M.V./H.T. license; for execution of electrical installation and other electrical works and a copy of such M.O.U. should be attached with the tender as per the proforma at Schedule- J which shall form a part of tender. A copy of electrical license should also be enclosed with the tender papers, the original of which need to be furnished during verification. The above M.O.U. is not required in case of the civil contractor having valid registration in M.V./H.T.electrical license with the same name & style.
9. (i) The contract will be drawn in P.W.D. **P-1** contract form and will constitute 3 parts as follows.
- a. Part – I : For Civil items of works
 - b. Part – II : For Electrical items of works
 - c. Part – III : For PH items of works
- The contract shall be drawn & signed by Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. on behalf of the Governor of Odisha.
- (ii) The Civil items of works as per Part-I of Schedule of quantities, Electrical items of works (both internal & external) as per part-II of Schedules of quantities and P.H. items of works (both internal & external) as per Part-III of the Scheduled of quantities of the Agreement shall be supervised measured and check measured by the Superintending Engineer, OTDC Ltd. respectively. In the interest of expeditious execution of work, payment of interim bills (Running A/c bills) shall be made by the Superintending Engineer, OTDC Ltd. in respect of Public Health works and nil final bill shall be sent to the concerned Superintending Engineer, OTDC Ltd. for final adjustment and compilation of accounts.
- Superintending Engineer, OTDC Ltd. shall be responsible for proper and timely execution of their respective items of works and implementation of the terms and condition of the contract. The contractor shall be bound to receive and act as well according to the direction of the Engineer-in-Charge for General Electrical / General Public Health Authority concerned.
10. If an individual makes the application, the individual should sign (with DSC) above his full type written name and current address.

11. If the application is made by proprietary firm, it shall be signed (with DSC) by the proprietor & furnish full type written name and the full name of his firm with its current address in a forwarding letter.
12. If the application is made by a firm in partnership, it shall be signed (with DSC) by a partner holding power of attorney for the firm in which case a certified copy of the power of attorney shall accompany the application. A certified copy of the partnership deed and current address of all partners of the firm shall also accompany the application.
13. If the application is made by a limited company or a corporation, it shall be signed (with DSC) by a duly authorized person holding power of attorney for signing the application in which case a certified copy of the power of attorney shall accompany the application. Such limited company or corporation will be required to furnish satisfactory evidence of its existence along with the technical bid.
14. The tender should be strictly in accordance with the provisions as mentioned in the tender schedule. Any change in the wordings will not be accepted.
15. The work is to be completed in all respects within **Nine (09)** calendar months from the date of issue of work order. Before acceptance of tender, the successful bidder will be required to submit a work programmed and milestone basing on the financial achievement so as to complete the work within the stipulated time and in case of failure on the part of the agency to achieve the milestone liquidated damage will be imposed
(Amendment to Para-3.5.18 Note-VIII of OPWD Code Vol.-I).
16. All tenders received will remain **valid for a period of 180 days** from the last date prescribed for receipt of tenders and validity of tenders can also be extended if agreed by the tenderers and the Department.
17. The tenderer shall carefully study the tentative drawings and specifications applicable to the contract and all the documents, which will form a part of the agreement to be entered in to, by the accepted tenderer and detailed specifications for Odisha, and other relevant specifications and drawings, which are available. Complaint at a future date that the tenderers have not seen plans and specifications cannot be entertained.
18. The drawings furnished with the tender are tentative and subject to revision or modification as tendered during the execution as per actual necessity and detail test conducted. But the tendered rates quoted by the tenderer will hold good in case of such modification of drawings during the time of execution and shall in no way invalidate the contract and no extra monetary compensation will be entertained. The work shall however be executed as per final approved drawing to be issued by the Engineer-in-Charge as and when required.
19. By admission of a tender for the work, a tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the work, about the quality and availability of the required quantity of material including the wheat/ rice referred to above, medical aid, labour and food stuff etc., and that rates quoted by him in the tender will be adequate to complete the work according to the specifications attached there to and that he had taken in to account all conditions and difficulties that may be encountered during its progress and to have quoted rates including labour and materials with taxes, octroi, other duties, lead, lifts, loading and unloading, freight for all materials and all other charges necessary for the completion of the work, to the entire satisfaction of the Engineer-in Charge of the work and his authorized subordinates. After acceptance of the contract rate Government will not pay any extra charges for any reason in case the contractor

claims later on to have misjudged as regard availability of materials, labour and other factors.

For the purpose of estimate, the approved quarry lead is to be provided judiciously. Engineers in charge would be responsible for ensuring the quality of the materials supplied. The contractors would, however, be responsible for procurement of material from authorized sources and voluntarily disclose the source of procurement for the purpose of billing. Besides, the bidder would be required to submit the details of quarry for procurement while submitting the bids.

(Amendment to Para-3.4.16 (a) (vii) of OPWD Code Vol.-I by substitution).

20. E.M.D for @ 1% Rs. 2,33,244.00/-(Online).

21. The tender should be accompanied with the *Scanned copies of the valid Contractor Registration certificate, GST Registration Certificate, GSTIN and PAN card* which are mandatory, otherwise his/her bid shall be declared as non-responsive and thus liable for rejection. The contractor belonging to outside state of Odisha and not started business should submit an undertaking in the form of an Affidavit indicating therein that they are not registered under Odisha GSTIN as they have not started any business in the state and they have no liability under the Act. But before award of final contract, such bidders will have to produce the Odisha GSTIN.
22. The tender containing extraneous conditions not covered by the tender notice are liable for rejection and quotations should be strictly in accordance with the items mentioned in the Tender Call Notices. Any change in the wording will not be accepted.
23. The department reserves the right of authority to reject any or all tenders received without assigning any reason whatsoever.
24. The earnest money of the L-1 bidder will be retained and will be dealt with as per terms and condition of O.P.W.D. Code. The retention of E.M.D. with the Department will carry no interest.
25. The Engineer-in-charge will notify the bidder / tenderer whose bid has been accepted of the award prior to expiration of the validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the conditions of Contract called the "Letter of Acceptance") will state the sum that the Engineer-in-charge will pay the contractor in consideration of the execution, completion and maintenance of the Works by the contractor as prescribed by the contract (Hereinafter and in the contract called the "Contract Price").

The Notification of award will constitute the formation of the contract, subject only to the furnishing of a performance security (Initial Security Deposit) in shape of **Kissan Vikash Patra / Post Office Saving Bank Account / National Saving Certificate / Post Office Time Deposit Account / Bank Guarantee in favour of the** Managing Director, OTDC Ltd. from any Nationalized / scheduled Bank in India counter guaranteed by its local branch at Bhubaneswar as per terms and conditions laid down in OGFR and in no other form. (As per O.M No.14468 dtd.20.09.2018 of Works Deptt. Govt of Odisha), which shall be 2% of the value of the tendered amount and sign the agreement in the P.W.D. form No. P-1 (Schedule XLV No. 61) for the fulfillment of the contract in the office of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. O.T.D.C. Ltd. The security deposit and the amount withheld according to the provision of P-1 agreement shall be retained as security for the due fulfillment of this contract and additional performance security in accordance with the provisions of the agreement.

The agreement will incorporate all agreements between the officer inviting the bid/ Engineer-in Charge and the successful bidder within 15 days following the

notification of award along with the Letter of Acceptance. The successful bidder will sign the agreement and deliver it to the Engineer-in Charge. Following documents shall form part of the agreement.

- a) The notice-inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming the bid as issued at the time of invitation of bid and acceptance thereof together with any correspondence leading thereto & required amount of performance security including additional performance security.
 - b) Standard **P.W.D. Form P-1 with latest amendments**. Failure to enter in to the required agreement and to make the security deposit as above shall entail forfeiture of the Bid Security (earnest money). No contract (tender) shall be finally accepted until the required amount of initial security money is deposited. The security will be refunded after **12 (Twelve) months** of completion of the work and payment of the final bill and will not carry any interest. As concurred by Law Department & Finance Department In their U.O.R. No 848, dt.21.05.97 J.O.R.No.202 W.F.D. dtd.06.03.98 respectively the E.M.D. will be forfeited in case, where tenderers back out from the offer before acceptance of tender by the competent authority.
26. The contractor should be liable to fully indemnify the Department for payment of compensation under workmen compensation act. VIII of 1923 on account of the workmen employed by the contractor and full amount of compensation paid will be recovered from the contractor.
 27. Tenderers are required to liable by fair wages clause as introduced by Govt. of Odisha, Works Department letter No.VII (R&B) 5225, dt.26.2.55 and No.II, M-56/61-28842 (5), dt.27.9.61.
 28. The contractor shall bear cost of various incidentals, sundries and contingencies necessitated by work in full within the following or similar category.
 - a) Rent, royalties, cess and other charges of materials and all other taxes including GST from time to time, Ferry tolls, conveyance charges and other cost on account of land buildings including temporary building required by the tenderer for collection of materials, storage, housing of staff or other purpose of the work are to be borne by the contractor at his own cost. No rent will be payable to Govt. for temporary occupation of land owned by govt. at the site of the work for Bonafide use of the land for work and all such construction of temporary nature by the contractor shall be done after obtaining written permission from the Engineer-in-Charge of the work and all such construction shall have to be demolished and debris removed and ground made good and cleared after completion of the work at no extra cost.
 - b) Royalty will be recovered from each bill as notified by Govt. from time to time unless K Forms are enclosed. Refund of royalty at later date after passing of the bills cannot be entertained as the recovery of royalty is being credited to revenue.
 - c) Labour camps or huts necessary to a suitable scale including conservancy and sanitary arrangements therein to the satisfaction of the local labour laws and health authorities shall have to be provided by the Contractor.
 - d) Arrangement of suitable water supply including pipe water supply where available for the staff and labour as well as for the execution of the work is sole responsibility of the Contractor and no extra cost for carriage of water will be entertained. e) All fees and dues levied by Municipal, Canal or Water Supply Authorities are to be borne by the Contractor.

- f) Suitable safety equipment and dresses, gloves, life belts etc. for the labour engaged in risky operations are to be supplied by the contractor at his own cost.
 - g) Suitable fencing barriers, signals including paraffin and electric signals where necessary at work and approaches in order to protect the public and employees from accident has to be provided by the Contractor at his own cost.
 - h) Compensation including cost of any legal suit for injury to persons or property arising out of execution of the work and also any sum, which may become payable due to operation of the workmen compensation act, shall have to be borne by the contractor.
 - i) The contractor has to arrange adequate lighting arrangements for the work wherever necessary at his own cost.
 - j) Care should be taken to interfere as little as possible with traffic. The contractor shall use all due precautions for the safety of traffic & shall place barriers across each end of the length of the road which is being worked upon. Watchmen shall be employed & bright red lights placed & maintained around the obstacle & elsewhere as the Engineer-in-Charge may direct. All diversion sign shall be clearly marked by white washed stones or any other means, when traffic is allowed along the shoulders. Barricades & warning signs shall be put as directed by the Engineer-in-Charge. These measures shall be at no extra cost to Govt.
29. No payment will be made for layout, benchmark, level pillars, profiles and benching and leveling the ground required, which has to be carried out by the contractor at his own cost. The rates to be quoted should be for finished items of work inclusive of carriage of all materials and all incidental items of work.
 30. After the work is finished all surplus materials should be removed from the site of work, preliminary work such as vats, mixing platforms, etc. should be dismantled and all materials removed from the site and premises left neat and this should be inclusive in the rates. No extra payment will be made to the Contractor in this account.
 31. It should be understood clearly that no claim whatsoever will be entertained to extra items of work or quantity of any item besides estimate amount unless written order is obtained from the competent authority and rate settled before the extra items of work or extra quantity of any items of work is taken up.
 32. The tenderers shall have to abide by the C.P.W.D. safety code rules introduced by the Govt. of India, Ministry of Works and Housing & Supply in their standing order No.44150, dt.25.11.57.
 33. The Contractor shall not sublet whole or part of the work without written permission to the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. or transfer to be made by the power of attorney authorizing others to receive payment on behalf contractor & such consent if given shall not be responsible for the acts, defaults & neglects of any sub-contractor employed by him as fully as if they were the acts, defaults & neglects of the contractor, his agents, servants or workmen. Employing labour directly on piece work basis shall not be deemed to be understood as subletting as explained above.
 34. Bid documents consisting of plans, specifications, the schedule of quantities and the set of terms and conditions of contract and other necessary documents can be seen in all the offices issuing the documents and office of the undersigned during

office hours every day except on Sundays and Public Holidays till last date of sale and receipt of tender papers. Interested bidders may obtain further information at the same address. But it must be clearly understood that tenders must be received in order and according to instructions in complete shape. Incomplete tender is liable for rejection.

35. No Relation Certificate.

The contractor shall furnish a certificate along with the tender to the effect that he is not related to any officer in the rank of an Assistant Engineer & above in the state P.W.D. or Assistant/Under Secretary & above in the Works Department. If the fact subsequently proved to be false, the contract is liable to be rescinded. The earnest money & the total security will be forfeited & he shall be liable of make good to damages the loss or damages resulting for such cancellations. The proforma for no relationship certificate is contained in a separate sheet vide **Schedule-A**.

36. Payment for variation in price -

Contract price shall be adjusted for increase or decrease in rates and price of Labour, Cement, Steel, Bitumen, Pipes, POL & other material component in accordance with the following principles and procedures as per formula Vide **Works Department Memorandum No-15847 /W dt.19.11.2019** as given below:

ANNEXURE-A

Clause 31 :- Price Adjustment

31.1 : Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formula given in following Paras.

(a) The price adjustment shall apply for the work done from the start date given in the contract data up to end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the contractor.

(b) The price adjustment shall be determined during each month from the formula given in following Paras

(c) Following expressions and meanings are assigned to the work done during each month:

R= Total value of work done during the month. It would include the amount of secured advance granted, if any, during the month, less the amount of secured advance recovered, if any during the month. It will exclude value for works executed for extra items under variations.

31.2 : To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs

The formula (e) for adjustment of prices are:

31(a) (i): Adjustment of Other Materials Component

Price adjustment for increase or decrease in cost of local materials other than cement, steel, bitumen, pipe and POL procured by the contractor shall be paid in accordance with the following formula:

$$V_M = 0.85 \times P_m / 100 \times R \times (M_1 - M_0) / M_0$$

V_M = Increase or decrease in the cost of work during the month under consideration due to Changes in rates for local materials other than cement, steel, bitumen and POL.

M_0 = The all India wholesale price index (all commodities) on 28 days preceding the date of opening of Bids, as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

M_1 = The all India wholesale price index: (all commodities) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_m = Percentage of local material component (other than cement, steel, bitumen and POL) of the work.

31(a)(ii): Adjustment for Cement Component

Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula:

$$V_c = 0.85 \times P_c / 100 \times R \times (C_1 - C_0) / C_0$$

V_c = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for cement

C_0 = The all India wholesale price index for Ordinary Portland Cement (OPC) on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

C_1 = The all India wholesale price index for Ordinary Portland Cement (OPC) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_c = Percentage of Cement Component of the work

31(a)(iii): Adjustment for Steel Component

(iii) Price adjustment for increase or decrease in the cost of steel procured by the contractor shall be paid in accordance with the following formula:

$$V_s = 0.85 \times P_s / 100 \times R \times (S_1 - S_0) / S_0$$

V_s = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel

S_0 = The all India wholesale price index for steel (Mild Steel long products) on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

S_1 = The all India wholesale price index for steel (Mild Steel long products) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_s = Percentage of steel component of the work

Note: For the application of this clause, index of (Mild Steel long products) has been chosen to represent steel group.

31(a)(iv): Adjustment of Bitumen Component

Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

$$V_b = 0.85 \times P_b / 100 \times R \times (B_1 - B_0) / B_0$$

- V_b = Increase or decrease in the cost of work during the month under consideration due to changes in the rate for bitumen.
- B_0 = The official retail price of bulk bitumen at the IOC/ BPCL depot at nearest center on the day 28 days prior to date of opening of Bids.
- B_1 = The official retail price of bulk bitumen at IOC/ BPCL depot at nearest center for the 15th day of the month under consideration.
- P_b = Percentage of bitumen component of the work

31(a)(v): .Adjustment towards differential cost of Pipes.

Price adjustment for increase or decrease in the cost of pipe shall be paid in accordance with the following formula:

$$V_{pi} = 0.85 \times P_{pi}/100 \times R \times (P_{i1} - P_{i0})/P_{i0}$$

V_{pi} = Differential cost of pipe i.e. amount of increase or decrease in rupees to be paid or recovered during the month under consideration.

P_{pi} = Percentage of pipe component of the work

P_{i1} = All India Whole sale price index of pipe for the period under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_{i0} = All India Whole sale price index of pipe on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

31(b): Adjustment of Labour Component

Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$$V_L = 0.85 \times P_l/100 \times R \times (L_1 - L_0)/L_0$$

V_L = Increase or decrease in the cost of work during the month under consideration due to changes in rates for local labour.

L_0 = The minimum wages for unskilled labour as Notified by Government of Odisha as prevailed on the last stipulated date of receipt of tender including extension, if any.

L_1 = The minimum wages for unskilled labour as Notified by Government of Odisha as prevailed on the last date of the Month previous to the one under consideration.

P_1 = Percentage of labour component of the work.

31(c): Adjustment of POL (fuel and lubricant) Component

(v) Price adjustment for increase or decrease in cost POL (fuel and lubricant) shall be paid in accordance with the following formula:

$$V_f = 0.85 \times P_f/100 \times R \times (F_1 - F_0)/F_0$$

V_f = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for fuel and lubricants.

F_0 = The official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC / BPCL/ HPCL at nearest center on the day 28 days prior to the date of opening of Bids.

F_1 = The official retail price of HSD at the existing consumer pumps of IOC / BPCL / HPCL at nearest center for the 15th day of the month under consideration.

P_f = Percentage of fuel and lubricants component of the work

Note: For the application of this clause, the price of High Speed Diesel oil has been chosen to represent fuel and lubricants group.

31(d): Adjustment for Plant and Machinery Spares Component

(vi) Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the Contractor shall be paid in accordance with the following formula:

$V_p - 0.85 \times P_p / 100 \times R \times (P_1 - P_0) / P_0$

V_p - Increase or decrease in the cost of work during the month under consideration due to changes in the rates for plant and machinery spares

P_0 - The all India wholesale price index for manufacture of machinery for mining, quarrying and construction on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_1 - The all India wholesale price index for manufacture of machinery for mining, quarrying and construction for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_p - Percentage of plant and machinery spares component of the work

Note: For the application of this clause, index of manufacturing of machinery for mining, quarrying and construction has been chosen to represent the Plant and machinery Spares group.

Regarding wholesale price Index (WPI) for appropriate commodity for payment of price adjustment, due to change of base year of WPI from 1993-94 to 2004-05 & 2011-12, it is observed that, the commodity 'Bars and Rod', 'Cement', 'Heavy machinery and parts' included in the list of WPI 1993-94 series are not mentioned as such in the WPI 2004-05 & 2011-12 series. Therefore, the following items in the WPI 2004-05 & 2011-12 series shall be considered corresponding to items in WPI 1993-94 series:

Sl. No.	Item in WPI 1993-94 series	Item in WPI 2004-05 series	Item in WPI 2011-12 series
1.	Cement	Grey Cement	Ordinary Port Land Cement
2.	Bars & Rods	Rebars	Mild Steel Long Products
3.	Heavy Machinery & parts	Construction Machinery	Manufacture of machinery for mining, quarrying & construction.

31(e): APPLICATION OF ESCALATION CLAUSE:

The contractor shall for the purpose of availing reimbursement/refund of differential cost of steel, bitumen, cement, pipe, POL and wages, keep such books of account and other documents as are necessary to show that the amount of increase claimed or reduction available and shall allow inspection of the same by a duly authorized representative of Government and further, shall at the request of the Engineer-in-Charge, furnish documents to be verified in such a manner as the Engineer-in-Charge may require any document and information kept. The contractor shall within a reasonable time of 15 days of his becoming aware of any alteration in the price of such material, wages of labour and for price of P.O.L. give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition along with information relating to there to which he may be in a position to supply.

Percentage Table

Sl. No.	Category of Works		% Component (Cost Wise)		
			Labour (P ₁)	POL (P ₁)	Steel (P _s) + Cement (P _c) + Bitumen (P _b) + Pipes (P _{pi}) + Plant & Machinery Spare & Component (P _p) + Other Materials*
1	R&B Works (% of component)	Road Works	5	5	90
		Bridge Works	5	5	90
		Building Works	5	5	90
2	Irrigation works (% of component)	Structural Work	5	5	90
		Earth, Canal & Embankment work	5	5	90
3	P. H. Work	Structural Work	5	5	90
		Pipeline Work	5	5	<u>Pipe - 70%</u> *Machinery + Other Material – 20%
		Sewer Line	5	5	<u>Pipe - 70%</u> *Machinery + Other Material – 20%

*Note:- Further break up may be worked out considering the consumption of Cement, Steel, Bitumen, pipe and Plant & Machinery Spare Component in the concerned works and shall be provided in the bid document in shape of "**Schedule of Adjustment Data**" as an "**Appendix to Bid**", (enclosed herewith).

**Appendix to Bid
Schedule of Adjustment Data**

[For all works, adjustment factor for Labour and POL shall be considered @ 5% each. Steel, Cement, Pipes, other Materials and Machinery shall contribute to 90% of Price Adjustment and shall be calculated for each work separately during preparation of estimate, shall be approved by the authority during technical sanction as a "Schedule of Adjustment Data" and shall form part of the Bid Document]

Cl. No.-31 of F2/P1 Contracts Sl. No.	Index description	Source of Index	Base value*	Base Date*	Weightage of Item**
31 (a)(i)	Other Materials	All India whole sale price index (all commodities) as published by the Economic Advisor to the Govt. Of India, Ministry of Commerce and Industry.			55.11%
31 (a)(ii)	Cement	Whole sale price index for Cement (Ordinary Portland Cement) as published by the office the Economic Advisor to the Govt. Of India, Ministry of Commerce and Industry.			8.09%
31 (a)(iii)	Steel	Whole sale price index for steel (Mild Steel-Long Products) as published by the office of the Economic Advisor to the Govt. Of India, Ministry of Commerce and Industry.			24.70%
31 (a)(v)	Pipes	Whole sale price index for the type of Pipe under consideration, as published by the office the Economic Advisor to the Govt. Of India. Ministry of Commerce and Industry.			1.69%
31 (b)	Labour	Minimum Wage notified by the Labour and Employee's State Insurance Department of Government of Odisha, India.			5%
31 (c)	POL	Official retail price of HSD at nearest IOCL/ HPCL/ BPCL Consumer pump depot.			5%
31 (d)	Plant and Machinery	Whole sale price index for Manufacture of Machinery for Mining, Quarrying and Construction as published by the office the Economic Advisor to the Govt. Of India, Ministry of Commerce and Industry.			0.41%
			Total		100%

* Values to be filled up at the time of drawl of contract

*** Values to be filled up in the bid document.

37. If any advance / Secured advance is granted by the Department the same will bear interest at the rate of 18% P.A.
38. All items of work as per schedule of quantities of this tender should confirm to Odisha Detailed Standard Specification. I.R.C. & I.S.I. Codes & Bridge code section I,II,III,IV&VII & latest design criteria for pre-stressed concrete bridge specially for Roads & Bridges issued by MoRT&H., Government of India, Compacting shall have to be carried out with help of mechanical vibrators from the range of I.S.:2505, I.S.:2006, I.S.:2514. I.S.:4656.
39. Centering & Shuttering shall be with suitable steel shutters in side of which shall be lined with suitable sheeting and made leak proof and watertight. All joints in formwork shall be properly sealed preferably with P.V.C. joints sealing tapes & compounds.
40. The form work used shall be made of steel or unless specifically permitted by the Engineer in which case the form work shall be with seasoned salwood planks bullahs with lining of steel sheet inside & made watertight & shall be made sufficiently rigid by the use of ties & bracings to prevent displacement or sagging between supports & to withstand all pressure, ramming & vibration, without deflection from the prescribed lines occurring during & after placing of the concrete. The contractor has to submit to the Deptt. full working plan of the centering & shuttering to the bridge prior to execution. It is to be further noted that in the event of collapse of false work & staging, the contractor is liable to be blacklisted apart from other penalties according to the terms of contract & law.
 - a) Form works shall be so constructed as to be removed in sections in the desired sequence without damaging the surface of the concrete.
 - b) Bolts & rods for internal ties of the form work shall not remain projected beyond the concrete surface, when the form works removed. These shall be cut to a depth of 25mm. (1") from the exposed surface & holes refilled with concrete.
 - c) When oil is used for coating the inside of the forms, it shall be non-staining & applied before the reinforcement is placed. All savings, chips, debris & dust must be cleaned out of the forms immediately before placing the concrete. Care shall be taken to prevent reinforcement from coming in contact with the oil coating.
 - d) Centering shall be gradually & uniformly lowered in such a manner as to avoid any shock or vibration or injurious stress in any part of structure.
 - e) Immediately after removal of the form work, the concrete shall be carefully inspected. Any defects shall made good as soon as practicable.
 - f) Concrete should be machine mixed unless otherwise ordered in writing by Engineer-in-Charge.
 - g) The depth of foundation indicate on the drawing are provisional but these may be altered if necessary in the light of the nature of state indicated by boring or sub soil exploration which must be taken in advance of the actual execution of the foundation.
41. Cement shall be used by bags and weight of one bag of Cement should be 50 (fifty) Kg. net & the Engineer-in-Charge or his representative shall have the right to test the weight & quality from time to time.
42. The tenderers shall make all arrangements for proper storage of materials but no cost for raising shed for store and pay of security guard etc. will be borne by the

- Department. The department is not responsible for any theft or loss of materials at site. It is contractor's risk. Under any such plea, if the tenderer stops the work he shall have to pay the full penalty as per clauses of the contract.
43. Approach road to site of work for transport of materials to site of work is sole responsibility of the Contractor. Statutory traffic restriction in the town area for Transport of construction material to site of work is to be taken in to consideration before tendering and no consideration for extra time or compensation thereof shall be considered.
 44. The contractor should at his own cost arrange necessary tools and plants required for efficient execution of work and the rates quoted should be inclusive of transportation, hire and running charges of such plant and cost of consumables.
 45. The contractor shall properly co-ordinate with the execution of P.H. and Electrical works and take care of the safety of workers.
 46. The machineries if available, with the department may be supplied on hire as per charges noted in the enclosed statement and may be changed from time to time subject to the condition that the contractor will execute in advance an agreement with the Engineer-in-Charge.
 47. No claim whatsoever will be entertained for supply of machineries. No extension of time will be granted to the contractor under this ground under any circumstances
 48. The tenderer should furnish along with their tender a list of works executed during the last five years duly certified by the concerned Engineer-in-charge indicating the satisfactory completion for Civil, P.H. & Electrical works as per the proforma enclosed in a separate sheet of **Schedule-D**.
 49. The tenderer or any of its constituent partners of whose contract for any work has been rescinded or who has abandoned any work in the last five years prior to the date of Bid shall be debarred from qualification. The tenderer is to furnish an affidavit at the time of submission of tender paper about the authentication of tender documents. An affidavit to this effect is to be furnished in **Schedule-F** and information in **Schedule-E**
 50. It should be clearly understood that :
 - a) The joints of the bars are to be provided with lapping, welds or bolts nuts as well be directed by the Engineer-in-charge.
 - b) Concrete test specimens 150mm × 150mm × 150mm in size (whether plain or reinforced concrete) for the testing shall be taken for each structural member by a representative of the contractor in the presence of responsible officer of the rank not lower than that of an Assistant Engineer or sub-Divisional Officer. The contractor shall bear the cost so involved in testing. The test specimen in cube should be carried out in the Departmental Control and Research Laboratory of Cuttack or Bhubaneswar. Test should be carried out in accordance with the stipulation in Bridges code section-III.
 - c) Test specimens shall be formed carefully in accordance with the standard method of taking test specimen and no plea shall be entertained later on the grounds that the casting of the test specimen was faulty and that the result of the specimen did not give a correct indication of the actual quality of concrete.
 - d) Plain concrete and reinforced concrete specimens will be tested in **QualityControl and Research Laboratory as per direction of Engineer-in-charge**. Cost of testingof all specimens and samples will be borne by the Contractor.

- e) The standard of acceptance of the cube strength of concrete shall be per standard specification & code practice for Bridge Code of IRC 24-1972.
 - f) Construction of coffer dam or islands or the works of open excavation or dressing required for laying well curb shall be included in the rate of well sinking.
 - g) No claims will be entertained in respect of difficulties due to sand blowing etc. met with during sinking of wells.
51. The rates quoted should be inclusive of carriage of water required in connection with execution of the work. No claim for carriage of water whatsoever will be entertained.
 52. The contractor shall employ one or more Engineering Graduate or Two Diploma holders as apprentice at his cost if the work as shown in the tender exceeds ₹2,50,000.00. The apprentices will be selected by the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., Odisha. The period of employment will commence within one month after the date of work order and would last till the date, when 90% of the work is completed. The fair wage to be paid to the apprentices should not be less than the emolument of personnel of equivalent qualification employed under Government. The number of apprentices to be employed should be fixed by the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., Odisha in the manner so that the total expenditure does not exceed one percent of the tendered cost of the work.
 53. List of tool & plants in running condition in possession of contractor is to be furnished in a separate sheet of **Schedule-C**.
 54. It is the responsibility of the contractor to procure and store explosive required for blasting operation. Department may render necessary possible help for procuring license.
 55. For submission of a tender for the work, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the work about the quality and availability of the required quantity of materials, Medical aid, labour and Flood stuff etc. and that the rates quoted by him in the tender will be adequate to complete the work according to the specifications attached thereto and that he had taken in to account all conditions and difficulties that may be encountered during its progress and to have quoted labour rates and materials with taxes, Octroi and other duties lead, lifts, loading and unloading freight for materials and all other charges necessary for the completion of the work to the entire satisfaction of the Engineer-in-charge of the work and his authorized subordinates. After acceptance of the contract rates Government will not pay any extra charges for any reason in case the contractor finds later on to have misjudged the conditions as regards the availability of materials, labour and other factors. The contractor will be responsible for any misuse, loss or damages due to any reasons whatsoever of any departmental material during the execution of work. In case of loss, damage or misuse, recovery at the rate at 5 times the cost of the materials will be deducted from the bills or his other dues.
 56. The prevailing percentage of I.T. Department of the gross amount of the bill towards income tax will be deducted from the contractor's bill.
 57. GST at source will be deducted as per the Government rule in force.
 58. **Prevailing rate of Cassie. @ 1% on estimated cost put to tender as per the Building and Other Constructed Workers (RE&CS) Act. 1996 and Buildings and Other Construction Workers Welfare Cess Act. 1996 (vide resolution No.-**

12653, dt.15.12.2008 of Labour and Employment Department, Govt. of Odisha) will be deducted from each running bill of the contractor.

59. It must be clearly understood that under no circumstances any interest is chargeable for the dues or additional dues if any payable for the work executed and final bill pending disposal due to any reason whatsoever.
60. No extra payment will be made for removing spreading and consolidating salvaged metals and materials.
61. Under section 12 of contractor's labour (Regulation and Abolition) Act. 1970 the contractor who undertakes execution of work through labour should produce valid license from licensing authorities of labour Department.
62. **Performance Security / Additional Performance Security:**

Amendment of Codal & Contractual Provisions:(As per Works Department OM No.173 dt.03.01.2026)

After careful observation, Government has been pleased to abolish the extant provisions of threshold negative bid caps (14.99%) introduced in Appendix-IX, Clause 36 of OPWD Code Volume-II in the procurement of works undertaken by the Govt of Odisha and its agencies to ensure the procurement process results viable and successful manner with adoption of in a following incremental Additional Performance Security(APS) system:

But, if more than one bid is quoted at the same percentage rate (decimal up to two numbers will be taken for all practical purposes) either at the estimated cost put to tender or less than the estimated cost put to tender, then the tender accepting authority will finalize the tender through a transparent lottery system, where all bidders / their authorized representatives, the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. of concerned Division and DAO will remain present. The time and venue of the lottery shall be intimated to the respective bidders through their e-mail only. No other communication in this regard will be made.

- 62.1 Additional Performance Security shall be obtained from the bidder, when the bid amount is less than the estimated cost put to tender. In such an event, only the successful bidder who has quoted less bid price / rates than the estimated cost put to tender shall have to furnish the exact amount of differential cost i.e. estimated cost put to tender minus the quoted amount as **Additional Performance Security(APS)** in shape of **Term Deposit Receipt** pledged in favour of Managing Director, O.T.D.C., Ltd. Bhubaneswar.(from any Nationalized / Scheduled Bank in India counter guaranteed by its local branch at Bhubaneswar within seven days of issue of letter of acceptance (LOA) by the Divisional officer (by e-mail) to the successful bidder, otherwise the bid of the successful bidder shall be cancelled and the earnest money Deposit / Bid security shall be forfeited. Further proceeding for blacklisting shall be initiated against bidder (As amended vide O.M. No.14459 dt.20.09.2018 of Works Deptt. Govt of Odisha **has been modified with O.M. No.4559 Dt.05.04.2021 of Works Dept., Govt. of Odisha).**

If the Contractor fails to complete the work, the amount so furnished as additional performance security will be forfeited in addition to the other penal clauses, if any to be imposed.

Additional performance security shall be taken on an incremental basis from the selected bidder for low bid prices in the project works as under:(As per Works Department OM No.173 dt.03.01.2026)

- I. where the bid price is below 0% but not below 10% of the project cost put to bid, no additional performance guarantee/security percentage is required.
 - II. where the bid price is below 10% but not below 20% of the project cost put to bid, the additional performance guarantee/security percentage shall be incremented by 0.1% for every percentage of bid price below 10% of the project cost put to bid starting at 11% with the additional bid performance guarantee being 0.1% and this additional performance guarantee percentage shall be applied on the bid price;
 - III. where the bid_ price is 20% or more below of the project cost put to bid. the additional performance guarantee percentage shall be incremented by 0.2% for every percentage of bid price below 20% of the project cost put to bid in addition to 1% of the bid price and this additional performance guarantee percentage shall be applied on the bid price;
 - IV. The additional performance guarantee percentage shall be rounded off to the next lower percentage based on whether the decimal point of the percentage of bid price is below 0.5% or next higher percentage based on whether the decimal point of the percentage of bid price is 0.5% or more.
 - V. The additional performance security shall be treated as part of the performance security.
 - VI. Justification for abnormally low bids shall be scrutinized by the departmental technical committee and recommended to the competent authority of the administrative department for the approval of the additional performance security (APS). An abnormally low bid is one in which the bid price, in combination other elements of the bid, appears so low that raises material concerns as to the capability of the bidder to perform the contract at the offered price. Procuring entity may, in such cases, seek written clarifications from the bidder, including detailed price analysis of its bid price in relation to scope, schedule, resource mobilization, allocation of risk and responsibilities and any other requirements of the bid document. If, after evaluating the price analysis, the procuring entity determines that the bidder has substantially failed to demonstrate its capability to deliver the contract at offered price, the procuring entity may reject the bid / proposal. However, it would not be advisable to fix a normative percentage below the estimated cost, which would automatically be considered as an abnormally low bid.
2. These amendments shall take effect from the date of issue of the O.M.
 3. Accordingly, the relevant existing codal / Contractual provision stands modified with effect from the date of issue of this O.M.
 4. This has been concurred in by the finance department vide file no. FIN-WF1-MISC-0102-2025.

63. **Sample of all material** - The contractor shall supply sample of all materials fully before procurement for the work for testing and acceptance as may be requiring by the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd..
64. Super class contractor shall employ under himself two Graduate Engineer and two Diploma holders belonging to the State of Odisha. Special class contractor shall employ under him one graduate Engineer and two Diploma Holders belonging to the state of Odisha. Likewise 'A' class contractor shall employ under him one Graduate Engineer or two Diploma Holders belonging to state of Odisha. The contractor shall pay to the Engineering personnel monthly emoluments, which shall not be less than the emoluments of the personnel of equivalent qualification employed under the State Govt. of Odisha. The Engineer-in Chief (Civil), Odisha may however assist the contractor with names of such unemployed Graduate engineers and Diploma Holders if such help is sought for by the contractor. The names of such Engineering personnel appointed by the Contractors should be intimated to the tender receiving authority along with the tender as to who would be supervising the work. Each bill of the Super Class, Special Class or 'A' Class Contractor shall be accompanied by an employment Roll of the Engineering personnel together with a Certificate of the Graduate Engineer or Diploma Holder so employed by the contractor to the effect that the work executed as per the bill has been supervised by him. (Vide Works Department No. Codes M-22/91-15384 dated 9.7.91). The required certificate is to be furnished in the tender documents vide **Schedule-G**.
65. An engineering personnel of the executing agency should be present at work site at the time of visit of High-level Inspecting officers in the rank of Chief Engineer and above.
66. All reinforced cement work should conform to Odisha Detailed specification and should be of proportion as per Contract Agreement having desired compressive strength (in work test) in 15 cm cubes at 28days, after mixing and test conducted in accordance with IS 456 and IS 516.
67. Bailing out of water from the foundation, pipeline trenches S. Tanks/ Soak pits/ Sumps/ M.H. etc. either rainwater or sub-soil water, if necessary, should be borne by the contractor. No payment will be made for benchmarks. Level pillars, profiles and benching and leveling the ground wherever required. The rates quoted should be for finished items of works inclusive of these incidental items of work. It should be understood clearly that no claims whatsoever would be entertained.
68. The tenderer shall have to abide by the C.P.W.D. safety code rules introduced by the Government of India, Ministry of work Housing and Supply in their standing order No-44150 dtd.25.11.57.
69. The Contractor will have to submit to the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., monthly return of labour both skilled and unskilled employed by him on the work.
70. All fittings for doors and windows P.H. & Electrical works as supplied by the Contractor should be of best quality and conform to relevant I.S. specification and should be got approved by the Engineer-in-charge of the respective wing before they are used on the work.
71. After completion of the work the contractor shall arrange at his own cost all requisite equipment for testing buildings, if found necessary and bear the entire cost of such test, including the inspection of Electrical Inspectorate.

72. The Tenderer should furnish along with their tender **1.** A list of works, which are at present in their hand (**Schedule-B**) **2.** List of T&P (**Schedule-C**) and **3.** List of work executed (**Schedule-D**) in the prescribed proforma(s) enclosed herewith in appropriate place of bid document.
73. All reinforced cement concrete works should be finished smooth.
74. The tenderer may at his option quote reasonable rate for each item of work carefully so that the rate for one item should not be unworkable low and for others too high.
75. The contractor has to arrange the samples of materials required for execution to be got tested and approved by the Department before taking up the work and during course of execution required from time to time. All such samples will be tested at any of the **Departmental Control and Research Laboratories**, at the cost of the Contractor with no extra cost to the Department.
76. If there is any damage to the work due to natural calamities like flood or cyclone or any other cause during the course of execution of work or up to 6 months after completion of work or if any, imperfection becomes apparent to the work within 6 months from the date of final certificate of completion of work the contractor shall make good of all such damages at his own cost with no extra cost to the Department. No claims, whatsoever, in this regard will be entertained.
77. The Fly Ash Bricks should be of good qualities. The bricks should be approved by the Engineer-in-Charge before use in the work and should confirm to the minimum strength and other criteria as per National Building Code.
78. Under Section 1 of contract labour Regulation and Abolition Act 1970 the contractor who undertakes execution of work through labour should produce valid license from the licensing authority of labour Department.
79. Standard co-efficient for linear measurement will be adopted while calculating consumption of steel and no claim whatsoever regarding difference in co-efficient of steel will be entertained. The rates quoted shall be inclusive of any eventuality of difference for co-efficient for linear measurements.
80. Engineer Contractor desirous to avail the facility of exemption of E.M.D is required to submit an affidavit to the effect that he has not yet availed the facility / participated in the tender for more than two works (Excluding this work) during the current financial year. The name of work for which participated and the authority to whom the tender was submitted must be mentioned in the affidavit, failing which the tender will be rejected.
81. That for the purpose of jurisdiction in the event of disputes if any of the contract would be deemed to have been entered in to within the State of Odisha and it is agreed that neither party to the contract will be competent to bring a suit in regard to the matter by this contract at any place outside the State of Odisha.
82. **SPECIAL CONDITIONS (PART OF THE CONTRACT)**
 - (I) All materials before they are being used in the items of works as per this Schedule of quantities and also the finished items of work where tests are applicable shall have to be tested through the Engineer-in-charge of the respective wing at appropriate Laboratories according to the relevant I.S. specifications of the materials and the said items of works and the cost of all such tests shall have to be borne by the Contractor and the rates of the items of works should be inclusive of cost of such tests.
 - (II) The tests have to be planned & carried out such that the progress of work is not hampered

- (III) The tests are mandatory as per the prescribed frequencies and I.S. specifications. However, these are not exhaustive and the Engineer-in-charge has the right to prescribe other required test if any as will be considered from time to time.
83. In case of ambiguity between clauses of this D.T.C.N. and the **P-1** contract form, the relevant Clauses of the **P-1** contract form shall prevail over the D.T.C.N. The clauses not covered under **P-1** contract form shall be governed by the clauses of the D.T.C.N.
 84. It must be definitely understood that the Government does not accept any responsibility for the correctness and completeness of the trial borings shown in the Cross Section.
 85. Schedule of quantities is accompanied in **Cover-II (Price Bid)**. It shall be definitely understood that the Government does not accept any responsibility for the correctness or completeness of this schedule and that this schedule is liable for alternation or omissions, deductions or alternations set forth in the conditions of the contract and such omissions, deductions, additions or alternations shall no way invalidate the contract and no extra monetary compensation, will be entertained.
 86. In case of any complaint by the labour working about the non-payment or less payment of his wages as per latest minimum Wages Act, the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. will have the right to investigate and if the contractor is found to be in default, he may recover such amount due from the contractor and pay such amount to the labour directly under intimation to the local labour office of the Govt. The contractor shall not employ child labour. The decision of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. is final and binding on the contractor.
 87. The contractor should arrange the materials like Steel, Cement, paint and bitumen etc. of approved quality and specification at his own cost for completion of the work with the time schedule. No extension of time will be granted on the application of the contractor due to delay in procurement of materials.
 88. The bidder will be responsible for the loss or damage of any departmental materials during transit and in the execution of the work due to reasons what-so-ever and the cost of such materials will be recovered from the bills at stock issue rates or market rates whichever is higher.
 89. If the contractor removes Government materials supplied to him from the site of work with a view to dispose of the same dishonestly, he shall be in addition to any other liability civil or criminal arising out of his contract be liable to pay a penalty equivalent to five times of the price of the materials according to the stock issue rate or market rate whichever is higher. The penalty so imposed shall be recovered at any time from any sum that may then or at any time thereafter become due to the contractor or from his security deposit or from the proceeds of sale thereof.
 90. The selected contractor may take delivery of departmental supply according to his need for the work issued by the **Sub-Divisional Officer in-charge** subject to the availability of the materials. The tenderer shall make all arrangement for proper storages of materials but no cost for raising shed for storage, pay of security guard etc. will be borne by the Department. The Department is not responsible for considering the theft of materials at site. It is the contractor's risk. Under any such plea if the tenderer stops the work, he shall have to pay the full penalty as per clause of **P1** agreement.
 91. The Department will have the right to supply at any time in the interest of work any departmental materials to be used in the work and the contractor shall use such

- materials without any controversy or dispute on that account. The rate of issue of such materials will be at the stock issue rates inclusive of storage charges or rates fixed by the Department or current market rate whichever is higher.
92. All the materials which are to be supplied from P.W.D. store will be as per availability of stock and the contractor will have to bear the charges of straightening, cutting, jointing, welding etc. to required sizes in case of M.S. Rods or TOR Steel / M.S Angles, Tees and Joists etc. After the issue from the P.W.D. store, the materials may be under the custody of the contractor and the contractor will be responsible for its safety and storage. Cut pieces of steel more than one meter in length will be returned by the contractor at the issuing stores without conveyance charges.
 93. Though Departmental issue of cement and steel has indicated, it may not be taken as binding. The contractor must have to arrange by themselves cement, steel, bitumen and every sort of materials from approved manufacturer, get it tested in the Departmental Laboratory and approved by the Department before use. No extension of time or escalation of price on such account shall be entertained in future.
 94. TOR rods, plates and structural members will be supplied in quantity, length and size available in the stock. For payment of reinforcement, the steel including plates etc. shall be measured in length of different diameter, size and specification as actually used (including hooks and cranks) in the work correct to an inch or cm. And their weight calculated as per sectional weight prescribed by the Indian Standard Specification or as directed by the Engineer-in-Charge (Wastage of bars and unnecessary lapping will not be considered for measurement and payment).
 95. Deleted
 96. The contractor is required to pay royalty to Govt. as fixed from time of time and produce such documents in support of their payment to the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. with their bills, falling which the amount towards royalties of different materials as utilized by them in the work will be recovered from their bills and deposited in the revenue of concerned department.
 97. **Trial Boring** - The foundation level as indicated in the body of the departmental drawing is purely tentative and for the general guidance only. The Department has no responsibility for the suitability of actual strata at the foundation level. The contractor has to conduct his own boring before starting the work and get the samples tested at his own cost to ascertain the S.B.C. and credibility of the strata at founding level while quoting his rates for tender the contractor shall take in to account of the above aspects.
 98. Any defects, shrinkage or other faults which may be noticed within **12 (Twelve) months** from the completion of the work arising out of defective or improper materials or workmanship timing are upon the direction of the Engineer-in-Charge to be amended and made good by the contractor at his own cost unless the Engineer for reasons to be recorded in writing shall be decided that they ought to be paid for and in case of default Department may recover from the contractor the cost of making good the works. The contractor is also required to maintain the road/building for **12 (Twelve) months** from the date of successful completion of the work.
 99. From the commencement of the works to the completion of the same, they are to be under the contractors charge. The contractor is to be held responsible to make good all injuries, damages and repairs occasioned or rendered necessary to the

- same by fire or other causes and they hold the Govt. of Odisha harmless for any claims for injuries to person or structural damage to property happening from any neglect, default, want of proper care or misconduct on the part of the contractor or any one in his employment during the execution of the work. Also, no claim shall be entertained for loss due to earthquake, flood, cyclone, epidemic, riot or any other calamity whether natural or incidental damages so caused will have to be made good by the contractor at his own cost.
100. **Gradation of ingredients:** The coarse and fine aggregate shall meet the grade requirement as per the latest provision of relevant. I.S. Code / I.R.C. code / MoRT &H specifications.
 101. Where it will be found necessary by the Department, the Officer-in-Charge of the work shall issue an order book to the contractor to be kept at the site of the work with pages serially numbered. Orders regarding the work whenever necessary are to be entered in this book by the P.W.D. Officer-in-Charge with their dated signatures and duly noted by the contractor or his authorized agents with their dated signature. Orders entered in this book and noted by the contractor's agent shall be considered to have been duly given to the contractor for following the instructions of the Department. The order Book shall be the property of the P.W.D. and shall not be removed from the site of work without written permission of the Engineer (Addl. Chief Engineer/Superintending Engineer, OTDC Ltd.) and to be submitted to the Engineer-in charge every month.
 102. The contractor should attach the certificate in token of payment deposit with the registration authority as per recent circular of the Government relating to his registration.
 103. In case of any discrepancy in printing or omissions of statutory specifications or any other part or portion of the approved document during download of the bid document, the decision of the officer inviting the bid will be binding on the bidder.
 104. The rates quoted by the contractor shall cover the latest approved rates of Labours, Materials, P.O.L. and Royalties. Arrangement of borrow areas i.e. Land, Approach Road to the building site etc. are the responsibility of the contractor.
 105. The rate for each work of concrete items wherever dewatering is imperatively necessary the term dewatering shall mean the execution or operation of the items due to standing water as well as due to percolation of water. The quoted rates will be inclusive of this.
 106. The contractor shall make requisition of claim book from the date of commencement of the work from the Department and shall maintain in proper P.W.D. form with pages serially numbered in order to record items of works are not covered by his contract and claimable as extra. Claims shall be entered regularly in this book under the dated signature of the contractor or his duly authorized agents at the end of each month. A certificate should be furnished along with the claim to the effect that he has no other claim beyond this claim up-to-date. If in any month there are no claims to record, a certificate to that effect should be furnished by the contractor in the claim book. Each claim must be defined and should be given as for as possible regarding the quantities as well as the total amount claimed. The claim book must be submitted by the contractor regularly by 10th and 16th days of each month for orders of the Engineer-in-Charge or competent authority. Claims not made in this manner or the claim book not maintained from the commencement of the work is liable to be summarily rejected. The claim book is the property of the P.W.D. and shall be surrendered by the contractor to the Engineer-in-charge after

- completion of the work or before recession of the contract by the Department whichever is earlier for record.
- 107.** Number of tests as specified in I.R.C. / MoRT&H / I.S.I specification required for the construction of roads / bridges / buildings or any other structural works will be conducted in any Govt. Test House /Departmental laboratories/reputed material testing laboratory as to be decided by the Engineer-in-charge. Testing charges including expenditure for collection / transportation of samples /specimens etc. will be borne by the contractor. The collection of samples and testing are to be conducted for both prior to execution and during execution as may be directed by the Engineer-in-charge and on both the accounts the cost shall be borne by the contractor.
- 108.** Even qualified criteria are met, the bidders can be disqualified for the following reasons, if enquired by the Department
- (a) Making a false statement or declaration.
 - (b) Past record of poor performance.
 - (c) Past record of abandoning the work half way/ recession of contract.
 - (d) Past record of in-ordinate delay in completion of the work.
 - (e) Past history of litigation.
- 109.** In case the 1st lowest tenderer or even the next lowest tenderers withdraw in series one by one, thereby facilitating a particular tender for award, then they shall be penalized with adequate disincentives with forfeiture of EMD unless adequate justification for such back out is furnished. Appropriate action for black listing the tenderers shall also be taken apart from disincentives against the tenderer.
- 110.** The following documents which are not submitted with the Bid, will be deemed to be part of the Bid:

Sl. No	Particulars
1	Notice Inviting tender
2	Instruction to the Bidders
3	Conditions of Contract.
4	Contract data
5	Specifications
6	Drawings

- 111. Condition for issue of plant & machinery to contractor on hire:** - Tools & plants will be issued to the contractor only if it is desirable in the interest of Govt. works and if these can be spared without inconvenience to the Department. The Sanction of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., Odisha shall be necessary in each case. The contractor shall arrange his programme of work according to the availability of the plant & machinery & no claim will be entertained for any delay in supply by the Department.
- An agreement shall be entered in to by the contractor to the effect that these hire charges are recoverable from the bills of the contractor regularly and the final payment for the work including refund of security deposit will not be made until the total amount due to the Government on account of hire of machinery etc. is

recoverable in full. Full amount of hire charges due from the contractor at any contract at any time shall be recovered from his next subsequent bill. All transit and incidental charges in connection with the dispatch of tools and plants and machineries from workshop shed/ deposit return there to, will be borne by the contractor. The hire charge shall be recovered at the prescribed rates from and inclusive of the date, the plant and machinery is made over up to and inclusive of the date of its return, even though the same day it may not have been utilized for any reason except for a major break down which may take more than 72 hours for repairs. The contractor shall immediately intimate in writing to the Engineer-in-charge when any plant or machinery goes out of order requiring major repairs. The hire charges are for clock hours. In case of tar boilers, hot mix plant and any other machinery requiring similar preparation the working hour will include the time required to make up the boiler temperature and bring plant to the operating conditions before the actual start of work. The machine will work in shifts of 8 hours each. Extra charges towards overtime wages of any of the operating and maintenance staff will be leviable. These charges will be fixed by the Engineer-in-charge from time to time. In no case, the tools and plants shall be operated beyond 8 hours in any shift without prior written permission of the Engineer-in-charge.

The contractor shall release the plant and machinery as and when required for periodical servicing and maintenance. He shall also provide for any labour and water source for washing the plants. In the case of Concrete mixtures, pavers and similar such type of equipment, the contractor shall arrange to get the hopper cleaned and the drums etc. washed at the close of work each day. The plant and machinery once issued to a contractor shall not be returned by him on account of lack of arrangement of labour and material etc. on his part. The same will be returned only when they do not require or when in the option of Engineer-in-charge the work or a portion of work for which issued is completed.

The tools and plants shall while in transit and in the custody of contractor be at his sole risk and responsibility for damages and / or loss except fair wear and tear. The damage or loss as assessed by Engineer-in-charge shall be made good by the contractor. In the event of a disagreement as to the extent of damage or the value of article lost, the decision of Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., O.T.D.C. Ltd., Odisha shall be final. The contractor shall on or before the supply of plant and machinery sign an agreement in indemnifying the Govt. against loss or damage to the machine. The Contractor shall also be responsible for any claim for compensation for loss of life, injury or damages to property etc. arising from any cause what-so-ever. The contractor shall provide full time chowkidar for guarding the plant and machinery at site.

If the articles are not returned within the date originally specified or extended by the Engineer in Charge, in addition to the normal hire charge, a surcharge equal to 10% of the hire charges will be levied for the period that the machinery is not returned. Such period will be treated as working time. In the event of the non-return of the machinery, the full value of the articles at the current market price will be recovered from the contractor's outstanding bills or any bills that may become due in respect of his other work under the state public works Department. The decision of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., O.T.D.C. Ltd., Odisha shall be final in case of dispute.

FORM OF AGREEMENT – The contractor shall, before taking the possession of the machinery, enter in to an agreement with the Engineer-in-charge or his nominees in the form attached. Log Books for recording the hours of daily works for

each of the plant and machinery supplied to the contractor will be maintained by the Department will be attested by the contractor or his authorized agent daily. In case of contractor contests the correctness of the entries and / or fails to sign the logbook, the decision of the Engineer-in-charge shall be final and binding on him. Hire charges will be calculated according to the entries in the logbook and will be binding on the contractor.

AGREEMENT FOR LOANS OF GOVERNMENT TOOLS & PLANTS

This agreement made on the Two Thousand between (herein-after referred to as “**the hirer**” which expression shall unless excluded by or repugnant to the context include his heirs, executors, administrators and assigns) of the one part and the Govt. of Odisha (here in after referred to as the Governor which expression shall unless excluded by or repugnant to the context include his successors in office as assigns) of the other part. Whereas the hirer desirous of hiring the tools and plants of the P.W. Department of the Odisha Govt. and more particularly specified in the schedule here under between here in after referred to as “the tools and plants”. And whereas Government has agreed to let in hire the tools and plants to the hirer on the terms and conditions here in after mentioned. Now it is here by and between the parties here to as follows :-

- a) In consideration of agreement that hire charges be recovered from their bill for work executed on which this machinery will be used or any other than standing in the names of contractors in the book of the Department or any other Government Department. The Govt. agrees to let the hirer tools and plants for the period to be computed from the date of delivery of the tools and plant to the hirer at the P.W. Department workshop / store at **Bhubaneswar**.
- b) The rate of higher charges will be as mentioned in the schedule attached.
- c) The hirer shall not transfer, assign or sublet or in any way part with the tools and plants or any part there-of without the previous written approval of the Engineer-in-charge
- d) On the expiry of the period of the hire, the hirer shall return the tools and plants to the Public Works Department. & Workshop / store at **Bhubaneswar** in the same good condition in which they were received by him.
- e) In the event of the tools and plants not being returned on the expiry of the above-mentioned period, the hirer shall without prejudice and any other liability pay to the Government on account equivalent to the rate of hire specified for the working period and an increase of ten percent.
- f) The tools and plants shall be open for inspection at all times to the officers of the Government.
- g) The hirer shall not operate the tools and plants so hired for more than one shift / two shifts of 8 hours each per day without the prior sanction of the Engineer-in-charge. If the hirer operates the tools and plants beyond the aforesaid limit without the prior sanction of the Assistant Engineer, he shall pay to Government additional hire charges as well as over time charges for staff for such excess operation at the rate approved by the Engineer-in-charge from time to time.
- h) In case of breakdown, repairable at the site within a period of three days hire charges as specified in the schedule will be levied except in case of major repairs.
- i) Normally the tools and plants will be supplied with operating staff.
- j) The hirer shall be responsible for any claims for compensation for loss of life, injury or damage to property etc. arising due to any causes what-so-ever during the period of the machinery is in his charge.

- k) All municipal or other dues and taxes payable on account of the use or operation of the tools and plants for the period of hire shall be defrayed by the hirer.
- l) The hirer shall make good any loss or damages arising out of causes other than fair wear and tear to the tools and plants during the period of hire. The cost recoverable from the hirer shall be the full replacement value as determined by the Engineer-in-charge. In the event of any loss or damage not being made good by the hirer to the satisfaction of the said Engineer-in-charge the office shall be at liberty to make good himself such loss or damage and recover the cost thereof from the hirer. The hirer shall pay to the Engineer-in-charge such an amount as shall be necessary to make good the loss or damage failing which the same will be recovered from his dues as in case of hire charges.
- m) On the breach of any terms or conditions of this agreement by the hirer the Engineer-in-charge shall be entitled to demand the return of tools and plants and the hirer shall return the tools and plants within 72 hours from the date of receipt of such order in writing. In case of failure on the part of the hirer to comply with such order he shall be liable to pay such penalty as may be imposed by the Engineer-in-charge for the period the tools and plant are detained provided that the maximum penalty shall not exceed the cost replacement of the tools and plants.
- n) In case of any disputes between the hirer and the Government, the decision of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., O.T.D.C. Ltd., Odisha shall be final.
- o) This agreement shall be operated by the Engineer-in-charge on behalf of the Government and the term Engineer-in-charge shall include all officers duly authorized by him to exercise powers on his behalf.

THE SCHEDULE

Serial No.	Description and Name of the articles	No.	Amount of hire per hour	Remarks

In witness where of the hirer and the Engineer-in-Charge has for and on behalf of the Governor of the State has set their respective hand, the day and the year here in above written.

Signed by:1

*2. Signed sealed and delivered in
the presence of*

112. **ELIGIBILITY CRITERIA:**

To be eligible for qualification, applicants shall furnish the followings. Non-furnishing of the following particulars shall be treated as ineligible.

- a. **Required E.M.D of Rs 2,33,244.00 Clause No.20 of DTCN**
- b. **Cost of tender paper Rs. 10,000.00 and GST @ 18% Rs. 1800.00(Online).**
- c. **Scanned copy of valid Contractor Registration Certificate, GST Registration Certificate, GSTIN, PAN card along with the tender documents and the L-I bidder has to furnish the Original Registration certificate, GSTIN and Pan card for verification within (5) Five days of opening of Cover-II of the tender before Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., O.T.D.C. Ltd., Bhubaneswar as per Clause No-1, 5(i) and 21 of DTCN. The contractor belonging to outside state of Odisha and not started business should submit an undertaking in the form of an Affidavit indicating therein that they are not registered under Odisha GST as they have not started any business in the state and they have no liability under the Act. But before award of final contract, such bidders will have to produce the GSTR registration certificate.**
- d. The agency having a valid M.V./H.T.License / M.O.U. (Memorandum of Understanding duly notarized) with eligible registered electrical contractor having valid M.V./H.T.license. **Clause No.8 of DTCN and Schedule-J need to be furnished.**
- e. **Joint Ventures are not accepted.**
- f. The bidder should have satisfactorily completed the works during the last five years ending previous day of last date of submission of tenders.

1. Three similar works each costing not less than **40%** of the Amount put to tender amounting to **RS. 93,29,776/- (Excluding GST).**

OR

2. Two similar works each costing not less than **50%** of the Amount put to tender amounting to **RS. 1,16,62,220/- (Excluding GST).**

OR

3. One similar work costing not less than **80%** of the Amount put to tender amounting **to RS. 1,86,59,551/- (Excluding GST).**

Similar work shall be executed under one agreement for any authority bodies of State Govt. / Central Govt./ Reputed Private Organization or Companies with Certificate from the concerned officer not below the rank of Executive Engineer/ Superintending Engineer, or Equivalent need to be furnished by the bidder as per Scheduled-D. **In case of execution of work in Private Organization / Companies the Certificate from the concerned competent authority supported with Income Tax return against the payment received for the same is required to be furnished by the bidder in Schedule-D. The Current price level for similar nature of work will be taken into consideration as per escalation factor mentioned in DTCN at clause 112 (g).**

g. BID CAPACITY - (Vide Works Department Office Memorandum No.6300 dtd.16.6.2011)

Applicants who meet the minimum qualification criteria will be qualified only if their available bid capacity at the expected time of bidding is more than the total estimated cost of the works. The available bid capacity will be calculated as under.

Assessed Available Bid Capacity = $(A \times N^2 - B)$, where

A = Maximum value of works executed in any one year during the last five years (updated to the current price level) rate of inflation may be taken as 10% per year (escalation factor) which will taken into account the completed as well as works in progress.

B = Value of **current price level** of the existing commitments and ongoing works to be completed during the next years (period of completion of works for which Bids are invited).

N = Number of years prescribed for completion of the work for which the Bids are invited.

(For work completion period less than one year the value may be taken as one year)

Note : In case of a Joint Venture the available Bid capacity will be applied for each partner to the extend of his proposed participation in the execution of the works.

The Statement showing the value of existing commitments and ongoing works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer-in-Charge not below the rank of an Addl. Chief Engineer/Superintending Engineer, OTDC Ltd.

Escalation Factor: For calculation of 'B' the following enhancement factors will be used for the cost of works executed and the financial figures to a common base value for works completed in India.

<u>Year before</u>	<u>Multiplying factor</u>
One	1.10
Two	1.21
Three	1.33
Four	1.46
Five	1.61

(Applicant should indicate actual figures of costs and amounts for the works executed by them without accounting for the above mentioned factors)

In case the financial figures and value of completed works are in foreign currency the above enhanced multiplying factors will be applied. Instead, current market exchange rate(State Bank of India BC selling rate as on the last date of submission of the bid) will be applied for the purpose of conversion of amount in foreign currency into Indian rupees.

The information on Bid Capacity as on the date of this bid is to be furnished as per the format in **Schedule-B.**

Total value of Civil Engineering construction work performed in the **last five years** are to be furnished for which **certificate from Chartered Accountant is to be furnished.**

2021-2022-----	2023-2024-----	2025-2026-----
2022-2023 -----	2024-2025 -----	

Total Value of the Civil Engineering construction work performed in the **last five years** are to be furnished for which **certificate from Chartered Accountant is to be furnished.**

2021-2022-----	2023-2024-----	2025-2026-----
2022-2023 -----	2024-2025 -----	

h. Non-submission of required information in schedule E and F shall be treated as non-responsive and the bid shall be summarily rejected. The documents uploaded for one bid or part thereof shall not be considered during evaluation of other bid and each bid shall be evaluated as per the documents uploaded for the particular bid.

- i. **Turn over certificate (Bidder / Firm should have annual financial turnover of not less than 40% of the value of work put to tender in any one year in civil construction works during last five years and the turn over need to be certified by a registered Chartered Accountant with Unique Document Identification Number (UDIN) for Practicing Chartered Accountants.)**
 - j. Valid EPF registration certificate with up-to-date payment receipt. (Mandatory)
- 113. Time Control:** - (Vide Works Department Office Memorandum No.24716 dtd.24.12.2005 and No.8310 dtd.17.05.2006)
- a) Progress of work and Re-scheduling programme.
 - i) The Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. shall issue the letter of acceptance to the successful contractor. The issue of the letter of acceptance shall be treated as closure of the Bid process and commencement of the contract.
 - ii) Within 15 days of issue of the letter of acceptance, the contractor shall submit to the Engineer-in- Charge for approval a Programme showing the general methods, arrangements, and timing for all the activities in the Works along with monthly cash flow forecast.
 - iii) To ensure good progress during the execution of the work the contractors shall be bound in all cases in which the time allowed for any work exceeds one month to complete, 1/4th of the whole time allowed under the contract has elapsed, 1/2 of the whole of the work before 1/2 of the whole time allowed under the contract has elapsed, 3/4th of the whole of the work before 3/4th of the whole time allowed under the contract has elapsed.
 - iv) If at any time it should appear to the Engineer-in-Charge that the actual process of the work does not conform to the programme to which consent has been given the Contractor shall produce, at the request of the Engineer-in-Charge, a revised programme showing the modifications to such programme necessary to ensure completion of the works within the time for completion. If the contractor does not submit an updated Programme within this period, the Engineer-in-Charge may withhold the amount of 1% of the contract value from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
 - v) An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
 - vi) The Engineer-in-Charge's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer-in-Charge again at any time. A revised Programme is to show the effect of Variations and Compensation Events.
 - b) **Extension of the Completion Date.**
 - i) The time allowed for execution of the works as specified in the Contract data shall be the essence of the Contract. The execution of the works shall commence from the 15th day or such time period as mentioned in letter of Award after the date on which the Engineer-in-Charge issues written orders to commence the work or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Government shall without prejudice to any other right or

remedy available in law, be at liberty to forfeit the earnest money & performance guarantee / Security deposit absolutely.

- ii) The Contractor shall submit the Time & Progress Chart for each milestone Quarter wise indicating each month and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in- Charge and the Contractor within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per milestone given in contract data.
 - iii) In case of delay occurred due to any of the reasons mentioned below, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.
 - (1) Force majeure, or
 - (2) Abnormally bad weather, or
 - (3) Serious loss or damage by fire, or
 - (4) Civil commotion, local commotion of workmen, strike or lockout affecting any of the trades employed on the work, or.
 - (5) Delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract.
 - (6) In case a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost, or
 - (7) Any other cause, which, in the absolute discretion of the authority mentioned, in Contract data is beyond the Contractors control.
 - iv) **Request for reschedule and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen (14) days of the happening of the event causing delay.** The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.
 - v) In any such case a fair and reasonable extension of time for completion of work may be given. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. Non-application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the contractor.
- c) **Compensation for Delay.**
 If the contractor fails to maintain the required progress in terms of clause-2 of P-1 Contract or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the **Addl. Chief Engineer/Superintending**

Engineer, OTDC Ltd.(whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day / month (as applicable) that the progress remains below that specified in Clause-2 of P-1 Contract or that the work remains incomplete. This will also apply to items or group of items for which a separate period of completion has been specified. Compensation @ 1.5% per month of for delay of work, delay to be completed on per Day basis. Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the Tendered Value of work or to the Tendered Value of the item or group of items of work for which a separate period of completion is originally given. The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Government. In case, the contractor does not achieve a particular milestone mentioned in contract data, or the rescheduled milestone(s) in terms of Clause-2.5, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of extension of time. Withholding of this amount on failure to achieve a milestone shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest whatsoever shall be payable on such withheld amount.

d) Bonus for early completion

For availing incentive clause in any project which is completed before the stipulated date of completion, subject to other stipulations it is mandatory on the part of the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. to report the actual date of completion of the project as soon as possible through fax or e-mail so that the report is received within 7 days of such completion by the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., Chief Engineer & the Administrative Department. The incentive for timely, completion should be on a graduated scale of one percent to 05 percent of the contract value. Assessment of incentives may be worked out for earlier completion of work in all respect in the following scale.

Before 30 % of contract period = 5 % of Contract Value

Before 20 to 30 % of contract period = 4 % of Contract Value

Before 10 to 20 % of contract period = 3 % of Contract Value

Before 5 to 10 % of contract period = 2 % of Contract Value

Before 5% of contract period = 1 % of Contract Value

(Amendment to Para-3.5.5 (V) of Note-III of OPWD Code Vol.-I by inclusion vide O.M. No.5288 dt.04.05.2016)

e) Management Meetings

- i) Either the Engineer or the Contractor may require the other to attend a management meeting. The business of management meetings shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- ii) The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken to be

decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

Rescission of Contract (Amendment as per letter No.10639 dt.27.05.2005 of Works Department, Odisha):-To rescind the contract (of which rescission notice in writing to the contractor under the hand of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. shall be conclusive evidence), **20% of the value of left over work will be realized from the contractor as penalty.**

114. Building and other Construction Workers Welfare Cess @ 1% of the estimated cost as per tender notification read with latest corrigendum if any will be proportionately deducted from the contractor's bill at the time of making payment of each bill.
115. The tenderers are required to go through each clause of P.W.D. Form **P-1** carefully in addition to the clauses mentioned here in before tendering.
116. A Contractor may be black listed as per amendment made to Appendix XXXIV to OPWD Code Vol.-II on rules for black listing of Contractors vide letter no.3365 dt.01.03.2007 of Works Department, Odisha.
As per said amendment a Contractor may be blacklisted
 - a) Misbehavior/threatening of Departmental & supervisory officers during execution of work/tendering process.
 - b) Involvement in any sort of tender fixing.
 - c) Constant non-achievement of milestones on insufficient and imaginary grounds and non-adherence to quality specifications despite being pointed out.
 - d) Persistent and intentional violation of important conditions of contract.
 - e) Security consideration of the State i.e. any action that jeopardizes the security of the State.
 - f) Submission of false/ fabricated / forged documents for consideration of a tender.
117. The safety certificate of the E.I. work will be furnished by the agencies after getting necessary verification from the electrical inspector / equally competent authority responsible for the work prior to Energisation of the building.
118. Percentage rate contract (vide Works Department letter no.8310 dt.17.05.2006) In case of percentage rate tender: -
 - i) The Contractor has to mention percentage excess or less over the estimated cost (In figures as well as words) in the prescribed format appended to the tender document.
 - ii) Contractors participated in the tender for more than one work may offer conditional rebate. Rebate offer submitted in separate sealed envelope shall be opened, declared and recorded first. The rebate so offered shall be considered after opening of all packages called in the same Tender Notice. The Contractors who wish to tender for two or more works shall submit separate tender for each. Each tender shall have the Bid Identification No., Name & Sl. No. of the work (as per IFB) to which they refer, written on the envelope.
 - iii) Only percentage quoted shall be considered. Percentage quoted by the Contractor should be accurately filled-in figures and words, so that there is no discrepancy.
 - (1) If any discrepancy is found in the percentage quoted in words and figures, then the percentage quoted by the Contractor in words shall be taken as correct
 - (2) If any discrepancy is found in the percentage quoted in percentage excess/ less and the total amount quoted by the Contractor, then percentage will be taken as correct.

- (3) The percentage quoted in the tender without mentioning excess or less and not supported with the corresponding amount will be treated as excess.
 - (4) The percentage quoted in the tender without mentioning excess / less supported with corresponding amount does not tally with either to percentage excess or less then it will be treated as percentage excess.
 - (5) The percentage quoted in the tender without mentioning excess / less supported with corresponding amount if tallied with the percentage then it will be treated as to which side the amount tallies.
 - (6) **The Contractor will write percentage excess/ less up to two decimal point only.**
 - (7) The tender shall be written legibly and free from erasures, over writings or corrections of figures. Corrections, over writings & interpolations where unavoidable should be made by making out, initialing, dating and rewriting.
- iv) In the contract P1 time is the essence. The contractor is required to maintain a certain rate of progress specify in the contract.
 - v) The quantity mentioned can be increased or reduced to the extent of 10% for individual items subject to a maximum of 5% over the estimated cost. If it exceeds the limit stated above prior approval of competent authority is mandatory before making any payment.
 - vi) The period of completion is fixed and cannot be altered except in case of exceptional circumstances with due approval of next higher authority.
 - vii) Bills for percentage rate tenders shall be prepared at the estimated rates for individual items only and the percentage excess or less shall be added or subtracted from the gross amount of the bill.

SPECIAL CONDITION

- i) No claim will be entertained due to any delay involve in land acquisition required for the work. It shall be construed that the Contractor has thoroughly acquainted himself about the situational condition before tendering for the work and after having fully satisfied himself about the site condition and after going for the stipulation of proceeding para of the special condition of DTCN as quoted rates. Thus, his quoted rate could be deemed to cover any and all distance and situations of the source of soil and also any & all modes of transport either by manual and mechanical means notwithstanding the fact that the concerned estimate or tender of Schedule of Rate for that matter does not envisage such provision.
- ii) No claim will be entertained doe to any delays involve in land acquisition required for the execution of the work. However, suitable extension of time may be given under recommendation of the Engineer-in-Charge.

(Total 118 Clauses)

APPROVED

**Addl. Chief Engineer,
O.T.D.C. Ltd. Bhubaneswar**

CONDITIONS OF CONTRACT
Clauses of P1Contract

Clause1 All compensation or other sums of money payable by the contractor to Government under the terms of his contract may be deducted from or paid by, the sale of a sufficient part of his security deposit or from the interest arising there from or from any sums which may be due or may become due to the contractor by Government on any account whatsoever and in the event of his security deposit being reduced by reason of any deduction or sale as aforesaid, the contractor shall within 10days thereafter make good in cash or Government securities endorsed as a aforesaid any sum or sums which may have been deducted from or raised by sale of the security depositor any part thereof.

Clause –2 (a) The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the written order to commence work is given to the contractor. The work shall throughout the stipulated period of the contract, be carried on with all due diligence (time being deemed to be of essence of the contract on the part of the contractor) and the contractor shall pay as compensation, an amount equal to ½ % on the amount of the estimated cost, if the whole work as shown by the tender for every day that the work remains un-commenced, or unfinished after the proper dates. The work should not be considered finished until such date as the **Addl. Chief Engineer/Superintending Engineer, OTDC Ltd.** shall certify as the date on which the work is finished after necessary rectification of defects as pointed out by the **Addl. Chief Engineer/Superintending Engineer, OTDC Ltd.** or his authorized agents, are fully complied with by the contractor to the Superintending Engineer, OTDC Ltd. / Superintending Engineer, OTDC Ltd. satisfaction). And further, to ensure good progress during the execution of the work the contractor shall be bound, in all cases in which the time allowed for any work exceeds one month: to complete one-fourth of the whole of the work before one fourth of the whole time allowed under the contract has elapsed; one half of the work, before one half such time elapsed, and three forth of work before three fourths of such time has elapsed, in the events of the contractor failing to comply with the condition, he shall be liable to pay as compensation an amount equal to one-third percent on the said estimated cost of the whole work for everyday that the due quantity of work remains incomplete provided always that the entire amount of compensation to be paid under the provision of this clause shall not exceeds10 percent on the estimated cost of the work as shown in the tender.

Compensation for delay

b) i) To rescind the contract of which rescission notice is writing to the contractor under the hand of the Addl. Chief Engineer// Superintending Engineer, OTDC Ltd. shall be conclusive evidence.20% of the value of left over works will be realized from the contract as penalty.

Contractor remains liable to pay compensation if action not taken under clause.
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ii) Security deposit of the contractor shall be refunded only **12 calendar months** after the date of completion of the work provided the final bill has been paid and defects, if any rectified.

Clause-3

In any case in which any of the powers, conferred upon the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. by clause 2 here of shall have become exercisable and the same shall not be exercised. The

Non-exercise thereof shall not constitute a waiver of any of the conditions here of and such powers shall notwithstanding be exercisable. In the event of any future case of default by the contractor of which by any clause or clauses he is declared liable to pay compensation amounting to the whole of his security deposit, and the liability of the contractor for the past and future compensation shall remain unaffected. In the event of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. putting in force vested him under the preceding clauses he may, if he so desire, take possession of all or any tools, plants, materials and stores, in or upon the work, or the site thereof or belonging to the contractor, or procured by him and intended to be used for the execution account at the contract rates, or in case of these not being applicable, at current market rates to be certified by the **Addl. Chief Engineer/Superintending Engineer, OTDC Ltd.** whose certificate thereof, shall be final otherwise the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. may by writing to the contractor or his clerk of the works, foreman or other authorized be require him to remove such tools, plants, materials or store from the premises (within a time to be specified in such notice) and in the event of the contractor failing to comply with any such requisition, the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. may remove them at the contractor's expenses or sell them by auction or private sale on account of the contractor and his risk in all respects, and the certificate of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. as to the expenses of any such removal and the amount of the proceeds and expense of any such sale shall be final conclusive against the contractor.

Power to take possession of or require removal of or sell contractors plants.

Clause4 If the contractor shall desire an extension of the time for completion of the work, on the ground of his having unavoidable hindered in its execution engineer within 30days of the date of the

Hindrance on account of which he desires such extension as a fore said and the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. shall, if in his opinion (which shall be final) reasonable grounds be shown there on, authorize such extension of time, if any, as may in his opinion be necessary or proper. The Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. shall at the same time in form the contractor whether he/she claims compensation for delay.

Extension of time

Clause5 On completion of the work, the contractor shall be furnished with a certificate by the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. (herein after call the Engineer-in-charge) to be completed until

the contractor shall have remove from the area of the premises to be distinctly marked by the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. in the site plan on which the work shall be executed, all scaffolding, surplus materials and rubbish, and cleaned off the dirt from all wood work, doors windows, floors or other part of any building in upon or about which the work is to be executed, or of which he may have possession for the purpose of the execution thereof nor until the work shall have been measure by the officer of the Public Works Department in accordance with the rules of the department whose measurements shall be binding and conclusive against the contractor. If the contractors shall fail to comply with requirements of this clause as to removal of scaffolding, surplus materials and rubbish and cleaning off dirt on or before the date fixed for completion of the works, the Engineer-in-charge mat at the expenses of the contractor remove such scaffolding, surplus materials and rubbish and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall forthwith pay the amount of all expenses incurred and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid, except for any sum actually realized by the sale thereof.

Final Certificate

Sub-Clause5 If in the opinion of the Engineer-in-charge, which shall be final and binding on the contractor, occupation or utilization of a portion of the work completed in no way interferes with progress of the work the same may be occupied or utilized by on behalf of the Govt. under the written order of the Engineer-in-charge and to get the defects, if any rectified by the contractor at his (contractor) own cost within six months from the date of completion of the whole work provided that the contractor will not be allowed any concession either in the shape of extension of stipulated period or any other monetary compensations account of such occupation or use.

Clause6 A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer-in-charge for all works executed in the previous month, and the Engineer-in-charge or his subordinate shall take the requisite measurement for the purpose of having the same verified and the claim, as far as admissible, adjusted, if possible before the expiry often days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid the Engineer-in-charge or his subordinate shall measure up the said work in the presence of the contractor whose countersignatures of the measurement list will be sufficient

Warrant, and the Engineer-in-charge or his subordinate shall prepare a bill from such list which shall be binding on the contractor in all respects.

Provided that, if any balance of the 10% security is **outstanding from each such payment shall be deducted so much, not exceeding 5% as may be necessary to make up the balance of the security. All such immediate payments to the contractor** shall be regarded as payments by way of advance against the final payment only and not as payments for the work actually done and completed, and shall not preclude the required of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected, or be considered as an admission of the due performance of the contract, or any par

Payment on
intermediate certificate
to be regarded as
advance& Bill to be
submitted.

Deduction of Security
deposits from Contractor's
bills

thereof in any respect, or the actual of any claim nor shall it conducted, determine, of effect in any way the powers of the Engineer-in-charge under these conditions or any of them as to the final settlement or adjustment of the accounts or otherwise or in any other way vary or affect the contract

Clause7 The final bill shall be prepared by the office of the Public Works Department in accordance with in one month of the date fixed for completion of the work.

Preparation of Final Bill deposits from Contractor's bills
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Clause8 If the specification or estimate of the work provides for the use of any specialdescriptionofmaterial to be supplied from the Engineer-in-charge's store, or it is required that the contractor shall use certain stores to be provided by the Engineer-in-charge under the conditions of this contract (such materials and stores, andprices to be charged therefore as here in after mentioned being so far as practicable for the convinces of the contractor, but not so as in any way to control the meaning of effect of this contractor specified in the schedule or memorandum here to annexed), the contractor shall be supplied at the ratesspecified in the said schedule may set off or deducted from any sums then due, or thereafter to be came due to the contractor under the contractor otherwise or against or from the security deposit, or the proceeds of sale thereof, if the same is held in Government securities, the same or a sufficient portion thereof being in this case sold for the purpose. All materials supplied to the contractors hall remain the absolute property of Government and shall not on any account be removed from the site of the work, and shall at all times be open to inspection by the Engineer-in-charge's store, at the prevailing market rate or at the issue rate whichever is less if by a notice in writing under his hand he shall so require, but the contractor shall not be entitled to return any such

Store supplied by the Government

materials, unless with such consent, and shall have no claim for compensation on account of any such materials so supplied to him as aforesaid being unused by him, or for any wastage in or damaged to any such materials.

Clause 8-(a) If a contractor removes any materials or stock so supplied to him from the site of the work in contravention of the provisions of this clause with a view to dispose of the same dishonestly, he shall, in addition to any other liability, civil or criminal, arising out of this contract be liable to pay a penalty equivalent to five times the price of the said materials or stock, according to the stipulated rate. The penalty so imposed shall be recoverable from any sum that may be then or at any time thereafter may become due to the contractor, or from his security deposit, or the proceeds of sale thereof.

Clause 8-(b) Owing to difficulty in obtaining certain materials in the open market the Government have undertaken to supply materials specified in the schedule here to annexed. There may be delay in obtaining materials by the department and the contractor is therefore, required to keep himself in touch with the day today position requiring the supply of materials from the Engineer-in-charge and to so adjust the progress of the work that there may not remaining idle nor may there be any other claim due to or arising from delay in obtaining the materials it should be clearly understood that no monetary claim what so ever shall entertained by the Government on account of delay in supply materials. However extension by the contractor vides also clause-5.

Clause 9 The contractor shall executive the whole and every and part of the work in the most substantial and work men like manner and both as regards materials and otherwise in every respect in strip accordance with the specifications. The contractor shall also conform exactly fully and faithfully to the designs, drawings and instruction in writing relating to the work signed by the Engineer-in-charge and lodged in his office and to which the contractor shall be entitled to have access at such office and to work the contractor shall be entitled to have access at such office for the which the purpose of inspection during office hour and the contractor shall if he so requires be entitle at his own expenses to make or cause to be and instruction as aforesaid.

Work to be executed in accordance with specification drawing and order etc.
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Clause 10

The Engineer-in-charge shall have power to make any alternation on or addition to the original specifications, drawings, designs and instructions that may appear to him necessary and advisable during the progress of work and the contractor shall be bound to carry out the work in accordance with any instruction which may be given to him in writing signed by the Engineer-in-charge a such alternation shall not invalidate the contractor and any addition work which the contractor may be directed to do in the manner above speciation all work as part of the work shall be carried to do in the contractor on the same condition in all respects on which he agreed to the main work. The time for the completion of the work shall be extended in the proportion.

And if the addition work included any class work for which no rate is specified in this contract then such class of work shall be carried out at the rates entered in the sanctioned scheduled of rates of the

locality during the period when the work is being carried on and if such last mentions last mentioned class of work is not entered in the schedule of the date of his receipt of the order to carry out the work seven days of the date of his receipt of the order to carry out the work inform the Engineer-in-charge of the rate which it is his intention to change for such class of work of work and if the Engineer-in-charge does not agree to this rate he shall by notice in writing be at liberty to cancel his order to carry out such class of work and arrange to carry it out in such manner as he may consider advisable.

No deviation from the specification stipulated in the contract not addition items of work shall any altered addition or substitution work be carried out by him unless the rates of the substitution altered or additional item have been approved and fixed in within by the Engineer-in-charge. The contractor shall be bound to submit his claim for any

**Alteration in
specification and
designs do not
invalidate the contract.**

**Extension of time
in consequence of
alterations.**

**Rates of work not in
estimate or schedule of
rate, of the district.**

additional work done during any month on or before the 15 day soft he following month accompanied by a copy of the order in writing of the Engineer-in-charge for the additional work and that the contractor shall not be entitled to any payment in respect of such additional work if he fails to submit his claim with in the aforesaid period.

Provided always that if the contractor shall commence work or c\incur any expenditure in regard thereof the rates shall have been determined as lastly hereinbefore mentioned, in such case he shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of the determination of the rates as aforesaid according to such rate of rates as shall be fixed by the Engineer-in-charge. In the every of a dispute, the decision of the Engineer of the circle will be final.

Clause11

It at any item after the commencement of the work the Government of Orissa shall for any reason whatsoever not required the whole thereof as specified in the tender to be carried out the Engineer-in-charge shall give notice in writing of the fact to the contractor who shall have no claim to any payment or compensation which soever on account of any profit or advantage, which he might have derived from the execution of the work in full but which he did not derive in consequence of the full amount of the work not having been carried out neither shall behave any original Specification drawings, design sand instruction which shall involve any curtailment of the work as originally contemplated.

No compensation for alteration in or restriction of work to be carried out.

Clause12

If it shall appear to the Engineer-in-charge or his subordinate in-charge of the work, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work and unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the contractor shall on demand in writing from the Engineer-in-

Action and compensation payable in case of bad work.

charge specifying the work materials or articles complained of notwithstanding that the same may have been in advertently passed certified and paid for, forthwith rectify or remove and reconstruct the work so specified in whole or in part, as the case may required, or as the case may be remove the materials or articles so specified and provide other proper and suitable materials or articles at his own proper charge and cost, and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day not exceeding ten days, while his failure to do so shall continue and in the case of any such failure the Engineer-in-charge may rectify or remove, and re-executed the work or remove and replace with others, the materials or articles complained of as the case may be at the risk and expense in all respect of the contractor.

Clause13

All work under or in course of execution or executed in pursuance of the contractor shall at all times be open to the inspection or supervision of the Engineer-in-charge and his subordinates and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice or the intention of the Engineer-in-charge or his subordinate to visit the works shall have been given to the contractor wither himself be present to receive orders and instruction have a responsible agent duly accredited in writing present for that purpose orders given to the contractors agent shall be considered to have the same force as if they had been contractor himself.

Contractor or
responsible agents to
be present.

Work to be
open to
inspection.

Clause14

The contractor shall givenotlessthanfiveday's notice in writing to the Engineer-in-charge or his sub ordinate-in-charge of the work before covering up or otherwise placing beyond the reach of

Measurement any work in order that the same may be measured and correct dimensions therefore be taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up or place beyond the reach of measurement, any work without the consent in writing of the Engineer-in-charge or his subordinate –in – charge of the work and if any work shall be covered up or placed beyond the reach or measurement without such notice having been given or consent obtained, the same shall be uncovered at contractor's expense, or in default thereofon payment or allowance shall be made for such work or the materials with which the same was executed.

Notice to be given
before work is
covered up.

Clause15

If the contractor or his work people, or servants shall break, deface injure or destroy any part of abuilding, in which they may be working or any building, road, fence, enclosure, or grass land or

cultivated ground continuous to the premises on which the work or any part of it is a being executed, or if any damaged shall happen to the work, while in progress from any cause whatever or any imperfection become apparent in it within 12months from the date of final certificate of its completion shall have been given by the Engineer-in-charge, as aforesaid, the contractor shall make the same good at his expenses, or in default, the Engineer-in-charge may cause the same to be made good by other workmen, and deduct the expense (of which the certificate of the Engineer-in-charge shall be final) from any sums that may be then, or at anytime thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof and the contractor shall be liable to pay any part of the expenses not so recovered by the Engineer-in-charge.

Contractor liable for
damage done and for
imperfection for
12(Twelve) months
after certificate.

Clause16 The contractor shall supply at his own cost all materials (except such special material, if any, as may in accordance with the contract, be supplied from the Engineer-in-charge's stores), plants, tools, appliances implements, ladders cordage, tackle scaffolding the temporary works requisite or proper of the proper

execution of the work whether original, altered or substituted, and whether included in the specifications or other documents forming part of the contract referred to in these conditions or not or which may be necessary for the purpose of satisfying or complying with the requirement of the Engineer-in-charge as to any matter as to which under these conditions, he is entitled to be satisfied, which he is entitled, to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means & materials necessary for the purpose of setting outworks and counting, weighting and assisting in the measurement or examination at any time & from time to time of the work or materials. Failing his so doing the same may be provided by the Engineer-in-charge at the expense of the contractor and the expenses may be deducted from any money due to the

contractor under the contractor from his security. And is liable for damages arising from non-provision of lights fencing etc. deposit or the proceeds of sale thereof, or of a sufficient portion thereof. The contractor shall also provide all necessary fencing and lights required to protect the public from accident, and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precaution, and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the contractor be paid to compromise any claim by any such person.

Contractor to supply plant, ladders, scaffolding etc.
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Clause17 No female labour shall be employed within the limits of a cantonment. The contractor shall not employ for the purpose of his contract any person who is below the age of twelve years, and shall pay to each labour of the work done by such labour, wages not less than the wages paid for similar work in the neighborhood.

The Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. shall have the right to enquire into the decided any complaint alleging that the wages paid by the contractor to any labour of the work done by such labourer, wages not less than the wages paid for similar work in the neighborhood.

The officer-in-charge of the work shall have the right to decide whether any labourer employed any the contractor is below the age of twelve year and to refuse to allow any labourer whom de decides to be below the age of twelve years, to be employed by the contractor.

Work not
be sublet.

(b)The contractor shall employ one or more Engineer Graduate or Diploma holder as apprentices at his own cost if the work as shown in the tender exceeds Rs.2,50,000/-. The apprentice's will be selected by the Chief Engineer, The period of employment will commence within one month after the date of work order and would last till the date when 90% of the work is completed. The fair wage to be paid to the apprentices should be not less than Rs.2,50,000.00, the emolument of personnel of equivalent qualification employed under Government. The number of apprentices to **be employed should** be fixed by the Chief Engineer in a manner so that the total expenditure does not exceed one percent of the tendered cost of the work.Each bill of the special class or 'A' class contractorshall be accompanied by andemployment tool of the engineering personnel together with a certificate of the GraduateEngineer or Diploma holder so employed by the contractor to the effect that the work executed as per the bill has been supervised by him

Clause18 The contract shall not be assigned or sublet without the written approval of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd.. And if the contractor shall assign or subject

Contract may be rescinded
and security deposit
forfeited for subletting
birdingorifcontractor

his contract, or attempt to do so,
or become in solvent or
commerce any insolvency
proceeding or make any
composition with his
creditor, or attempt to do so, or if
any bribe, gratuity gift, loan,
perquisite reward or advantage
pecuniary or otherwise, shall either
directly be given.

Promised or offered by the contractor, or any of his servant or
agents to any public officer or person in the employ of
Government in any way directly or indirectly interested in the
contract, the Addl. Chief Engineer/Superintending Engineer,
OTDC Ltd. may there upon by notice in writing rescind the
contract and the security deposit of the contractor shall there
upon stand forfeited and be absolutely at the disposal of
Government and the same consequence shall ensue as if the
contract had been rescinded under clause-3 hereof and in
addition the contractor shall not be entitled to recover or to be
paid for any work therefore actually performed under the
contract.

Clause19- All sums payable by way of
compensation under any to the three
conditions shall be considered as
reasonable compensation to be
applied to the use of Government
without reference to the actual loss
or damage sustained, and whether
or not any damage shall have been
sustained.

Sum payable by way of compensation be considered as

Clause20

In the case of tender by partners, any
change in the constitution of the firm shall
be forthwith notified by the
contractor to the Engineer-in-charge
for his information.

Change in constitution of firm

In case of failure to notify the change in the constitution within
fifteen days, the Engineer-in-charge may by notice
in writing rescind the contract and the security deposit of the contractor
shall thereupon stand forfeited and be absolutely at the disposal of Gov
ernment and the same consequence shall ensue as if the contract has
been rescinded under clause –3 hereof, and in addition the
contractor shall not be entitled or recover to be paid for any
works therefore actually performed under the contract.

Clause 21

All work to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer of the circle for the time being who shall be entitled to direct at what point or points and in what manner they are to be commenced and from time to time carried on.

Clause 22 Deleted.**Clause 23**

When the time at which the work is made to include lump sums in respect of parts of the work the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items or if the part of the work in the Engineer-in-charge may by his discretion pay the lump sum amounts entered in the estimate and the certificate in writing of the Engineer-in-charge shall be final and conclusive the provision of this clause.

Lump sums in estimate

Clause 24

In the case of any class of work for which there is no such specification as is mentioned in rule I such work shall be carried out in accordance with the circle specification and in the event if there be no circle specification then in such case the work shall be carried out in all respects in accordance with the instruction and requirements of the Engineer-in-charge.

Action where no specification

Clause 25

The expression "work" or "works" where used in these conditions shall unless there be something either in the subject or context repugnant to such construction be construed and taken to mean the work by or virtue of permanent and whether original altered substitute or additional.

Clause 26

Government shall be entitled to recover in full from the contractor any amount that the Government may be liable to pay under workmen's compensation Act VIII of 1923, to any workman employed

Definition of works

In a course of executive of any part of the work covered by these contractors.

Clause27 Thatforthepurposeofjurisdictionintheeventofdisputeifanythecontract should be deemed to have been entered into within the state of Orissa and it is agree that neither party to the contractor agreement will be competent to bring a suit in requota the matters covered by this contract at place outside the state of Orissa.

Clause28 The department will have the right to inspect the scaffolding and centering made for the work and can reject partly or fully structure of found defective in their opinion.

Clause29 Sanitary arrangement will be made by the contractor at this own cost for his labour camp.

Clause30 The contractor shall bear all taxes including sales tax in come tax royalty fair weather changes and tollage where necessary.

ClauseNo31

(As per Works Department Office Memorandum No 07556900242019- 15847/W Dtd19.11.2019)PROPOSALFORPRICEVARIATIONCLAUSED UETOINCREASEORDECREASEINRATEOFMINIMUMWAGES, PRINCIPAL MATERIALS, POL &OTHER MATERIALSTO BE INCORPORATEDINCONDITIONOF CONTRACT.

Contract price shall be adjusted for increase or decrease in rates and price of Labour, Cement, Steel, Bitumen, Pipes, POL & other material component in accordance with the following principles and procedures as per formula given below

Clause31:- Price Adjustment

Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels andlubricantsinaccordancewiththefollowingprincipalsandproceduresand as per formula given in following Paras.

- (a) The price adjustment shall apply for the work done from the start date given in the contract data up to end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the contractor.
- (b) The price adjustment shall be determined during each month from the formula given in following Paras.
- (c) Followingexpressionsandmeaningsareassignedtotheworkdoneduringeachmont h.

R= Total value to work done during the month. It would include the amount of secured advance granted, if any, during the month, less the amount of secured advance recovered, if any during the month it will exclude value for works executed for extradite ms under variations.

: To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

The formula (e) for adjustment of price shall be:

31(a)(i): Adjustment of Other Materials Component

Price adjustment for increase or decrease in cost of local materials other than cement, steel, bitumen, pipe and POL procured by the contractor shall be paid in accordance with the following formula:

$$VM = 0.85 \times P_m / 100 \times R_x (M_1 - M_0) / M_0$$

VM = Increase or decrease in the cost of work during the month under consideration due to changes in rates for local materials other than cement, steel, bitumen and POL.
M₀ = The all India whole sale price index (all commodities) on 28 days preceding the date of opening of Bids, as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

M₁ = The all India whole sale price index (all commodities) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_m = Percentage of local material component (other than cement, steel, bitumen and POL) of the work.

31(a)(ii): Adjustment for Cement Component

Price adjustment for increase or decrease if the cost of cement procured by the contractor shall be paid in accordance with the following formula.

$$V_c = 0.85 \times P_c / 100 \times R_x (C_1 - C_0) / C_0$$

V_c = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for cement.

C₀ = The all India whole sale price index for Ordinary Portland Cement (OPC) on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

C₁ = The all India whole sale price index for Ordinary Portland Cement (OPC) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_c = Percentage of cement Component of the work.

31(a)(iii): Adjustment for Steel Component

Price adjustment for increase or decrease in the cost of steel procured by the contractor shall be paid in accordance with the following formula.

$$V_s = 0.85 \times P_s / 100 \times R_x (S_1 - S_0) / S_0$$

V_s = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel.

S₀ = The all India whole sale price Index for steel (Mild Steel long products) on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

S₁ = The all India whole sale price Index for steel (Mild Steel long products) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_s = Percentage of steel Component of the work.

Note: For the application of this clause, index of (Mild Steel long products) has been chosen to represent steel group.

31(a)(iv): Adjustment of Bitumen Component

Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula.

$$V_b = 0.85 \times P_b / 100 \times R_x (B_1 - B_0) / B_0$$

V_b = Increase or decrease in the cost of work during the month under consideration due to changes in the rate for bitumen.

B_0 = The official retail price of bulk bitumen at the IOC/BPCL depot at nearest center on the day 28 days prior to date of opening of Bids.

B_1 = The official retail price of bulk bitumen at the IOC/BPCL depot at nearest center on the day 15th day of the month under consideration.

P_b = Percentage of bitumen Component of the work.

31(a)(v): Adjustment towards differential cost of pipes

Price adjustment for increase or decrease in the cost of pipe shall be paid in accordance with the following formula. $V_{pi} = 0.85 \times P_{pi} / 100 \times R_x (P_{11} - P_{10}) / P_{10}$

V_{pi} = Differential cost of pipe i.e. amount of increase or decrease in rupees to be paid or recover ed during the month under consideration.

P_{pi} = Percentage of pipe component of the work.

P_{11} = All India Wholesale price Index of pipe for the period under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_{10} = All India Whole sale price Index of pipe on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

31(b): Adjustment of Labour Component

Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula.

$$V_L = 0.85 \times P_1 / 100 \times R_x (L_1 - L_0) / L_0$$

V_L = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for local labour.

L_0 = The minimum wages for unskilled labour as Notified by Government of Odisha as prevailed on the last stipulated date of receipt of tender including extension, if any.

L_1 = The minimum wages for unskilled labour as Notified by Government of Odisha as prevailed on the last date of the Month previous to the one under consideration.

P_1 = Percentage of labour component to the work.

31(c): Adjustment of POL (fuel and lubricant) Component

(v) Price adjustment for increase or decrease in the cost POL (fuel and lubricant) shall be paid in accordance with the following formula.

$$V_1 = 0.85 \times P_1 / 100 \times R_x (F_1 - F_0) / F_0$$

V_1 = Increase or decrease in the cost of work during the month under consideration due to changes in the rates fuel and lubricants.

F_0 = The official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC/BPCL/HPCL at nearest center on the day 28 days prior to the date of opening of Bids.

F_1 = The official retail price of HSD at the existing consumer pumps of IOC/BPCL/HPCL at nearest center for the 15th day of the month under consideration.

P_1 = Percentage of fuel and lubricants component of the work.

Note: For the application of this clause, the price of High Speed Diesel of has been chosen to represent fuel and lubricants group.

31(d):Adjustment of Plant and Machinery Spares Component

(vi) Price adjustment for increase or decrease in the cost of plant and machineryspares procured by the Contract or shall be paid in accordance with the following formula.

$$V_p = 0.85 \times P_p / 100 \times R_x (P_1 - P_0) / P_0$$

V_p = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for plant fuel and machinery spares.

P_0 = The all India wholesale price Index for manufacture of machinery forming, quarrying and construction on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P_1 = The all India whole sale price Index for manufacture of machinery for mining, quarrying and construction for the month under consideration as published by the Ministry of Commerce and industry, Government of India, New Delhi.

P_p = Percentage of plant and machinery spares component to the work.

Note : For the application of this clause, index of manufacturing of machinery for mining, quarrying and construction has been chosen to represent the Plant and machinery Spares group.

Regarding wholesale price index (WPI) for appropriate commodity for payment of price adjustment, due to change of base year of WPI from 1993-94 to 2004-05 & 2011-12, it is observed that, the commodity "Bars and Rod", "Cement", "Heavy machinery and parts" including the list of WPI 1993-94 series are not mentioned as such in the WPI 2004-05 & 2011-12 series. Therefore, the following items in the WPI 2004-05 & 2011-12 series shall be considered corresponding to items in WPI 1993-94 series.

Sl. No	Item in WPI 1993-94 series	Item in WPI 2004-05 series	Item in WPI 2011-12 series
1	Cement	Grey Cement	Ordinary Portland cement
2	Bars & rods	Rebars	Mild steel long products
3	Heavy Machinery & parts	Construction Machinery	Manufacture of machinery for mining, quarrying & construction

31(e):APPLICATION OF ESCALATION CLAUSE:

The contractor shall for the purpose of availing reimbursement/refund of differential cost of steel, bitumen, cement, pipe, PO Land wages, keep such books of account and the documents as are necessary to show that the amount of increase claimed or reduction available and shall allow inspection of the same by a duly authorized representative of Government and further shall at the request of the Engineer-in-Charge, furnish documents to be verified in such a manner as the Engineer-in-Charge may require any documents and information kept. The contractor shall within a reasonable time of 15 days of his becoming aware of any alteration in the price of such materials, wages of labour and/or price of POL give notice thereof to the

Engineer-in-Charge stating that the same is given pursuant to this condition along with information relating to there to which he may be in opposition to supply.

Percentage Table

Sl.No.	Category of works		%Component(costwise)		
			Labour(P1)	POL(P1)	Steel (Ps)+Cement(Pc)+Bitumen (Pb)+Pipes(Pp1)+Plant & Machinery Spare &Component(Pp)+Other Materials.
	R&B works (% of components)	Road Works	5	5	90
		Bridge works	5	5	90
Building works			5	5	90
Structural work	Irrigation works (%of components)		5	5	90
Earth, Canal Embankment work			5	5	90
Structural work	P.H.Work		5	5	90
Pipeline Work			5	5	Pipe-70% Machinery+Other material-20%
Sewerage Line			5	5	Pipe-70% Machinery+Other material-20%

Note :- Further break up may be worked out considering the consumption of Cement, Steel, Bitumen, Pipe and plant & Machinery Spare Component in the concerned works and shall be provided in the bid document or shape of "Schedule of Adjustment Data" as an "Appendix to Bid".(enclosed herewith)

TECHNICAL SPECIFICATION OF CIVIL PORTION OF WORK

Materials of following specification are to be used in work. The Tenderers are expected to possess and be well conversant with the following IS standard and code of practice.

1.	Cement	Will be as per I.S. 269/255 (However the grade of cement to be selected by the Engineer-in-Charge of work and compressive cube test before commencement of work in each batch).
2.	Steel	I.S. 432 (Plain) and 1786 (Tor)
3.	Vibrator	I.S. 7246
4.	Aggregate	I.S. 383, I.S. 515
5.	Water for mixing and curing	Shall be clean, free from injurious amount of oil, salt, acid, vegetable materials and other substances and harmful to concrete in conformity to I.S. 456 and I.S.

		2025.
6.	Sand/ Aggregate Fine	I.S. 2116, 383
7.	Binding wire	I.S. 280 (galvanized minimum 1 mm)
8.	Rain water pipe	I.S. 2527
9.	Construction joints	I.S. 3414
10.	Steel Window Frame	I.S. 1038/83
11.	Steel Door Frame	I.S. 4351/75
12.	Fitting & Fixtures for joinery works	Conforming to I.S. 7452/82 strictly conform to I.S. specification and as per direction of Engineer-in-Charge.

Note : For road work (Approach Road) specification as per road and bridges (latest edition) published by I.R.C& M.O.S.T. shall be followed. In case of any doubt and absence of provision, regarding specification I.S. shall be referred (Indian standard).

ITEM OF WORK

1. Concrete shall be with conformity to I.S.456.
2. Foundation shall be with conformity to I.S.1080.
3. Stone masonry (R.R.) shall be with conformity to I.S.1597 (Part-I)
4. C.R. Masonry shall be with conformity to I.S.1597.
5. Brick masonry shall be with conformity to I.S.2212.
6. Cement plastering shall be with conformity to I.S.9103 & 6925.
7. Mortar shall be with conformity to I.S.2250
8. White and colour washing shall be with conformity to I.S.6278.
9. CC in foundation shall be with conformity to I.S.2571.
10. Anti-Termite Treatment shall be with conformity to I.S.6813. (Part – I & Part – II)
11. Painting to all surfaces shall be with conformity to I.S.2395 (Part – I & Part – II)
12. DPC shall be with conformity to I.S.3067
13. Tarfelt treatment shall be with conformity to I.S.1346
14. Mosaic flooring with conformity to I.S.2114
15. Steel painting shall be with conformity to I.S.1477 (Part – I & Part – II) I.S.1661

Clause 32- After the work is finished, all surplus materials and debris are to be removed by the contractor and preliminary works such as vats, mixing platforms, etc. are to be dismantled and all materials removed from site. The ground up to 30Mtr. wide from the building should be cleared and dressed as per the specification and direction of the Engineer-in-Charge.

FAIR WAGE CLAUSE

Clause 33 (a)- The contractor shall not employ for the purpose of this Contract any person who is below the age of twelve years and shall pay to each labourer for work done by such labourers fair wages.

Explanation- "Fair Wages", means wages whether for time or piece work prescribed by the State Public works department provided that where higher rates have been

prescribed under the Minimum Wages Act. 1948 wages at such higher rates should constitute fair wages.

The Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. shall have the right to enquire into and decide any complaints alleging that wages paid by the contractors to labourer for work done by such labourer is less than the wages as per the sub-paragraph (1) above.

Clause 33 (b)- The contractor shall notwithstanding the provisions of any contract to contrary, cause to be paid a fair wages to labourers indirectly engaged on the work including any labour engaged by his sub contractors in connection with the said work, as if the labourers had been immediately employed by him.

Clause 33 (c)- In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this agreement, the contractor shall comply with or cause to be complied with all regulations made by Government in regard to payment of wage period deductions from wages, recovery of wages not paid and deductions unauthorisedly made, maintenance of wage register, wage cards, publications of scale of wages and other terms of employment, inspection and submission of periodical return and all other matters of a like nature.

Clause 33 (d)- The Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. or Sub-ordinate Officials concerned shall have the right to deduct, from the money due to the contractor, any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages, which are not justified by their terms of the contract or non-observance of the regulations. Money so deducted should be transferred to the workers concerned.

Clause 33 (e)- Vis-a-vis, the Odisha Tourism Development Corporation Ltd. / Government of Odisha, the contractor shall be primarily liable for all payments to be made under and for the observance of the regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractor.

Clause 33 (f)- The regulations aforesaid shall be deemed to be a part of this contract and any breach thereof shall be breach of this contract.

Odisha P.W.D. Electricity Department Contractor's Labour Regulation.

1. **Short Title** - These regulations may be called "The Odisha Public Works Department / Electricity Department Contractor's Regulations."
2. **Definitions** - In these Regulations, unless otherwise expressed or indicated the following words and expressions shall have the meaning hereby assigned to them respectively that is to say -
 - (1) "Labour" means worked employed by a contractor of the Odisha Public Works Department / Electricity Department directly or indirectly through a sub-contractor or other person or by an agent on his behalf
 - (2) "Fair wages" means wages whether for the time of piece work described by the State Public Works Department / Electricity Department for the area in which the work is done.
 - (3) **"Contractor"** shall include every person whether a sub-contractor or headman or agent employing labour on the work taken on contract.
 - (4) **"Wages"** shall have the same meaning as defined in the Payment of wages Act, and include time and pice rate wages, if any.

3. Display of notices regarding wages, etc. The contractor shall-

(a) Before he commences his work on contract, display and correctly maintain and continue to display, in a clean and legible condition, in conspicuous places on the work, notices in Odia / English and in the local Indian language spoken by the majority of the workers, giving the rate of wage prescribed by the State Public Works Department / Electricity Department for the district where the work is done.

(b) Send a copy of such notices to the Engineer-in-charge of the work.

4. Payment of Wages--

(1) Wages due to every worker shall be paid to him direct.

(2) All wages shall be paid in current coin or currency or in both.

5. Fixation of wage period-

(1) The contractor shall fix the wage period in respect of which the wages be payable.

(2) No wage period shall exceed one month.

(3) Wages of every workman employed on the contract shall be paid before the expiry of the days, after the last day of the wage period in respect of which the wages are payable.

(4) When the employment of any worker is terminated by or on behalf of the contractor, the wages earned by him shall be paid before the expiry of the day succeeding the one on which his employment is terminated.

(5) All payments of wages shall be made on working day.

6. Wage book and wage cards, etc-

(1) The contractor shall maintain a wage book of each worker in such forms as may be convenient, but the same shall include the following particulars-

(a) Rate of daily or monthly wages.

(b) Nature of work on which employed.

(c) Total number of days work during each wage period.

(d) Total amount payable for the work during each wage period.

(e) All deductions made from the wages with an indication in each case of the ground for which the deduction is made.

(f) Wages actually paid for each wage period.

(1) The contractor shall also maintain a wage card for each worker employed on the work.

(2) The Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. may grant an exemption from the maintenance of wage bond, wage cards to a contractor who, in his opinion may not directly or indirectly employ more than 10 persons on the work.

7. Fines deduction which may be made from wages-

(1) The wages of a worker shall be paid to him without any deduction of any kind except the following-

(a) Fines

(b) Deductions for absence from duty, i.e., from the place or places where by the terms of his employment he is required to work. The amount of deductions shall be in proportion to the period for which he was absent.

(c) Deductions for damage to or loss of good expressly entrusted to the employed person for custody or for loss of money for which he is required to account where such damage or loss is directly attributable to his neglect or default.

(d) Any other deductions which the Odisha Tourism Development Corporation Ltd. /

Odisha Government may from time to time allow.

(2) No fines shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the workers has been given an opportunity or showing cause against such fines or deduction.

(3) The total amount of fines which may be imposed in any one wage period on a work shall not exceed an amount equal to five paise in rupees of the wages payable to him in respect of that wage period.

(4) No fine imposed on any worker shall be recovered from him by installments, or after the expiry of 60 days from the date on which it was imposed.

8. Register of fines, etc.-

(1) The contractor shall maintain a register of fines and of all deductions for damage or loss. Such Register shall mention the reason for which fine was imposed or deduction for damage or loss was made.

(2) The contractor shall maintain a list in Odia / English and in the local Indian language, clearly defining acts and omissions for which penalty or fine can be imposed. It shall display such list and maintain it in a clean and legible condition in conspicuous places in the work.

9. Preservation of Register-

The wage register, the wage cards and the register of fines, deduction required to be maintained under these regulations shall be preserved for 12 months after date of the last entry made in them.

10. Power of Labour Welfare Officer to make investigation or enquiry

The Labour Welfare Officer or any other persons authorised by the Government of Odisha on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observance of the fair wage clauses and the provision of these regulations. He shall investigate into any complaint regarding default made by the contractor, sub-contractor in regard to such provisions.

11. Report of Labour Welfare Officers-

The Labour Welfare Officers or others authorized officials as aforesaid shall submit a report of the results of his investigation or enquiry to the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. concerned, indicating the extent, if any, to which the default has been committed with a note that necessary deduction from the contractor's bill be made and the wages and other dues be paid to the labourers concerned.

12. Appeal against the decision of Labour Welfare Officers-

Any persons aggrieved by the decision and recommendation of the Labour Welfare Officer or other person so authorised may appeal against such decisions to the Labour Commissioner within 30 days from the date of decision forwarding simultaneously a copy of his appeal to the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. concerned but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.

13. Inspection of registers-

The contractor shall allow inspection of the wage book and wage cards to any of his workers or to his agent at a convenient time and place after due notice is received, or to the Labour Commissioner or any other person authorized by the Government of Odisha on his behalf.

14. Submission of return-

The contractor shall submit periodical returns as may be specified from time to time.

15. Amendments-

The Government of Odisha may from time to time, add to or amend these regulations and on any question as to the application, interpretation of effect of the regulations, the decision of the Labour Commissioner or any other person authorised by the Government of Odisha in that behalf shall be final.

Clause 34: The terms and conditions of the agreement have been read / explained to meand.....certify.....clearly understood them.

Clause 35: The Contractor should possess full-fledged field laboratory for testing of the quality of the work with the following provisions:

- (1) Engineering personnel of the executing agency should be present at work site at the time of visit of high level Inspecting Officers in the rank of Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. and above.
- (2) After completion of the work proper in all respects, required signages should be affixed by the executing agency at desired locations.

ADDENDUM TO THE CONDITION OF P₁ CONTRACT

Clause-2 (a) of P₁Contract:- TIME CONTROL

2.1 Progress of work and Re-scheduling programme.

- 2.1.1. Before acceptance of the tender, the successful bidder will be required to submit a work programme and milestone basing on the financial achievement so as to complete the work within the stipulated time and in case of failure on the part of the agency to achieve the milestone liquidated damages will be imposed.
- 2.1.2. The Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. / Engineer- in-Charge shall issue the letter of acceptance to the successful contractor. The issue of the letter of acceptance shall be treated as closure of the bid process and commencement of the contract.
- 2.1.3. To ensure good progress during the execution of the work the contractors shall be bound in all cases in which the time allowed for any work exceeds one month to complete, 1/4th of the whole time allowed under the contract has elapsed, 1/2 of the whole of the work before 1/2 of the whole time allowed under the contract has elapsed, 3/4th of the whole of the work before 3/4th of the whole time allowed under the contract has elapsed.
- 2.1.4. If at any time it should appear to the Engineer-in-Charge that the actual process of the work does not conform to the programme to which consent has been given the Contractor shall produce, at the request of the Engineer-in-Charge, a revised programme showing the modifications to such programme necessary to ensure completion of the works within the time for completion. If the contractor does not submit an updated Programme within this period, the Engineer-in-Charge may withhold the amount of 1% of the contract value from the next payment certificate and continue to withhold this amount until the next payment after the date on which the over due Programme has been submitted.
- 2.1.5. An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on

the timing of the remaining work including any changes to the sequence of the activities.

- 2.1.6. The Engineer-in-Charge's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer-in-Charge again at any time. A revised Programme is to show the effect of Variations and Compensation Events.

2.2. Extension of the Completion Date.

- 2.2.1. The time allowed for execution of the works as specified in the Contract data shall be the essence of the Contract. The execution of the works shall commence from the 15th day or such time period as mentioned in letter of Award after the date on which the Engineer-in-Charge issues written orders to commence the work or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Odisha Tourism Development Corporation Ltd. / Government of Odisha shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money & performance guarantee / Security deposit absolutely.

- 2.2.2. As soon as possible after the Contract is concluded the Contractor shall submit the Time & Progress Chart for each milestone and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per milestone given in contract data.

- 2.2.3. In case of delay occurred due to any of the reasons mentioned below, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

- i) Force majeure, or
- ii) Abnormally bad weather, or
- iii) Serious loss or damage by fire, or
- iv) Civil commotion, local commotion of workmen, strike or lockout affecting any of the trades employed on the work, or.
- v) Delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract.
- vi) In case a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost, or
- vii) Any other cause, which, in the absolute discretion of the authority mentioned, in Contract data is beyond the Contractors control.

- 2.2.4. Request for reschedule and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- 2.2.5. In any such case a fair and reasonable extension of time for completion of work may be given. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. Non-application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the contractor.

2.3. Compensation for Delay.

- 2.3.1. If the contractor fails to maintain the required progress in terms of Clause-2 of P₁Contract or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Odisha Tourism Development Corporation Ltd. / Government of Odisha on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day / month (as applicable) that the progress remains below that specified in Clause 2 of P₁Contract or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified. Compensation @ 1.5% per month for delay of work, delay to be completed on per day basis. Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the Tendered Value of work.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Odisha Tourism Development Corporation Ltd. / Government of Odisha. In case, the contractor does not achieve a particular milestone mentioned in contract data, (which is in this case the original work programme furnished by the Contractor and approved by the Engineer-in-Charge which formed a part of agreement) or the rescheduled milestone(s) in terms of Clause 2.5 of P₁Contract, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of extension of time. Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest whatsoever shall be payable on such withheld amount.

2.4. Bonus for early completion

- 2.4.1. In case, the contractor completes the work ahead of scheduled completion time, a bonus @ 1% (one percent) of the tendered value / Agreement cost / actual value of work executed whichever is less per month computed on per day basis, shall be payable to the contractor, subject to a maximum limit of 2% (two percent). The amount of bonus, if payable shall be paid along with final bill after completion of work.

2.5. Management Meetings.

- 2.5.1. Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 2.5.2. The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

Clause-2 (b) of Percentage Rate P₁ Agreement: - Rescission of Contract

- 5 *To rescind the contract (of which rescission notice in writing to the contractor under the hand of the Addl. Chief Engineer/ Superintending Engineer, OTDC Ltd. shall be conclusive evidence), 20% of the value of left over work will be realised from the contractor as penalty.*

ADDITIONAL CLAUSE TO BE INCLUDED IN THE FAIRWAGE CLAUSES INTRODUCED IN G.O.NO.4A-VII-R18/52-25DT.26.12.55

- 6 Clause (G) Under the provision of the Minimum Wages Act 1948 & the Minimum Wages (Central) Rules 1950 the contractor is bound to allow or cause to be allowed to labourers directly or indirectly employed in the works on day rest or six days continuous work & pay wages at the same rates as for duty. In the even of default Addl. Chief Engineer/ Superintending Engineer, OTDC Ltd. of Asst. Engineer concerned shall have the right to deduct the sum or sums not paid on account of wages for weekly holiday to any labourers & pay the same to the persons entitled there to from any payment due to the contractor.
- Clause (H) The Contractor shall at his own expenses provide or arrange for the provisions of foot wear for any labourers doing cement mixing work & black topping or roads (The contractor has undertaken to execute under this contract to the satisfaction of the Engineer-in-Charge & on his failure to do so, Govt. shall be entitled to provide the same & recover the cost from the contractor.

Clause (I) The contractor shall submit by the 4th & 19th of every month to the Engineer-in-Charge a true statement showing in respect of the second half of the preceding month & the first half of the current month respectively (1) the number of labourers employed by him on the work (2) their working hours (3) the wages paid to them (4) accidents that occurred during the said fortnight showing the circumstance under which they happened & the extent of damage & injury caused by them & (5) the numbers of female workers who have been allowed maternity benefit according to clause (K) & the amount paid to them

failing which the contractor shall be liable to pay to Govt. a sum but exceeding Rs.50/- only per each default of materially incorrect statement. The decision of the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. shall be final in deducting from any bill due to the contractor the amount levied as fine.

Clause(J) In respect of all labour directly or indirectly employed in the works for the performance of contractor's part of this agreement, the contractor shall comply with or cause to be complied with all the rules framed by Govt. from time to time for the protection of health & sanitary arrangements for workers employed by the Orissa Public Workers Deptt. & its contractors. This will apply to work place having 50 or more workers.

Clause(K) Maternity Benefit Rules for female workers employed by contractor. Leave & pay during leave shall be regulated as follows:-

Leave (i) In case of delivery:- Maternity leave up to 8 weeks, 4 weeks up to & including the day of delivery & 4 weeks following that day.

SPECIAL CONDITIONS

1. Any increase or decrease over or below the Schedule of Quantities appended to the tender during the execution be carefully watched to determine the financial implication in accordance to the codal provisions. No extra items, extra quantities beyond the agreement quantities should be allowed without prior permission from competent authority.
2. The contractor is to bear required sales taxes, octroi taxes, all other taxes and royalties, etc. at his own cost. Royalty will be reimbursed on production of valid money receipt by the contractor.
3. The contractor pays the minimum wages fixed by Government from time to time to the labourers engaged by him in the work.
4. The work should be executed as per approved drawings and designs. Necessary confirmatory soil tests / field tests etc. are to be conducted by the contractor at his own cost at site to ensure the structural adequacy.
5. In case, where quoted rates are too low, strict supervision is necessary and the Assistant Engineer should also make frequent inspection of the work to ensure the execution of the same as per the required specification in accordance with the instructions.
6. The sample of materials used for the work should be got approved from the competent authority before execution of work. Number of tests as specified in I.R.C. / MORT&H / B.I.S. specification required for the construction of roads / bridges / buildings or any other structural works will be conducted as per required frequency in any Govt. Test House / Departmental laboratories / Reputed or Govt. approved material testing laboratory as to be decided by the Engineer-in-charge. Testing charges including expenditure for collection / transportation of samples / specimens etc. will be borne by the contractor. The collection of samples and testing are to be conducted for both prior to execution and during the course of execution as may be directed by the Engineer-in-charge and on both the accounts, the cost shall be borne by the contractor.

Besides, the Firm / Contractor shall install full fledged field laboratory at work site for conducting required tests as per I.R.C. / MORT&H / B.I.S. requirement at his own cost for providing opportunity for checking quality from time to time.

7. From time to time the contractor shall submit to the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd.-in-Charge for his approval the programme showing the order of procedure & method in which he proposes to carry out the work & whenever required by the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd.-in-Charge or his representative furnish for the information. Particulars in writing of the contractor's arrangements for the carrying out of the work & of the constructional plant & temporary work which the contractor intends to supply, use or construct as the case may be. The submission to the approval by the Engineer-in-Charge of such programme of furnishing of such particulars shall not relieve the contractor of any of his duties or responsibility under the contract.
8. The contractor shall be responsible for the true & proper setting out of the work & for the correctness of the position, levels, dimensions & alignment of all part of the work & for the provision of all necessary instruments, appliances & labour in connection there with. If any time during the progress of the works, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the works the contractor on being required to do so by the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd.-in-Charge or his representative shall at his own expenses rectify such error to the satisfaction of concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd.-in-Charge. The checking of any setting out or of any line or level by the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. of his representative shall not in any way relieve the contractor of his responsibility for the correctness there of & the contractor shall carefully protect & preserve all bench marks, pegs & other things used in setting out of the works.
9. The contractor shall abide by "Fair wages" clause in accordance with the Govt. of Orissa, Works & Transport Deptt. Lr.No.A-VIIR-18/52/25 dt.26.2.1955 & No.IIM-56/52-28845 (A) dt.27.9.1961 & workmen Compensation Act. 1923 & other laws as may be introduce by the Govt. from time to time.
10. The contractor shall at his own expenses provide & maintain all the constructional plant, temporary works, materials both for temporary & for the permanent works, labour transport to or from the site & in & around the works & other things of every kind required for the construction, completion & maintenance of the works.
11. The contractor shall have to submit to the Engineer-in-Charge fortnightly return of labour both skilled & unskilled as employed by him on the work in the proforma to be prescribed by the OTDC authority.
12. The contractor shall on the written order of the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. suspend the progress of the work or any part there of for such time or times & in such manner as the Engineer-in-Charge may consider necessary & shall during such suspension, properly protect & secure the work as far as in necessary in the opinion of the Engineer-in-Charge. No claim in this regard will be entertained.
13. The concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. shall make any variation of the form quality or quantity of the works or any part

thereof that may in his opinion be necessary & for that purpose or of for any other reasons it shall in his opinion be desirable. If due to such alterations or additions any item or items of works are to be executed which are not specially covered by the contract then the same may be taken up departmentally through job work agreements with the same contractor or separate piece workers or through Muster Rolls at the prevailing schedule of rate at or rates approved by the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., Bhubaneswar.

When the extra or additional items are executed through the same contractor he shall give in writing his willingness to accept the prevailing schedule of rates or the rates approved by the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., Bhubaneswar, prior to taking up the work.

14. It shall be presumed that the tenderer has satisfied himself as to the nature & location of works, sub soil strata & local conditions particularly those bearing on transports availability, storage & handling of material, weather conditions, monsoons conditions, currents in the river & availability of sweet water etc. & has estimated his cost accordingly. Deptt. will bear no responsibility for the lack of acquaintance of those conditions on the part of the tenderer. The consequences of the lack of such knowledge will be at the risk & cost of the tenderer.
15. If in the opinion of the Engineer-in-Charge, any of the work had been executed with improper materials of defective workshop the contractor, when required by the Engineer forth-with is to re-execute the same & to substitute proper materials & workmanship & in case of default of the contractor in so doing within a week the Engineer is to have the full power to employ other persons to re-execute the work & the cost thereof shall be borne by the contractor.
16. The contractor is not to vary or deviate from the approved drawing of specification or executive any extra work of any kind what-so-ever unless upon the authority of the Engineer-in-Charge to be sufficiently shown by a order in writing or a drawing expressly given & signed by him as an extra or variation, or by any subsequent written approval signed by him.
17. Any authority by the Engineer-in-Charge for any alterations or addition in or to the work is not to vitiate the contract but additions, omissions, alterations or substitutions made in carrying out the work are to be measured & valued & certified by the Engineer & added to or deducted from the amount of the contract as the case may be at approved rates of the particular item of work. In those cases in which such rates do not exist the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. will fix the rates to be paid. In case of any dispute the matter may be referred to the Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. whose decision shall be final & binding.
18. A certificate of the Engineer or an award of the refer herein after referred to as the case may be showing final balance due to payable to the contractor is to be conclusive evidence of the work having been duly completed & that the contractor is entitled to receive payment of the final balance but without prejudice to the liability of the contractor under the provision of clause.
19. **USE OF SITE**

- (1) The contractor shall at his own expenses make all necessary arrangements of lands & their reclamation if any where necessary for stores, field office having sweet water supply & similarly arrangements required for his materials & his employees etc. & shall pay direct all charges & taxes the authorities & owner concerned.
- (2) The contractor shall have to abide by the regulation of the authorities concerned as well as the direction of the Engineer of the use of the site of work & should refrain from causing undue obstruction for the normal traffic in the river.

20. PROGRESS SCHEDULE

The contractor shall furnish within 15(Fifteen) days from the date of order to start the work, a progress schedule in quadruplicate indicating date of start, the monthly progress expected to be achieved & the anticipated completion of date of each major item of work to be done by him, also indicating procurement & setting up materials plant & machinery for the completion of the whole work in the time limit & of the particular items, if any in the due date specified in the contract & shall have the approval of the Engineer-in- Charge. Further the date for the progress in this schedule shall be kept up. In case it is subsequently found necessary to alter the schedule, the contractor shall submit in good time a revised one incorporating necessary modification proposed and get the same approved by the Engineer-in-Charge. No revised schedule shall be operative without such acceptance by writing. The Engineer-in-Charge is further empowered to ask for more detailed schedule week by week for any item or items & the contractor shall supply the same as & when asked for.

- a. The work should be restricted to the available funds.
- b. The Addl. Chief Engineer/Superintending Engineer, OTDC Ltd. while inspecting the work should invariably record their observations in the 'Site Order Book' maintained at the site of work for which the tender has been accepted by him. He shall make final inspection of such works after completion thereof but before the payment of the final bills.
- c. It shall be the responsibility of the contractor to produce all materials required for the work including procurement of steel, cement and bitumen etc. (to be approved by the Engineer-in-Charge) from the market at his own cost and complete the work within the stipulated time of completion as per accepted agreement. At no stage, difficulty or obstacle for procurement of materials due to any reasons whatsoever shall not be entertained by the Odisha Tourism Development Corporation Ltd. nor any plea for extension of time or compensation / claim to this effect shall be entertained on account of the above. All incidental expenses like transport, storage, handling and any other expenditure in respect of for any procurement of materials shall be borne by the contractor.

21. *All reinforcement steel and structural steel (Grade of steel as mentioned in the*

***GAD)shallbeprocuredfromprimaryproducersofsteelSAIL/RINL/TATA/JIND
ALSTEEL/SHYAMSTEEL***

- 22. The cement of the companies having their own manufacturing units in the State of Odisha is to be used in all works.**

23. Additional performance security

- a. Incentive should be paid only in respect of individual project for new construction / substantial addition or improvement works (Building work / P.H. work), the minimum value of which is Rs. 40.00 Lakhs with approval of next higher authority of tender accepting authority on completion of original work before original time schedule.
 - b. Odisha Tourism Development Corporation Ltd. shall not supply any materials what-so-ever for the work. The contractor should be financially stable for advanced procurement of all materials to be required for the work.
- 24. Thetermandconditionsoftheagreementhavebeenread/explainedtomeandcertifyt hatclearlyunderstandthem.**

TECHNICAL SPECIFICATIONS OF P.H. PORTION OF WORK

A) WATER SUPPLY & SANITARY INSTALLATIONS:

Materials of following standard manufacturers are to be used in the work. The contractor shall indicate, in the offer, the brand or make of the materials, for which the rates are quoted.

(a) Sanitary fixtures:

To be of best quality vitreous ware of porcelain.

- (i) Indian water closet
- (ii) Foot Rests
- (iii) Wash Hand Basin
- (iv) Kitchen Sink/Hindware/Parry Ware / Neycer/ ISI marked
- (v) Urinals
- (vi) Drain Board
- (vii) Odisha Closet
- (viii) European Water Closet & Low Level Flushing Cistern.

(b) C.I. High Level Flushing Cisterns : Sushila Industries Prabhat Iron Foundry/ East India Steel / I.S.I. marked. "

(c) H.C.I. Soil Waste Pipes: Confirming to I.S.I. 1729-1954, having I.S.I. Mark.

(d) C.P. Bath Room Fittings: Plaza/Jaquar I.S.I. marked & confirming to-latest ISS

(e) Brass Fittings : Shakti/Anupama /Luster/1.S.I. Marked.

(f) Gunmetal Valves : Anupama / Leader / B.S.I.S.I. marked.

(g) G.I. Pipes (Medium Class): Manufactured by TATA / JINDAL / B.ST. having I.S.I. Mark.

(h) Galvanised Iron fittings : I.S.I. marked C/R brand.

(i) Paints: Asian / Berger / Jonson/Confirming to I.S.S

(j) Cast Iron Manhole cover frame: Sushila Industries / Prabhat Iron Foundry / East India Steel make confirming to ISS 7.26

(k) Stone Ware Pipes & Fittings : Manufactured by Odisha Ceramic Industries / Odisha industries / Keshab Ceramic confirming to I.S.S. Specification No.651 / 1980 {Grade A}

(l) P.V.C. (S.W.R.) & P.V.C (Rigid.) Pipe/Fittings: Manufactured by the Supreme Industries Ltd., Bombay / Oriplast, Balasore/Duroplast confirming to I.S. Specification No. 4985/81 (Class IV)

(B) BUILDING MATERIALS:

(a) Bricks:

Bricks shall be of locally available best quality kiln burnt. Bricks shall be well burnt, uniform deep red, cherry or copper colored, free from cracks and flaws, well-shaped, uniform in size, homogeneous in textures and shall emit a clear metallic sound when struck, bricks shall have a minimum crushing strength 75 Kg/Cm² and shall not absorb water more than 20% by weight.

(b) Cement Mortar:

Mortar shall be well mixed to a uniform colour and consisting in the proportion as specified in the items of work. Sand shall be measured on the basis of its dry volume and the quantity shall be adjusted for bulking of damp sand. Cement shall be mixed, taking 50 kg. or 0.035 Cum. in volume only required quantity that can be consumed within 30 minutes of adding water shall be mixed at one time.

(c) Cement:

Cement should confirm to IS-269/IS-455.

(d) Sand:

Locally available best river sand medium size.

(e) Coarse Aggregates:

The coarse aggregate shall be of hard granite stone and shall generally conform to I.S. 389. Porous coarse aggregate shall not be used. The aggregate shall be free from clay films and other adherent coatings. Aggregate containing clay films over the stone materials shall be thoroughly washed. The aggregate shall be from approved quarry and crusher broken. Coarse aggregates shall be composed of particles ranging between the sizes 2.36 to the maximum size as may be specified in the relevant item of work, within the range, the aggregates shall be well graded so as to produce a dense concrete.

(f) Reinforcements:

Mild steel Round Bars, coiled twisted and deformed bars of steel of medium tensile strength will be used as reinforcement as per drawing and design and directions. Mild steel bars shall conform to I.S.:226/1962 standard quality or IS:432/1966 - Grade-I. Black annealed wire (Not thinner than 24 gauge for tying the reinforcements shall be used).

TECHNICAL SPECIFICATION FOR SANITARY & PLUMBING WORKS**(A) Sanitary ware & allied fittings :****1. General:**

All Sanitary fixtures and their allied fittings, should be of first quality, manufactured by Hindustan Sanitary Ware / Parryware / Nycer, These should be approved by the Engineer-in-charge of the G.P.H. Wing before use.

2. Squatting Pattern W.C. (pan) (Odisha Pattern Closets):

The water closet shall be of vitreous China of specified size and pattern, with an integral flushing rim. It shall have the flushing inlet at the back. The Odisha closet should be of approved quality confirming to I.S.S.-2656 (Part-III).

The squatting type Indian Water Closet (Odisha Closet) shall be sunk in floor sloped towards the pan in a workmanship like manner. The closet shall be fixed on a proper cement concrete base of 1:3:6 proportion, taking care that the cushion is uniform and even, without closet, to receive the specified thickness of the floor finishing. The joint between the Closet and the P.V.C. (S.W.R) trap shall be made with W.C. ring and rubber lubricant and shall be leak proof.

3. Flushing Cistern :

The flushing of the Indian water closet (Odisha Closet) shall be done by C.I. or Polyethylene High Level low-level porcelain valve-less syphonic flushing cistern of approved brand and quality I.S.I. Marked and capacity as specified. The connection between the cistern and water closet shall be made by 32 dia O.I. flush pipe, made from G.I. Pipe (Light Quality) or 32 dia P.V.C. Pipe as specified in the tender schedule. The flush pipe with an offset should be fixed to wall by using C.I. Holder Bat Clamps. The capacity of the cistern should be 10 Ltrs. as per I.S.S. 15 Ltrs. In case of low-level cisterns. The Cistern shall be fixed on cast Iron or Rolled Steel Cantilever Brackets (Bulltin type), which shall be firmly embedded in the wall, with C.C. 1:2:4. The Cistern shall be provided with 20mm dia P.V.C. Overflow Pipe with fittings, which shall terminate into mosquito proof coupling secured in a manner that will permit it to be readily cleaned or renewed.

The 32mm dia Flush Pipe shall be connected to the Water Closet by means of approved type joint. The Flush Pipe shall be fixed to wall by using C.I. Holder Bat Clamps. The bend and the Offset as required in the Flush pipe shall be made cold. The inside of the Cistern shall be painted with two coats of approved black bitumen paint. The Outer face of the Cistern, Brackets Overflow pipe and Flush Pipe etc., shall be painted with two coats of any synthetic

enamel paint of approved shade and make, over a coat of priming. The cost of the rate quoted for the flushing cistern. The inlet connection to the Cistern shall be made with 450 mm 1 cmg 15 mm dia. P.V.C. Heavy type connection Pipe.

4. Wash Hand Basin:

The Wash Hand Basin shall be of the White Vitreous China of approved quality, make and brand I.S.I, marked. It shall be one-piece construction with an integral combined overflow. The size of the basin shall be as specified. Each basin shall be provided with one 15 mm dia. C.R Brass Pillar Tap, 32mm dia. C.R Waste, C.R. Chain and Rubber Plug, Unions, Joints, C.P Bottletrap cast complete in all respects of approved quality.

The Basin shall be supported on a pair of R.S. or C.I. Cantilever brackets (built in type) embedded and fixed in wall with cement concrete, 1:2:4. These brackets shall be painted to the required shade with two coats of approved synthetic enamel paint over a coat of priming.

The waste of the Basin shall discharge into a floor trap or Channel through bottle traps as specified. One 32mm dia. C.P. Bottle Trap is to be fixed to the Waste of the Basin & the outlet of the bottle trap is to be connected to the waste pipe to discharge the waste to the Pipe, to discharge the waste to the aforesaid floor trap. The inlet connection to the Basin shall be made with 450mm Long 15mm dia. Heavy type P.V.C. connection pipe.

5. Kitchen Sink:

Unless otherwise mentioned the Kitchen Sink and drain board (if used) shall be of white Vitreous China or fire clay as specified and approved quality, make a brand, confirming to T.S.S, It shall be of one piece construction with integral combined overflow. The size of the sink and Drain Board shall be as specified.

Each Sink shall be provided with one 15mm dia. C.P. brass, Bib Cock, long body, 40mm C.P. Waste with overflow C.P. Chain & Rubber Plug, unions etc., complete in all respects as specified and of approved quality.

The sink shall be supported on a pair of M.S. or C.I. Cantilever Brackets (Built in type) embedded or fixed in position in the wall by Cement Concrete 1:2:4. The brackets shall be painted to required shade with two coats of approved synthetic enamel paint over a coat of priming. The waste should discharge into a floor Trap or Channel. The waste pipe should be 40mm dia. P.V.C. Pipe jointed to the waste of the Sink with a Brass union nut.

6. Standing Urinals :

The Urinals shall be flat pattern lipped front basin of required dimension of White Vitreous China and one piece construction with internal flushing box rim of an approved make and brand as specified. It shall be fixed in the position by*using wooden plug embedded in the wall with screws of proper size. Each Urinal shall be connected to a 40mm dia. RV.C. Waste Pipe, which shall discharge into a channel of floor trap. The lip of Urinals shall be kept at 525mm from floor level, while fixing the Urinal on wall.

Where number of Urinals are fixed in a line, the distance between the centre to centre of each Urinal shall be kept 750mm. and each Urinal should be separated from one to other by a partition plate. The centre to centre of partition plates shall be kept 750mm apart. The partition plate shall be of one-piece 25mm thick marble plates, cut to size and front corners rounded. The partition plates shall be embedded in wall with cement concrete and finished smooth. The bottom of the partition plate should be kept 350mm above floor level and top should be kept at 1250mm above floor level. The plates should project 600mm from wall surface. The width of the plates to be embedded inside the wall should not be less than 100mm. The thickness of the plates shall be minimum 25mm.

For flushing the Urinals each Urinals shall be connected with one 20mm dia. G.I. Pipe (Medium Class), One of this pipe shall be inserted into the inlet of the Urinal and jointed with Jute and putty where as the other end is connected either with a Tee or Bend with the 25mm

dia. size Water Pipe Line fixed on the wall horizontal above the Urinals. In each 20mm dia. flush pipe one 20mm dia. cum-metal Gate valve, the water will flow to thermal of Urinal through the inlet pipe and flush the Urinal. After flush, the valve can be closed to avoid wastage of water. One 40mm dia. P.V.C. Waste Pipe shall be connected to the waste of each Urinal, to discharge the Waste into the Channel of Trap. One end of this Waste pipe shall be made a cup size to fit into the projected waste and tightened with screws.

7. Squatting Urinal Plates:

The Urinal Plates shall be of White Glazed Vitreous China with integral flushing rim of size 450 X 350mm of approved make and brand as specified. There shall be white vitreous channel with stop and outlet pieces in front. These plates shall be fixed on C.C. at 75mm to 100mm above floor level.

For flushing arrangement, one 25mm dia G.I. Common Water Pipeline (minimum size) shall be fixed on the wall parallel to floor. For each urinal one 20mm dia G.I. Branch Pipe shall be taken down up to 1200mm from floor level just at the centre of each plate, in which one 20mm dia Gate Valves is fixed at 350mm above floor level. At 1200mm height, the 20mm dia flush pipe shall be divided into two branches shall be taken downward and connected to the inlets of the urinals plate at floor level. By operating the valve as above, the water will rush into the rims of the urinal plate and flush it.

Where there are number of urinals fixed in a line, each urinal should be separated by a partition plate fixed in the centre of two urinal plates. The centre-to-centre distance of the partition plates shall be kept 750mm.

The partition plates shall be of one-piece marble plate, 25mm thick, cut to sizes and front corners rounded. The plates are to be embedded in wall with cement concrete and finished smooth. The bottom of the partition plates shall be kept flushed to urinal top level and the top level of partition plate shall be kept at 1200mm from the urinal plate top and the projection from the wall shall be 600mm. The width of the plate to be embedded inside the wall should not be less than 100mm.

(B) Soil and waste pipes and fittings

1. H.C.I. Pipe Fittings

The Cast iron Soil, Waste and design pipes (spigot & socket joints) shall be of make and brand as specified (under specification of materials), confirming to I.S.S. 3989-1970 and ISI marked with approved clamps are to be used. The pipes and fittings shall be free from cracks, laps, pinholes, and other imperfection and carefully cited. The access door fittings shall be designed and made so as to avoid dead space in which filth may accumulate and door shall be provided with 3mm thick rubber insertion packing when closed and bolted.

WEIGHT OF HCI PIPES

2. Dia of Pipe in mm	Thickness in mm	Length of pipe & width piece	1.8mtr. D/s	1.8mtr.
50 mm	5mm	16.00kg.		15.00 kg.
75 mm	5mm.	13.83kg.		16.52kg.
100 mm	8mm	24.00kg.		22.00kg.
150mm	8mm	26.70 kg.		31.82kg.

Tolerance 10%

- The jointing should be done with pig lead confirming to I.S. 782-1966 - grade 99.94. The spigot and of Pipes and Fittings should enter into the socket end. The annular space shall be packed with spun yarn gasket, compacted so as to leave a depth for receiving required quantity of lead in a continuous pouring from ladder. After pouring lead in the joints in full, caulking is to be done three times round with the caulking chisels, so that the joints may be sealed with lead. The depth of lead in a point should be 35mm and the rest depth of the joint should be packed with spun yarn Gasket.

4. Requirement of lead and Gasket cement for jointing H.C.I. Pipes (Each Joint)
- | Dia of pipe in mm. | Lead in kg. | Gasket in kg. | Cement kg. |
|--------------------------------|-------------|---------------|------------|
| (same for lead & cement joint) | | | |
| 100 | 1.2kg. | 0.13kg. | 0.12kg. |
| 50 | 0.36 kg. | 0.06 kg. | 0.06 kg. |

5. The inside of the pipes and fittings shall be well coated with special tar or bitumen solution of approved quality. Where the pipe and fittings are laid below the ground, the outer surface of the pipes and fittings shall also to be painted with two coats of black anticorrosive paint of approved quality. On completion of the work, the exposed pipes and fittings are to be painted with two coats of synthetic enamel paint of approved colour & quality over a coat of red oxide primer. The cost of paint should include in the rates.

6. Soil pipes for ventilation is to be connected to the sewer at its floor and without a trap and be carried to such a height, at least above roof level, to prevent damage to health by commission of foul air. The pipe shall terminate as open and protected by a cowl.
7. The waste water pipe shall be connected with the nearest yard gully or a surface drain.
8. The traps should be of hard cast iron and should have a water seal at least 50mm deep.
9. All the soil and waste pipes and fittings, after laid and fixed shall be smoke tested, to the entire satisfaction of the Engineer-in-charge. The Cost of testing is to be included in the offer. For smoke-test the materials usually burnt greases cotton waste, which gives out a clear pungent smoke, which is easily detected by sight and smell. Smoke shall be pumped to the drains from the lower end from a smoke machine, which consists of lower, and burner.

a) P.V.C (S.W.R.) & P.V.C. (Rigid) Pipes & Fittings

9.01. The P.V.C. (S.W.R.) and P.V.C. (Rigid), soil Waste & Vent Pipes (Spigot & Socket, & couples joints), shall be of make & brand as specified (Under Specification of materials) confirming to I.S.S., B.S.S. & DIN are tube used.

The main specification of P.V.C. Soil & Waste pipes and fitting are as below.

- a) Materials – Un-plasticized Poly Vinyl-Chloride (UPVC).
- b) Color - Grey
- c) Dimensions -
 - (i) Diameter - Fittings - 75mm/110mm/63mm & 63mm.
 - Pipes - 75mm, 110mm, on lengths of 3 or 6 mtr.
- d) Wall thickness - Fittings - Minimum 3.2mm at any port.
 - Pipes - As per application
 - For Rainwater - 75mm - 1.8 to 2.2mm, 110mm - 2.5 to 3mm
 - Waste & Soil - 75mm - 1.8 to 2.2mm, 110mm - 2.5 to 3mm, 63mm –
 - Underground drainage with light/NIL Traffic - 110mm - 2.5 to 3mm
 - Light/Nil in Heavy traffic - 110mm 3.7 to 4.3mm
- e) Standard Confirming to Attributes Confirms to Standard No.
 - i) Fittings & Wall B.S.4514, DIN 10531
 - Thickness - DIN 19534 I.S.7834 - PVC (Rigid)
 - ii) Pipe Wall thickness - IS 4905
 - iii) Rubber ring - IS 5382
 - iv) Fitting dimensions - DIN 19531 - P.V.C.,
DIN 19534-S.W.R.

- v) Pipe Dimensions
- IS - 7834 V.C. (Rigid)
- IS 4985

b) Laying instructions & Jointing Procedure

1 Jointing of P.V.C. (S.W.R.) Pipes & Fittings

Clean the outside of the pipes spigot and the inside of the sealing groove of the fitting. Apply the rubber lubricant, to the spigot end, sealing ring and pass the spigot end into the socket, containing sealing ring, until fully homed. Mark and position of the Socket edge with pencil on the pipe, then withdraw the pipe from the socket by approx. 10mm towards thermal expansion gap.

2 Fixing of the Pipes and fittings on wall surface.

P.V.C. pipes both (S.W.R.) & (Rigid), fixed on wall surface, are to be supported by P.V.C. pipe clips, specially made for these pipes, with horizontal runs, the pipe clips should be spaced at intervals of more than 10 times the outside diameter of the pipes. In vertical lines the clips are to be spaced at intervals of one meter to a maximum of two meters according to pipe diameter. •

3 Jointing of P.V.C. (Right) Pipe Fittings

Clean the Outside of the pipes and inside of the socket of a fitting of the inside of the couplers (where 2 plain ended pipes are jointed) of. Apply solvent cement solution, evenly and smoothly on the outer surface of the pipe end and inside surface of either the coupler of the socket and pass the pipe end into the socket of the fittings. Up to full depth of socket. In case of jointing 2 plain-ended pipes 1st. push the coupler up to half depth on the end of one pipe and the outer half of the coupler should be pushed to the end of other pipe and thus, both pipes are jointed.

4 Fixing of P.V.C. pipes and Fittings through holes of Walls or Chajja of roofs etc.

The Wall/concrete slots should allow for a stress free installation, Pipes and fittings to be inserted into the slots, without a cement base, have to be applied first with a thin coat of P.V.C. Solvent cement, followed by sprinkling of dry sand (medium size). Allow it to dry. This process gives a sound base for cement concrete fixation, around the pipes/fittings while mending the damages.

5 Anti-syphonage Pipes

All the antisiphonage pipes and fittings to be used are of 63mm. If these are not available under the items of P.V.C. (S.W.R.) materials, 63mm pipes and fittings, manufactured under P.V.C.(right) materials can be used, since the raw materials for both is same.

6 All traps should have a minimum water seal of 50mm as per I.S. 5329 and IS 2556 (Part XIII). Where antisiphonage connection is required, the traps to be supplied and used should have a 50mm antisiphonage vent horn on the outlet side. All the Traps used with the closets, should be of the size 125mm X 110mm i.e. Inlet (Socket end) of 125mm & outlet (spirit end) of 110mm only.

7 Installation of Water Closet

Determine the correct Location of the P/S Trap & set on a firm base, relative to the floor finish by pouring concrete on a slab. Bedding can be carried out by pouring concrete around the trap, ensuring that the traps outlet is left clear of concrete. Place the W.C. Connector ring to the socketed end of 125/110mm R/S trap. Apply rubber lubricant on W.C. Connector ring as well as outer side of water closet (connection point) and now complete the joint by pushing the W.C. to home of 125mm socket of the trap.

8 P.V.C. (Rigid) Pipes and Fittings

63mm (O.D.) P.V.C. Pipes to be used for these work either in antisiphonage system or elsewhere, should be of "Quick Fit" Pipes Class 2 (4kg. F/Cm²), Quick Fit, Pipes have

one end socketed. The P.V.C. (Rigid) fittings, such as 63mm elbow, 63mm equal Tees 110mm x 63mm reducer etc. used in the work, should be of injection-molded fittings.

- 9 One -'jointing rubber ring will be available, with each P.V.C. (S.W.R.) pipe and fitting and hence, the cost of therein will not be added in the joint.

10. Measurement

All pipes shall be measured not/length as laid or fixed and shall be measured over all fittings such as bends, junctions, traps etc. The length shall be taken along the counter line of the pipes and fittings. Fittings will be counted extra over.

31. Before fixing and painting, the pipe shall be tested hydraulically to pressure $Q.4\text{Kg/Cm}^2$ for pipes under I.S.-1729/1964 and at a pressure 0.7 Kg/Cm^2 for pipes under I.S. 3989-1970 without showing any sign of leakage, sweating of or her defect of any kind. The pressure should be applied internally and shall be maintained for not less than 15 seconds.

c) Water Supply Pipes and Fittings:

1. Materials.

All galvanized Iron Pipes are to be of mild steel continuous welded, screwed tubes, medium quality conforming to I.S.S. and bearing ISI Marks manufactured by reputed Firms and approved brands as specified. The pipes shall confirm to LS.1239 (Part-I) -1975.All G.I. Fittings shall be of 'R' Brand manufactured by M/s. R.M. Engineering Ltd., Ahmedabad and 'C' brand manufactured by Present Engineering works or equivalent best quality.

2. Laying of Pipes

The layout of the mains and service pipe set etc., will be done in accordance with the drawings. The contractor is to mark out the exact position of the pipes and fittings at site and take approval of the Engineer In-charge, before taking up the work.

3. Where the Pipes are laid, underground these must not be laid less than 450mm below ground level and coated with one coat of approved black bituminous paint. For laying the G.I. pipes and fittings below ground level, the width and the depth of the trenches for different dimensions for the pipes shall be given as below :

Dia of Pipe	Width of Trench	Depth of Trench
15mm to 50 mm	300 mm	600 mm
65mm to 100mm	450 mm	750 mm

The pipes shall be laid on a layer of 75mm thick sand and filled up with sand up to 75mm above pipes and the remaining portion of the trench shall then be filled up with proper ramming as described in "Excavation and refilling". The surplus earth shall be disposed of as directed.

Thrust or anchor blocks of cement concrete 1.2.4 in hard granite chips shall be constructed on all bends or branches to transmit the hydraulic pressure without impairing the ground and spreading it over a sufficient area. Pipes shall not be laid to pass through manholes, catch pit, drain, where, it is unavoidable the pipes shall be carried in sleeve pipe of M.S./G.I., as approved by the Engineer-in-charge. The rate should include such a situation.

4. Where Pipes run along walls, the same are to be fixed to the wall with holder bat clamps /M.S. Hooks as below:

Dia of pipe in mm	15	20	25	32	40	50
Horizontal line	2m	2.50m	2.50m	2.50m	3m	3m
Vertical line	2.5m	3m	3m	3m	3.5m	3.5m

Where the pipes are passing through the R.C.C. / Masonry wall / Column / beam or pillars, these must pass through the appropriate higher sizes of C.I./G.I Sleeve Pipes and are to be included in the rates.In case the pipes are embedded in walls and floors it should be painted

with one coat of anticorrosive paint of approved quality. ,

All pipes should be fixed horizontal and vertical. For taking the pipes through the walls and floors & roof slabs etc. the holes shall be made by filling with chisels or jumper and not by dismantling the brickwork or concrete. After fixing, the holes shall be made good with cement concrete 1:2:4 and properly finished with C. Plaster 1.4 to match the adjacent surface. Union Nuts are to be provided in each of the vertical riser or drop on and from G.I. Tank and near the Valve and as and where necessary. The long screw fittings of 3 mtrs. for long horizontal lines and inside the lavatory / Kitchen etc.

5. After laying and jointing the pipes and fittings shall be inspected under working condition of pressure and flow. Any joint found leaking pipes should be removed and replaced without extra cost. The pipes and fittings after they are laid shall be tested to hydraulic pressure of 6 Kg/Cm². The test pressure should maintain without loss of for at least half an hour.

6. Painting

On completion of the test, the exposed pipes and fittings are to be painted with two coats of synthetic enamel paint of approved color and brand over a coat of priming.

7. Measurement

The length shall be measured in running meter. Correct to centimeter for the finished work, which shall include the pipes and fittings such as Bends, Tees, Elbows, etc., but excludes brass or Gun-metal fixture like tap, Cooks, Valves, PVC connection pipes etc.

8. Ball Valve

The ball valve shall be high or low pressure class as stipulated in the Tender Schedule and shall confirm to I.S. 1703-1968, The nominal size of ball valve shall be that corresponding to the size of Pipe for which it is used. The Ball valve shall be of brass or gun-metal and the float for low pressure polyethylene and for high pressure in copper. Each and every ball valve while in closed position shall withstand and internally applied hydraulic pressure of 20 Kg/Cm² for a minimum period of two minutes without leakage or sweating.

Every high pressure ball valve when assemble in working condition, with the float immersed to not more than half its volume shall remain closed against a test' pressure of 10.5Kg/Cm² and a low pressure ball valve against a test pressure of 5.3 Kg/Cm².

Polyethylene floats shall be watertight and non-absorbent and shall not contaminate water and with do jointing adhesive jointing parts. The minimum thickness of the copper sheet used for making copper floats shall be of 0.45 mm. The thickness of materials of the float shall be uniform throughout.

9. Ferrule

The ferrules for connection with C.I. main shall generally confirm to I.S. 2692-1964 and shall be of nominal bore as specified. The ferrule shall be fitted with 3 screw and 1 plug or valve capable of complete cutting off the supply to the connected pipe as and when required. For fixing the ferrule, the C.I. main shall be drilled and tapped during non-supply hour at 45 to the connected Pipe as that when required. The ferrule must be so fitted, that no portion of the sunk shall be left projecting within the main on which it is fitted. After the ferrule is connected, one C.I. bell mouth cover or with bricks (as specified) shall be kept over the ferrule to cover the ferrule to protect it and the cost thereof is to be included in the item, even if there is no mention.

10. Non-return Valve (Check Valves)

The non-return valve shall be of Brass or Gunmetal and shall be of horizontal or vertical flow type and of the size as specified and confirm to I.S. 7810-1959 and I.S. 778-1957. The

approximate weights of the valves are given below.

Dia in mm	Horizontal type (in kg)	Vertical type (in kg)
15	0.30	0.25
20	0.55	0.25
25	0.90	0.75
32	1.25	0.90
40	1.70	1.20
50	2.90	1.45
65	5.25	2.15
80	7.70	4.10
	±Tolerance 5%	

11. Foot Valve

Foot valve is generally placed at the lower end of the suction pipe of the centrifugal pump to prevent the suction pipe from emptying. On vertical non-return valve may also be fixed in place of foot-valve. The foot valve shall confirm to I.S.038-1967.

12. Water meters (Domestic types)

Water meter up to 50mm nominal size shall confirm to I.S.-779-1968. The meter body shall be of bronze/ Gun-metal and marked to read in liters complete with registration box and lid. The water meters shall be provided with Strainers. Strainers shall be of material, which is not susceptible to electrolyte, clean and shall be fitted on the inlet side of water meter. It shall be possible to remove and clean the strainer and not permit disturbing the registration box. The offer should include the same. The water meters shall bear ISI Mark.

13. Bibcock & Stopcock

These shall confirm to I.S.781-1967 and bear ISI Mark. The bibcock is a draw off tap with a horizontal inlet and free outlet and stopcock is a valve with a suitable means of connection for Insertion in a pipeline for controlling or stopping the flow. This shall be of screw down type. The cock shall open in anti-clockwise direction. The stopcocks should be of C.P open type/concealed type/angle valves type as specified in tender schedule. Bibcock should be also C.P Brass bibcock.

14. Full way Valve (Brass)

Full way valve is a valve with suitable means of connection for insertion in a pipeline for controlling or stepping the flow. The valve shall be of brass fitted with a cast-iron wheel and shall be of gate valve type confirming to I.S, 780-1960, opening Full way and of the size as specified.

Dia in mm	Flanged End Valves in kg	Screwed End Valve in kg
15	1.021	0.567
20	1.503	0.680
25	2.498	1.077
32	5.232	1.559
40	6.082	2.268
50	6.691	3.232
65	10.149	6.840
80	13.281	8.845

15. Gun Metal Full Way Valve

This shall be of the Gun-Metal fitted with wheel and shall be of Gate-Valve type opening

full way. This shall confirm to I.S, 778-1971. Class I. The Valves should bear ISI Mark.

TECHNICAL SPECIFICATION FOR STONEWARE PIPE ETC.

1. Stoneware Pipes (Materials)

The S.W. pipes & fitting should be of Grade 'A' confirming to I.S 651/1965. The pipes shall be sound, free from visible defects such as fire crack or hair crack and flow or blister. The pipes shall give a sharp clear line when struck with a light hammer and should be perfectly salt glazed.

Internal dia of Pipe in m.m.	Thickness of the Barrel in m.m.	Weight of each pipe in kg.
100	12	14
150	16	23
200	17	33
230	19	44
250	20	52
300	25	79
350	30	100
400	35	125
450	38	147

The length of pipes is 600mm exclusive of the internal depth of socket.

2. Excavation of Trench for laying Sewer Pipes

The trenches for the pipes shall be excavated to the lines & level as directed. The bed of the trench shall have to be evenly dressed throughout from one change of grade to the next. The gradient is to stout by means of sight rails and boning rods and required depth be excavated at any point. The depth of the trench shall not less than one meter, measured from top of the pipe to the surface of the ground under roads and not less than 0.75mm elsewhere. The width of the trench shall be the nominal diameter of the pipe plus 350mm. The bed of the trench if in soft or made up earth, shall be well watered and rammed before laying the pipes and the depressions if any shall be properly filled with sand and consolidated in 200mm layers. Depending on soil condition, piling may even be necessary if so desired by the Engineer In-charge. If rock is met with, it shall be removed 150 mm below the level of the pipe and the trench will be refilled with sand and consolidated.

The excavated materials shall not be placed within One Mtr. or half of the depth of the trench whichever is greater from the edge of the trench. The trench shall be kept free from water. Shoring and shuttering shall be provided wherever required. Excavation below water level shall be done after dewatering the trenches.

After the excavation of the trench is completed, foundation of cement concrete 1.4.8 in hard granite metal (size 40mm) shall be laid with proper level all along under the length of the pipe with launching on all around concrete as per drawing.

3. Laying, Jointing, haunching of the Pipes and fittings.

Drain Pipes (S.W. pipe & other pipes used for drain and Sewer) shall be laid in straight lines and to the even gradients as shown in the layout drawings. The socket and of the pipes shall face stream. Adequate care shall be exercised in setting out and determining the level of the pipes and the contractor shall provide suitable instruments, templates, sight rails, boning rods and other equipment necessary for the purpose. In the case of pipes with joints to be made with loose collars, the collars shall be slipped on before the next pipe is laid. In those

joints, a tight ring of twisted tarred jute soaked in cement mortar filling to ensure proper alignment and prevent. Cement entering the pipes, Cement compound joints is to be finished with proportion 1:1 with 45 beveling. The joints are to be kept wet with wet bag until the same are properly set with. The cement mortar joints shall be cured at least for 7 (Seven) days.

In the case of S.W. Pipe joints (socket & spigot), they should be caulked first with tarred jute (Spun) of required diameter, almost quarter depth of the socket, after which cement mortar 1:1 is pushed in with wooden chisel and finishing beveled at outside at 45 degree. Instead of jute of hump rubber gasket of proper size may also be used. The whole joint must be cured for not less than three days. In case of pipes less than 250mm dia, joints should be made at ground level with three pipes at a time and for larger ones two pipes at a time and after curing they should be soiled in foundation with the help of the ropes. All pipes should be properly launched with cement concrete 1:3:6 with washed gravel where the pipes are crossing the drain or all round concrete 1:3:6 with washed gravel is to be done to 150 mm thick over the barrel of the pipe. The whole of the drain work shall be tested when laid, and at the completion of the contract, to the satisfaction of the Engineer-in-charge and shall be retested if necessary until found satisfactory. The test shall be made by means of water under pressure at the highest point of the Section under test and providing an air pipe at the lower end of the line. Maximum head of 5 (five) feet (1.5m) must be maintained.

4. Excavation and refilling.

Excavation for drain and pipe trenches shall be straight and to correct depth and gradient. The trench bottom shall be of required width as per specification to allow working space for pipe jointing.

Excavated materials shall be dumped away from the site as directed by Engineer-in-charge. Suitable precautions are to be taken to prevent in flow of water into the excavated area, during construction.

The contractor at his own expense shall pump out or otherwise remove any or all water which during the continuance of contract may be found in the excavated trenches to keep the trench clear of water during the work under progress. The pipeline shall not be refilled and covered, until the line therein has been passed and tested.

5. Buried Services

All pipes, cable mains and other services exposed by the excavations shall be effectively supported by timbering or other means for which no extra payment will be allowed. The contractor shall be responsible for any damage occurring to buried services and make good the same at his own cost to the satisfaction of the Engineer-in-charge.

6. Trench condition :

Where a trench is excavated and refilled after laying the pipe, settlement of the earth in the refilled trench take place. The filling above the top of pipe, settles relatively, more than the sides of the trench, thereby developing frictional resistance. The contractor is required to take special precaution against this, while refilling the trenches. Procedure for backfilling as stipulated earlier should be strictly followed.

7. Inspection Chambers/Manholes

At every change of alignment, gradient or diameter of a drain there shall be a manhole or Inspection Chamber. The maximum distance between man hole chamber shall be 30 metres for the line laid straight.

All manhole and inspection chamber shall have internal dimension as shown in drawing and B.O.Q. The depth of invert shall be fixed to the gradient. The foundation for Manhole shall be 175mm thick & with cement concrete 1:3:6 in hard stone metal / granite metal of 40mm size. The concrete shall project 150mm beyond the external faces of the brickwork.

The brick masonry shall be done in cement mortar in the proportion of 1:4 and thickness of the brick wall should be 250mm thick up to 1200mm depth from Ground Level and beyond

that the wall thickness shall be maintained 375mm. The inside surface of the walls of the chamber, shall be finished with cement plaster 1.3 and outside with cement pointing 1.3. In addition to this, the inside surface should also be provided with cement punning.

On the top of base concrete channeling on C.C. 1.2.4 with granite chips is to be done keeping the diameter equal to the dia of drain pipe and depth equal to half of the dia of pipe. The channel, 'should¹ be done longitudinally at the centre, connecting both the ends of the pipe. The channel is to be hunched up with concrete 1.2.4 with hard granite chips of size 12mm sloping upwards from the edge of channel to meet the side of chamber at gradient of 1.6. The channel and benching are to be finished smooth and cement mortar 1.3 and punning unless it is unavoidable. The branch should deliver sewerage in the Manhole in the direction of main flow and the junction must be made with care so that the flow in the main is not impeded. Channels for drains coming from the side of the Manhole Chamber, shall be curved to meet the main drainage channels.

The Manhole and Inspection Chambers shall be covered with R.C.C. cover slab of thickness 100mm to 150mm according to the requirement at site. One C.I. Manhole cover of diameter and weight as stipulated in the tender schedule shall be fixed, on the cover slab. Unless otherwise mentioned the C.I. Cover and Frames and shall confirm to I.S. 1726/1960. Heavy duty covers etc., under heavy vehicular traffic condition and capable of bearing wheel loads up to 11.25 tons, are to be used and medium duty under light type wheel traffic loads and light duty for domestic premises are to be used. Covers and Frames shall be clearly cast, double water seal type and they shall be free from all and sand holes. The cover shall be gas tight and water tight with proper water-seal. The C.I. Cover and frame shall be coated with two coats of black bituminous paint. The frame of Manhole cover shall be fixed on the slab while the slab is cast. R.C.C.M.H. covers of 50cm dia and 100mm thickness shall be fitted in line of C.I.M.H. cover if stipulated in the bill of quantity of the tender schedule.

8. Gully Trap Chamber

The size of chamber for 100mm HCl yard gully shall be of 250mm X 250mm (Inside). Foundation with 100mm thick cement concrete 1.3.6 with hard granite metal of size 40mm from outer surface of wall and Brick work in cement mortar 1.4, 125mm thick, depth up to 600mm maximum. The finishing of masonry wall both inside and outside should be done in cement mortar 1.4 cement punning should be provided on the inner surface the trap should be buried in cement concrete 1.2.4 in H.G. chips up to the mouth and one hinged C.I. Grating of size 300mm x 300mm are to be fixed on the top of mouth of Gully trap to arrest rubbishes shall be provided. The foundation, should project 75mm from outer.

9. Kota/Marble Stone flooring

The Kota/Marble stones shall be of thickness specified but not less than 20mm and of uniform with edges absolutely square & straight. They shall be laid in Cement Mortar (1.4) over masonry or concrete base. The sides of the stones shall be arranged to butt against each other truly so as to come the joints practically invisible and certainly not more than 0.8mm in width anywhere. The joints shall not be filled with mortar but may afterwards be grouted with neat white cement mixed with matching colour pigment. When the floor has completely set, it, should be polished with pumice stone and finally with pads of felt.

10. Glazed tile dado

The glazed porcelain tiles shall be of approved size and thickness 5mm to 6mm with edges absolutely straight & surface accurately plain. They shall be fixed in 6mm. thick cement mortar 1.3 using cement slurry over pre-cement plastered base. The sides of the tiles shall be arranged to butt against each other truly so as to make the joints practically invisible. However, the joints may be grouted with white cement mixed with coloring materials to match the tiles and neatly cleaned leaving no trace of excess grouting materials. The tiled surface and edges should be perfectly vertical and straight. The corner points must be normally right angled

unless the site condition demands otherwise,

ADDITIONAL APPENDIX TO BILL OF QUANTITY:

(For P.H. Items of Work)

1. The quantities of items mentioned in the tender schedule may increase or decrease during execution of works but the contractor will complete the work as per his tendered rates in accordance with the instruction of Engineer in charge of G.P.H. wing.
2. **Specification:** The standard PHD and PWD specification will be followed for execution of work. During the course of execution of work, the instructions of the Engineer in charge shall be final and binding.
3. The Sales Tax element should not be added to the analysis of rates and the previous practice should be followed as per the Works Department letter No.IIT.22-89-18170 dt.18.7.1989
4. There should be no clause either in the tender or in agreement for payment of any additional claim on account of Sales Tax on completed works which will be deemed to be recovered by existing omnibus stipulation as per the works Department letter No.TIT 22/89-18170 dt.18.7.89.
5. It is the responsibility of the Contractor to arrange watch and ward to the installations until testing commissioning and handing over for which no extra payment towards watch and ward will be paid,
6. The contractor shall maintain a separate site order book for P.H. portion of work.
7. The P.H. portion of work shall be open for inspection by the authorities of P.H. Circle (R&B) Odisha, Bhubaneswar and the higher authorities and instructions imparted during the course of Inspection should be binding on the contractor.
8. Materials not covered by any of the above categories of items in the bill of quantity have to be approved by the competent authorities before utilizing the 'same in works. In such event, the payment of such item will be made as per actual on due approval by the competent authority.
11. All materials required for the work shall be supplied by the contractor as per standard specifications appended with due approval by the Engineer in charge of G.P.H. Wing. In case the materials as per make specified are not available, the materials of equivalent make and as per I.S. Specifications or of best quality when not covered by I.S. Specifications can be utilized on prior approval of concerned S.E./ E.E., GPHD (R&B) Circle/Division or the officers duly authorized. It is binding on the part of the contractor to use such items of materials which are available in the Departmental store and in such case the deduction from the bills will be made at stock issue rates.

TECHNICAL SPECIFICATION OF INTERNAL ELECTRIFICATION WORKS

The details of internal wiring, the position of fittings, fans, switches and plug sockets etc. are indicated in the layout drawings. The position of light fittings, fans, switchboards etc. indicated in these drawings are only for the guidance of the supplier and the actual position of these shall be mutually decided between the supplier and the purchaser. The supplier shall submit the purchaser of his consideration and approval all runs of wiring and the exact position of all the points and the switch boxes first marked on the points buildings.

All internal wiring shall be done in conformity to the latest Indian standard specification/Rules, code of practice adopted by CPWD and other standard practices prevalent

in the part of the country. For the purpose of the specification the terminology used shall be as defined in IS:732 and IS:1356 of the definition of points wiring. The installation shall be carried out in conformity to all requirements of IE Act, 1910 and IE Rules 1956.

- a) Ceiling rose in (in case of ceiling and exhaust fan).
- b) Ceiling rose or connector (in case of pendants except stiff pendant points)
- c) Bank plate (in case of stiff pendant).
- d) Socket outlet (in case of socket outlet points)
- e) Lamps holder (in case of wall Bracket, batten holder bulk head fitting and similar other fittings)
- f) Call bell / buzzer (in case words 'via' the switch shall be read 'via' the ceiling rose / socket outlet for bell push, where no ceiling rose / socket outlet its provided.

The following shall be deemed to be included in the point wiring

- a) Switch and ceiling rose are required
- b) In case of wall brackets, bulk head fittings, cables as required up to the lamp holders]
- c) Bushed conduit for porcelain tubing where cables pass through walls.
- d) All wood or metal blocks, boards and boxes, R.J. Boxes sunks or surface type including those required for fan regulator but excluding those under the distribution board and main control switch.
- e) Earth wire from 3 pin socket point to the common earth including connection to the earth dolley.
- f) Earth wire of 16SWG/14 SWG/I.G. wire for loop earthing of the fixture
- g) All fixing accessories such as clips, nails, screw, plug, rawl plug, wooden plug, round blocks etc. as required
- h) Joint for junction boxes and connecting the same as required
- i) Connections to ceiling rose or connection socket outlet, lamp holders, switch, fan regulators etc.

The point wiring in case of fan and light points shall mean the distance between the control switch and ceiling rose, connect or back plate, socket outlet or lamp holder depending upon the fittings measured along the runs of wiring irrespective of the number of wires in run. In the case of socket outlet points, the length shall mean the distance between the socket outlet and the tapping point of live wire on the nearest switchboard or junction box, as the case may be.

In the case of exclusive socket outlet circuits wired on 'Joint Box' system of wiring, any junction provided for extending the wiring beyond the point referred to, shall be treated as the nearest tapping point. In case of call bell / buzzer points the length shall mean the distance between the call bell and the ceiling rose / socket outlet or the bell push (when the ceiling rose / socket outlet is not used).

Sub main shall include the earth wire of adequate size main distribution Board up to sub distribution board B.B. such wiring has been classified on the basis of length. For the internal lighting, either surface conduct wiring system or recessed conduit or batten wiring system shall be provided as specific in the bill of quantities and working drawings.

LED LIGHTS

1. LED light distribution pattern, illuminance, Luminous, chromaticity, color temperature, color rendering Index to applicable standard Lm79 & Lm80.
2. LED lights should be as per standards IEC EN 60598 and IEC61547.
3. LED luminaries should in function in a temperature raise -30°C + 60°C under 95% relative humidity condition to simulate adverse operating environment.
4. The LED produces should meet safety standards as per EN60598, EMCIEMI standard as per EN611547/EN 55015 and EN61000-3-2 and 61000-3-3 for Harmonics.

5. The electronic driver should work in the short circuit and open circuit conditions and should work in the voltage range 90V to 3000 volts.
6. LED lighting fixtures should be manufactures with LEDs of on only reputed makes such as Panasonic/Havells/Crompton/Philips/Wipro/Equivalent make
7. The officer-in-charge has reserve the right to inspect and tested the quality in Govt. laboratory to ensure technical qualifications to meet the requirements.
8. LED lights no toxic materials U V and IR spectrum protects insect life.
9. It should be manufacture with dia-cast aluminium with required colour as per manufacture for released months.
10. The LED fittings should have a lumen output not less than 100 Lumens/watt.
11. The LED lights Should function 90 to 380V, 50/60 Hz, PF-Z0.9 (230V AC), Copper temp-3000K/4000K/ 6000K/ operation temperature - 20°C + 50°C in-gross protection-IP 20, lifespan 30000hrs.

Firefighting

1. No advance payment will be made by the Department. However, Part / full Payment shall be made by the concerned Addl. Chief Engineer/Superintending Engineer, OTDC Ltd., after completion of supply, erection testing and commissioning, inspection and satisfactory operation.
2. In the event of failure or refused to execute the order the ISD will be forfeited and the order will be cancelled after the completion time period from the date of issue of the order. In the event of delay in supply erection, testing and commissioning of the materials with work pertaining to order, penalty @ 0.5% of the order value per month delay will be imposed subject to a maximum of 5% (Five percent) along with the EMD.
3. All the materials should be ISI marked and duly approved by the fire Deptt. Govt. of Odisha.
4. 3rd Party Audit should be done by registered agency of Fire Deptt. Govt. of Odisha by the firm.
5. Drawing and designed duly approved by the Fire Deptt. Govt. of Odisha should be submitted before execution of work.
6. If addition alternation required as per guide line of Fire Deptt., the firm will execute the same with due approval of the authority.
7. After completion of the work the firm should made a mock fire drill demonstration and all the testing of the installation, in presence of Engineer-in-Charge, authorised officer of the Fire Deptt. and building authority.

A.C. Machine

The tenders should furnish following documents in cover-1.

1. Detail drawing and design.
2. Technical specification as per manufactures norms supp.
3. Detail of equipment and material supplied.
4. Make, model with individual price may be furnished.
5. All the materials and equipment must be confirming to ISI.

Lighting arrester

Supply, Installation, Testing and Commissioning of Copper Plate Earthing (600x600x3mm)with running Copper Flat 25x5mm from copper plate to funnel of 40mm dia GI PIPE heavy duty with including all accessories, excavation of earth and providing masonry work with cover plate having locking arrangement and and, charcoal, salt , funnel , tinned brass bolt, check nut and washer complete in all respect as per Direction of Engineering -in-Charge. Conventional Lightening arrester is to be used as per the direction of Engineer-in-charge following the SOR.

ACCEPTABLE MAKES FOR FIRE FIGHTING

S.NO	ITEM	ACCEPTABLE MAKE
1	Pump	Kirloskar / Crompton / ABB /Siemens/LUBI/Eq make
2	Motor	Kirloskar / Crompton / ABB /Siemens/LUBI/Eq make
3	Diesel Engineen	Kirloskar / Cummins /LUBI/Eq make
4	M.S. Pipe	Tata /Jindal / Sail/ (ISI Marked)/Eq make
5	C.I. Pipe	IS :1537
6	G.I. Pipe	Tata /Jindal / Sail/Nizon/(ISI Marked)/Eq make
7	C.I. Pipe Fitting	IS :1537
8	Sluice Valve	Kirloskar / Leader /Sant/Zoloto/(ISI Marked)/Eq make
9	Gun Metal Valve	-Do-
10	Butterfly Valve	-Do-
11	Water Solenoid Valve	-Do-
12	Cushy Foot Mountings	ISI Marked
13	Pressure Switch	Indofus / Groundfos / Eq make ISI Marked
14	Pressure Gauge	Indofos/Eq make ISI Marked
15	Water Level Controller	ISI Marked
16	Batteries	OEM/OEA/Luminous/Eq make
17	Flow Switch	
18	Internal/External Hydrant (Landing Valve)	Newage / Fireshield/Winco/Minimax/Eq make
19	Hose Reel 20 mm Dia	-Do-
20	Installation Control Valve	-Do-
21	Fire Bridge Intel / Connection	-Do-
22	Sprinkler Head	-Do-
23	RRL Hose pipe 63 mm Dia	-Do-
24	GM Branch Pipe 63mm x 20mm dia	-Do-
25	First Aid Hose Reel Drum	-Do-
26	Power Cables	Havell,s /Finolex / Mescab/KEI/Eq make
27	Control Cables	-Do-
28	Single Phase Preventor	L&T /GE /Siemens/Legrand/Eq make
29	SDFU / SFU with HRC Fuses	-Do-
30	Starters / Control	-Do-
31	Electrical Panel / System Controller & Control Console	Legrand/Siemens/Schneider/Eq make

ADRESSABLE FIRE ALARM SYSTEM

01	Microprocessor based Photo electric smoke / Heat Detector	Cooper / Honeywell / Edward/Eq make
02	Microprocessor based Manual call Box	-Do-
03	Microprocessor based Control Module	-Do-
04	Fire Alarm Control Panel	-Do-
05	Steel Conduit	AKG / BEC/RMCON/Eq make
06	FRLS and Twisted Cables	Finolex /Havell's /RR Kable/KEI/Eq make

Conduit wiring

For recessed conduit wiring system the conduit shall be placed in the ceiling / columns etc. before the casting of the slab or column. The conduit pipes shall be properly positioned and fixed so that it will not be displaced at the time of concreting. The junction boxes provided shall be so arranged that its cover will be flushed with the finished surface of the ceiling or column.

For placing the conduits in the walls, chases of ample dimension shall be made neatly to fix the conduit in a desired manner. The conduit pipe shall be fixed by means of staple or saddles not more than 600mm apart. Fixing of standard bends or elbows shall be avoided and all curves maintained by bending the conduit itself with a long radius will permit easy drawing of the conductors. Suitable inspection boxes shall be provided to permit periodical inspection and removal or replacement of wires if necessary. There shall be mounted flush with the wall with holes in the cover of the box.

The switch or regulator box shall be made of metal on all sides except on the front where backlight sheet or Perspex cover painted to match the colours of the wall shall be used in case of surface wiring system. For recessed wiring system, these boxes shall be made flush with the conduit of each conduit or section shall be completed before conductors are drawn in. The entire system of conduit after installation shall be tested for mechanical strength and electrical continuity throughout the earthing of the entire installation shall be carried out in accordance with I.E. Rules and standards. The number of wires drawn in the conduits shall not exceed the numbers those specified in Indian standard specification No.732.

Main and Sub distribution Boards:

The position of main boards for lighting and sub distribution board for different buildings are approximate and the exact location shall be given to the successful tenderer at the time of installation. The scope of this specification includes installation of the panel boards and distribution boards and making necessary connections. The installation of the boards shall be done strictly in accordance with the details supplied with the specifications; the instructions supplied by the switchgear manufacturer, Indian standard specifications and H.E. rules. The supplier shall submit the details of installations to the purchaser for his consideration and approval, prior to installation.

When the switchboards are wall / column mounted top, they shall, be mounted on a suitable angle iron framework. All the metal supports etc. shall be protected against corrosion. The mounting height for such switchboards shall be such that it can be conveniently operated.

Earthing

Earthing shall generally be carried out in accordance with the requirements of Indian Electricity Rules and the relevant rules and regulations of electrical supply authorities. The complete earthing work for the installation covered by this specifications shall also be provided taking into account Indian Standard Specification No.IS:732 and IS:3043. The earthing system adopted shall also have adequate mechanical strength.

The work shall include earthing of non-current carrying metallic parts of all the equipment, light fittings, conduit pipes, cable and cable supports and earth strips (the design to be approved by the purchaser) and all the inter connection between the earthing system to a value mutually agreed upon\ between the purchasers and the supplier.

Installation, testing and Commissioning:

The supplier shall be responsible for the installation testing the commissioning of all the equipment and materials supplied by him against this specification. This shall also include the provision of miscellaneous wiring and supports and earthing in compliance with Indian Electricity rules and to the full satisfaction of the Government Electrical Inspector. All small items such as clamps, bolts, nuts, racks, supports, miscellaneous wiring etc. required to make the installation complete, shall constitute the part of major items specified in the bill of quantities and the tenderer should quote for each item taking these into consideration.

The responsibility of the supplier shall include receiving all the equipment and materials at site, storage for required period, handling the same at the site of erection, final execution , erections, revisions of equipment, if any, testing and commissioning and handing over the installation complete in all respect to the entire satisfaction of the purchaser's authorized representative. The supplier shall make good of all the damaged equipment and materials during this period at his own expense. The supplier shall submit sample of each and every equipment and materials for the final approval of the purchaser's representatives immediately after the acceptance of offer. All the equipment and materials shall be supplied exactly as per to the approved samples. If at any stage the purchaser brings to the notice of the supplier any discrepancy or defect the supplier shall replace the same at his own expense.

The supplier shall render all reasonable assistance to the purchaser in getting the installation approved by the Government Electrical Inspector prior to the energisation and supply necessary drawings, test certificates and both for tests carried out at the factory and site as well as the tests which the inspector may demand. In case any addition of alternations are required, to be made in the installation or in the equipment as per the directive of the Government Electrical Inspector / Local Authorities, he same will have to be carried out by the supplier , at his own expense.

The position of light fittings, main board, switches, sockets and routes of pipes and cables shown in the drawings are only indicative. The actual position of these shall be decided at site at the time of execution joints by the supplier and the purchaser's authorized representative. The position of light fittings, pipes and board if required, to be changed / shifted due to the change in the building design etc by the purchaser's authorized representative, the same shall be carried out at no extra cost.

All the materials supplied to the contractor according to the Contract condition will be subject to inspection and approval of the officer or his representative from time to time. The contractor will provide all facilities of such inspections free of cost. At the time of inspection, the owner or his representative will have full liberty to reject any such materials, which does not conform to the specification / requirement. No claim for any rejected materials will be entertained by the owner. The contractor will remove all rejected materials from site at his own cost. No surplus materials procured by the contractor will be accepted by the owner. The contractor will be responsible to get the Electric installations cleared by the Electrical Inspector of Odisha Government. Only the inspection fee will be reimbursed by Department on production of challan copy.

Installation and Maintenance Tools:

The supplier along with the tender shall furnish a complete list of tools, appliances and accessories required for the installations of switch grass, light fittings, pipes cables and wires.

Drawings:

All drawings, test certificates, instructions manuals etc. shall be in English Language and all dimensions and weights shall be in metric units.

The tenderer shall submit with the tender general arrangement drawings for the installations work, typical methods and cabling and cables supports pipe work and pipe supports, typical methods of earthing and fixing of light fittings earthing etc. as offered by him in the tender.

The contractor shall submit for the purchaser's approval all layout, the general arrangement drawings as well as the typical details of all types of installation work in three sets before commencing the manufacture and the site installations work well in advance so that the site work shall not suffer.

After obtaining approval of the above drawings the contractor shall supply three sets of the following drawings:

- (a) The arrangement and support of conduit pipe
- (b) The position of light fittings, switches / plug socket and switch boards
- (c) Earthing installations
- (d) Layout plan showing the entire cable network

On completion of work, the successful tenderer shall supply one set of tracing in transparent linen and five sets of prints of all drawings incorporating all the changes / modifications affected during the execution of the contract. All wiring diagrams shall indicate clearly, the switch board, the runs of main and sub main wiring and the position of all the points with their controls. All the circuits shall be clearly indicated and numbered in accordance with IS:375. The technical literatures and operating instructions and the maintenance manuals shall also be supplied in triplicate to the purchasers after the completion of the installations work.

Test:

Manufactures standard tests in accordance with Indian Standard and other standards, adopted shall be carried out on all the equipment and accessories covered by this specification so as to ensure efficient and satisfactory performances of all the components and also the equipment as a whole under working conditions at site. The tenderer shall submit a complete list of all such tests. If the purchaser, if so desired for special tests, to be carried out, under certain conditions the same shall be made by the successful tenderer at his own expenses. All equipment shall be tested at site before the commissioning in accordance with the adopted standard and Indian Electricity Rules. Voltage test shall be carried out on each circuit on completion of wiring and cabling.

Technical Data:

The tenderers shall submit with their tender all such technical data, which are required for complete evaluation of the equipment offered. The suppliers shall give complete technical information of the equipment as detailed in Annexure and relevant Indian standards. The tenderer should supply such details of all equipment and materials offered specially with regard to the following.

- a) Fuse switch board and distribution boards
- b) Light fittings
- c) Conduits and the accessories for them
- d) Switches / plug sockets

e) Cable and wires

The tender shall give along with his tender the following details:

- a) Complete details of earthing electrodes, earthing station and earthing conductors
- b) Details of conduit supports
- c) Details of all the equipment and accessories to be supplied

Exception to Specifications:

The object of this specification is to have all tenderers quote for equivalent materials and workmanship. It is, however, understood the certain manufacturers may not be able to offer as specified in every case, where the tenderer may find it necessary to deviate from the exact letter and not the intent of the specification, he must specifically state what these deviations may be at the time he submits the tender. All deviations must be grouped in one statement. No deviations other than those includes in the tender will be permitted.

PVC insulated Cables and Wires:

For 415V Distribution system, cables of voltage grade not less than 1000V shall be used. These cables shall be heavy-duty class, PVC insulated and PVC sheathed with aluminium/ copper conductors. The wires used in the lighting installation shall be PVC insulated and PVC sheathed copper / aluminium wire in case of conduits wiring and of 660V grade. Wires of different colours shall be made use of for quick\ identification of phase wire / neutral wire etc. All cable of wires shall comply with the requirements regarding the manufacture and testing etc as specified in India Standard Specification IS: 1554 and IS:694.

The length of cables indicated in the bill of quantities and drawings are only indicative and the Successful tenderer will be paid for the exact length of cables laid at site. No joint shall be allowed in a run of cables, which can be covered by a possible drum length of cables.

Fuse switch / switch fuse shall be metalclad dust and vermin proof suitable for use under climatic conditions prevailing at site. Switch fuse / fuse switch units shall comply in general to IS:1567/4064 with regard to design and constructional / features.

The 'ON' and 'OFF' position of the switch handles shall be distinctly indicated and interlocks shall be provided to ensure that the switch cover cannot be opened unless the switch is in the 'OFF' position. Means shall, however, be provided for releasing the interlock to permit closing of switch with cover open for testing purposes. Designs with normal conventional position of switch handles, i.e. with switch handle up in the 'ON' position and down I the 'OFF' position shall be preferred. All live parts inside the switch shall be properly surrounded and inter phase barrier shall be provided.

Switch fuse / fuse switch units, distribution boards shall be provided with necessary metal fame work so that they can be mounted on wall / columns structure etc. as desired. The panel boards, shall be wall mounted type or floor mounted type as specified in the bill of quantities or drawings. Necessary supporting metal frame of approved design shall be provided for all panel boards

The arrangements of work boards shall be such that the operational handle of the top mounted switches are within the convenient of operators (about 1.2 M from the finished floor level) and proper space shall be provided for the termination of the cable in the switches provided below the bus-bars.

The bus-bars within the bus-bar chamber shall be liberally spaced for taking the riser connection. The bus bars with aluminium conductors shall be provided and PVC sleeves of different colour shall be mounted on them for easy identification, Clamped joints for taking the riser connections, instead of bolted type shall be preferred.

Two bolted type earthing terminals shall be provided on the switch boards. All individual switches shall be connected with suitable size earth wire to the main earthing terminals of the switchboard. Hanger Board and shock treatment / charts shall be supplied wherever required.

At the incoming side of each pen phase, 3-neon type indicating lamps should be provided at the main board.

Switches and Plug Sockets

Switches provided for control of light points shall conform to IS:1087 and shall be rated for 5A/15A 250V

Ceiling Fans and Exhaust Fans:

Ceiling fans shall conform to Indian standard specification IS: 374-1960. The fans shall be supplied with all standard accessories like regulator and capacitors etc.

The performances rating of the propeller fans shall in accordance with stipulations of IS:2312. All fans shall be robust in design and construction and shall be supplied complete with wall brackets / clamps etc.

Fluorescent Fittings:

All fluorescent fittings supplied shall confirm in general to IS:1913 and shall be complete with all standard accessories like choke, starter and capacitor etc. The type of enclosure provided for the fittings shall be of that specified in the bill of quantities and the working drawings. The materials of construction for fittings used for outdoor installations and for use in the work anodes shall be such that they shall withstand the atmospheric condition in that area. Lamp holders used shall be fully shock proof, spring-loaded rotary type to ensure positive lamp locking. It should also be not possible to touch live parts of the lamp holder both after the lamp has been taken out and during the insertion or removal of the lamp. The starters shall be designed to give designed starting characteristics that shall promote full lamp life. Starter shall have high mechanical strength and topic proof construction. It should be incorporated with radio suppression capacitor o adequate rating and\ capacity. Power factor improvement capacitors are provided with hermetically sealed housing to ensure long and trouble free service. Terminal soldering tango shall be provided for easy electrical connections. The capacitors in general shall confirm to IS:1569-1963 and P.F improvement up to 0.95 for twin fluorescent light fittings and 0.9 for single fluorescent light fittings is to be maintained.

The ballast provided in the fluorescent fittings shall generally be in accordance to IS:1534. The ballast should incorporate the following design features.

- i) Low working temperature
- ii) Correct pre heating current for the electrodes
- iii) Proper wave foam
- iv) Small in dimensions
- v) Correct power supply to the lamp
- vi) No hum.
- vii) Easy connection leads.

All the metal construction of the fittings shall be such that they shall:

- 1) Withstand the atmospheric condition prevailing in the area
- 2) Provide maximum mechanical protection to the tubes and fittings accessories. Assists in maximum and uniform light distribution. All fittings shall be provided complete with florescent lamps. All lamps shall confirm to IS:2418.

Incandescent Fittings:

The incandescent fittings shall be supplied strictly as per the details given in the enclosed annexure and bill of quantities, deviation if any regarding design, construction of materials should be specified clearly. All the metal parts used in construction of the fittings shall have no effect due to dust / fumes / gases likely to exist in the atmosphere. All the bolts, clamps, nuts and guard wire etc shall be galvanized. The wall fittings shall be provided with necessary hooks / clamps / supports etc for fixing the light fittings on wall / ceiling etc as detailed in the bill of quantities and the working drawings. Light fittings shall be suitable for connection with 19mm dia. Conduit pipe as required. If fittings are to be connected through

PVC cables, glands of adequate size and capacity shall be provided. The lamp holders provided in the fittings shall confirm to IS:1528.

CODES

Codes shall mean the following including the latest ascendants and / or replacement if any.

- a) Indian Boiler Act, 1923 and Rules and Regulations made there under
 - b) Indian Electricity Act, 1923 and Rules and Regulations made there under
 - c) Indian Factories Act, 1948 and Rules and Regulations made there under
 - d) The minimum wages Act
 - e) The Women's Compensation Act
 - f) The Payment of Wages Act
 - g) The Fatal Accident Act
 - h) The Industrial Employment Act
 - i) The Employment provident Fund Act
 - j) Indian Explosive Act 1984 the Rules and Regulations made there under
 - k) Indian Petroleum Act 1934, and Rules and Regulations made there under
 - l) A.S.M.E. Test Codes
 - m) AIRE Test, Codes
 - n) American Society of Materials Testing Codes
 - o) Standards of the Indian Standards Institution
-
- 1) Low Tension Circuit Breakers : IS 2516-1955 Part I Sec.1
 - 2) Switchgear Bus Bars IS 375-1963
 - 3) HRC fuse links IS 2208-1962
 - 4) Distribution fuse boards IS2675-1966
 - 5) Enclosure for Low Voltage switchgear IS214701962
 - 6) PVC Cables IS1554-1975
 - 7) Tabular fluorescent lamps for Cameral lighting service IS2418-1963
 - 8) Tungsten Filament Lamps for cameral service IS415-1963
 - 9) Ceiling Fans IS274-1966
 - 10) Flood lights IS1947-1961
 - 11) Wall Glass flame-proof electric light fittings IS2206-1962 (Part 1)
 - 12) Water Tight Electric Light Fittings IS3553-1956
 - 13) Steel Boxes for Enclosure of Electrical Accessories IS5133-1969
 - 14) Fittings for Rigid Steel conduit IS2667-1979
 - 15) Rigid steel circuits for electrical wiring IS3837-1966
 - 16) Accessories for Rigid Steel Conduits for Electrical Wiring IS3837-1966
 - 17) Switch Socket Outlets IS3837-1966
 - 18) PVC Wiring IS694-1977
 - 19) Switches for domestic and similar purpose IS3854-1966
 - 20) PVC wiring IS694-1977
 - 21) Call Bell and Buzzers IS2268-1966
 - 22) Straight through joint boxes and leads sleeves or paper insulated cables- EID-0032-1964
 - 23) Earthing IS3043-1966
 - 24) Electrical Wiring installations IS732-1963
 - 25) Switchgear IS3072-1965 (Part I)
 - 26) Lighting protection IS2309 –1969
 - 27) Public Address system IS1882-1962
 - 28) Low Tension switch use units IS4064-1978
 - 29) Code of Practice for Automatic FIRE ALAM system IS2189-1970
 - 30) Specification for Heat Sensitive Fire Detectors IS2175-1977

- 31) Guide for Safety procedure in Electric work IS5216-1969
- 32) Rubber Mats for Electric works IS5424-1969
 - p) Other internationally approved standards and / or Rules and Regulations touching the subject matter of the contract.

NAME OF WORK: - INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT.

Technical Specification

1.	Load (Kgs.)	68 x 6 = 408Kg. (6 passenger)
2.	Speed – mps	1.5mps
3.	Travel – mtrs	Ground floor to 2 nd floor, About 10.00 Mtr.
4.	Stops & Openings	3 Stops, 3 Openings (All openings on the same side)
5.	Power Supply	400 Volts 3 Phase 50 Hertz. Alternating Current.
6.	Control	A.C. Variable Voltage Variable Frequency (with close loop)
7.	Operation	Simplex full Collective (with / without Attendant)
8.	Machine	Compact permanent magnet Gearless machine.
9.	Car Size (inside Dimension)	About 1100 mm wide X 1000 mm depth.
10.	Hoistway Required	About 1900 mm wide X 1700 mm depth – Finished with plaster.
11.	Car Enclosure	IND – 160
12.	Car Panels	Stainless steel mirror finish
13.	Handrails on three sides	Stainless steel mirror finish.
14.	False Ceiling	CD – 35 (powder painted)
15.	Flooring	Vinyl tiles.
16.	COPD Door	COPD Door, 800mm Width
17.	Door operation	Automatic with ACVVF Door Operator & Multi-Ray Electronic Door Detector System.
18.	Signals (Design)	S – 60
19.	Details	a. Combined luminous hall button with seven segment digital hall position indicator at all floors. b) Car operating panel with luminous buttons, seven segment digital car position indicator combined with direction arrows, overload warning indicator. c.) Battery Operated Alarm Bell & Emergency Light. d.) Firemen's switch at main lobby.
20.	Face Plate Finish	Stainless Steel in hairline.
21.	Face Plate Shape	Rectangular.
22.	Pit depth required	1600 mm
23.	Fan	Cabin Fan
24.	Fire Extinguisher with fire alarm	CO ₂ 4.5Kg, Capacity manually operator container should be provided in the machine room & car cabin with alarm
25.	Belt	Flexible coated steel belts
26.	Automatic rescue device	Essential

Note : One year maintenance warranty by the manufacturer through the contractor is binding.

N.B. : Before quoting of the rates, the bidder may contact the Engineer-in-Charge of the work for inspection of site.

Tenderer(s)is/are required to submit the information in the following Schedules

SCHEDULE - A

CERTIFICATE OF NO RELATIONSHIP

I/We hereby certify that I/We* am/are* **related / not related**(*) to any officer of O.T.D.C. of the rank of Assistant Engineer & above and any officer of the rank of Assistant / Under Secretary and above of the Works Department, Govt. of Odisha I/We* am/are* aware that, if the facts subsequently proved to be false, my/our* contract will be rescinded with forfeiture of E.M.D and security deposit and I/We* shall be liable to make good the loss or damage resulting from such cancellation.

(*) - Strike out which is not applicable

Signature of the Tenderer

Date:-

SCHEDULE - B

EXISTING COMMITMENTS AND ON-GOING WORKS OF SIMILAR NATURE:

Description of works	Place & State	Contract No.	Name & Address of Employer	Value of Contract (₹. In lakh)	Stipulated Period of Completion	Value of works* remaining to be completed (₹. In lakh)	Anticipated date of completion
1	2	3	4	5	6	7	8

31.9. *The above information is to be certified by the Engineer in Charge / Employer not below the rank of Executive Engineer/Superintending Engineer, or equivalent / Self Certified. In case if there is no existing commitment and ongoing works, the bidder will furnish a declaration in Schedule 'B' (above) that he has no work in hand. If any information found incorrect or the fact of hiding any ongoing works if detected latter the bid shall be summarily rejected and his EMD/Bid Security shall stand forfeited and his registration in the portal shall be blocked and the bidder is liable to be blacklisted as per ITB clause-21.5 and DTCN clause **No.116.**

Signature of the Tenderer

Date.....

SCHEUDLE – C

CERTIFICATE OF TOOLS AND PLANTS

I/We hereby certify that the following tools and plants, machineries and vehicles are in my /our possession and in working order.

I/We
note
non-

SI. No	Type of Equipment's	No. of machines required	Marks
1	Water Tanker of 3000litre capacity mounted with Truck / Tractor (For each 4 marks)	2	08
2	Tractor (For each 4 marks)	2	08
3	Generator of 25 KVA Capacity	1	10
4	Concrete mixer (For each 5 marks)	2	10
5	Concrete vibrator: Needle type (For each 2 marks)	4	08
6	Concrete vibrator: Plate type (For each 3 marks)	2	06
7	Complete staging, shuttering, centering arrangement for wooden/Ply shuttering – Not older than 2 years. (No marks will be awarded if the shuttering material area is less than 2000 sqm)	500 sqm	35
8	Water Pump of 1 HP Capacity- 2Nos and Water Pump of 2 HP Capacity- 1No. (For each 5 marks)	3	15
	Minimum Qualifying marks-80	Total	100

also
that,

submission of this certificate will render my/our tender liable for rejection.

Signature of the Tenderer
Date.

SCHEDULE – D

WORK EXPERIENCE
LIST OF SIMILAR NATURE* OF PROJECTS EXECUTED

Name of Employer	Name of location and name of work	Contract price in Indian Rupees/ Agreement no.	Major Items of works	Stipulated date of commencement / completion of the work as per Agreement	Actual date of completion of the work	Value of work actually executed during last 5 financial years		Reasons for delay in starting/ completion, if any
						Financial year	Value	
1	2	3	4	5	6	7	8	9

Note:

1. The above information is to be certified by the Engineer in Charge / Employer not below the rank of Executive Engineer/Superintending Engineer.

2.If any information found incorrect later the bid shall be summarily rejected.

Signature of the Tenderer
Date.

1.	a)	Is the tenderer currently involved in any litigation relating to the works.	Yes / No
	b)	If yes: give details:	
2.		Has the tenderer or any of its constituent partners been debarred/expelled by any agency in India during the last 5 years.	Yes / No
3.	a)	Has the tenderer or any of its constituent partners failed to perform on any contract work in India during the last 5 years.	Yes / No
	b)	If yes, give details:	

If any information in this schedule is found to be incorrect or concealed, qualification application will summarily be rejected.

Signature of Tenderer

SCHEDULE – F

AFFIDAVIT

1. The undersigned do hereby certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither my / our firm / company / individuals _____ nor any of its constituent partners have abandoned any road/ bridge/Irrigation /Buildings or other project work in India nor any contract awarded to us for such works have been rescinded during the last five years prior to the date of this bid.
3. The undersigned hereby authorise(s) and request(s) any bank, person, firm or Corporation to furnish pertinent information as deemed necessary and as requested by the Department to verify this statement or regarding my (our) competency and general reputation.
4. The undersigned understands and agrees that further qualifying information may be requested and agree to furnish any such information at the request of the Department.

(Signature of Tenderer)
Title of Officer
Name of Firm
Date:

SCHEDULE - G

**CERTIFICATE OF EMPLOYMENT OF UNEMPLOYED GRADUATE
ENGINEER / DIPLOMA HOLDERS
(For Super Class / Special Class / 'A' Class Contractors only)**

I / We hereby certify that at present, the following Engineering personnel are working with me / in our firm / company and their bio-data are furnished below.

Sl. No.	Name of Engineering personnel appointed for supervising contractor's work with address	Qualification	Date of Appointment	Monthly emolument	Whether full time engagement and continuous	If they are superannuated / retired / dismissed or removed personnel from state Govt./ Central Govt. / Public Sector Undertaking / private Companies and s or any one ineligible for Government service
1	2	3	4	5	6	7

Signature of the Tenderer.

Date: -

SCHEDULE – H**SAMPLE FORMATS****UNDER TAKING****This is to certify that**

1. My firm has neither been associated, directly or indirectly, with the Consultant or with any other entity that has prepared the design, specifications, and other documents for the Project nor has any person associated with been proposed as Project Manager for the Contract.
2. My firm has not engaged any agency and any of its affiliates engaged by the Engineer-in-Charge to provide consulting services for the preparation or supervision of this work.
3. My firm has not engaged any Engineer of gazetted rank employed in Engineering or Administrative duties in an Engineering Department of the Government of Odisha or other gazetted officer retired from Government service during last two years without prior permission of the Government of Odisha in writing on or before submission of this tender. I am aware that my contract is liable to be cancelled if either I or any of my employees is found any time to be such a person who had not obtained the permission of the Government of Odisha as aforesaid.

Signature of the Tenderer.

Date:-

Note: i. Strike out whichever is not applicable
ii. In case any person is under his employment with due permission from Government, the same may be cited in a separate letter.

SCHEDULE – I**RELATIONSHIP DECLARATION****To,****The Tender Inviting Officer,****Subject: (Name of the Work)****Reference : (Bid reference number)****Sir,**

Pursuant to clause 2 of the ITB, it is to inform that I have relative(s) employed as an Officer in the rank of an Assistant Engineer/Under Secretary under the _____ Department. His (Their) details are as follows.

Relationship:

Name:

Designation

Office

Address

Pursuant to clause 2 of the ITB, I am to submit herewith the names of persons who are working under my firm having near relatives to any gazetted officer in the rank of an Assistant Engineer/Under Secretary in the _____ Department.

SINo	Name of my employee and his designation in the firm	Presently working at	Details of his relatives working in the Department
			Relationship Name: Designation Office Address
			Relationship Name: Designation Office Address

I am also duty bound to inform the relationship of any subsequent employment with any gazetted officer in the rank of an Assistant Engineer/Under Secretary in the _____ Department. I **am aware that** any breach of this condition would render my firm liable for penal action for suppression of facts.

Yours Sincerely

Signature of the Tenderer.

Date:-

SCHEDULE – J**MEMORANDUM OF UNDERSTANDING**

First Party I Sri/Smt....., Aged years, S/O-, At / P.O. / Dist-..... (hereinafter called the First Part)

AND

Second Party I Sri/Smt....., Aged years, S/O-, At / P.O. / Dist-..... (hereinafter called the Second Part) having M.V./H.T. license registration No..... valid upto

AND WHEREAS the First Party of 1st part is the managing partner of

AND WHEREAS the First Party willing to appoint the Second Party to execute the E.I. portion for the tender work, “.....”

AND WHEREAS the Second Party accepted the offer of First Party.

NOW THIS DEED OF AGREEMENT WITNESSES AS FOLLOWS;

- 1) That, the Second Party shall do all E.I. works, if the tender is awarded to First Party.
- 2) That, the Second Party shall fulfill all the E.I. works as per the tender schedule by instruction of Engineer-in-Charge.
- 3) That, the First Party shall receive payment, signing the bill the document for the concerned work.
- 4) That, the Second Party shall abide the rules, regulations and specification of E.I. works of above said matter.

In witness where of both the party have signed in presence of

WITNESS

W₁ -

W₂ -

GOVERNMENT OF ODISHA

WORKS DEPARTMENT

OFFICE MEMORANDUM

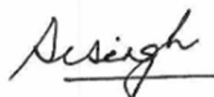
No. 07764600022025 632 /W., Bhubaneswar Dt. 9.1.26

Sub- Clarification on Works Department Office Memorandum No.173 dt 03.01.2026 regarding Amendment of Codal and Contractual Provisions.

The following clarifications are issued on Works Department Office Memorandum No. 173 dated 03.01.2026

1. The phrase " *to abolish the extant provisions of threshold negative bid caps (14.99%) introduced*" in the first para of the Works Department OM No. 173 dated. 03.01.2026 may be read as " *to abolish the extant provisions of threshold negative bid caps of 15 % introduced vide Works Department OM No. 12366/W dt. 08.11.2013 and amended vide Works Department OM No. 1437 dt, 31.01.2023*"
2. If more than one bid is quoted (decimal up to two numbers will be taken for all practical purposes), either at the estimated cost put to tender or less than the estimated cost put to tender, the tender accepting Authority will finalize the tender through a transparent lottery system, where all the concerned bidders/their authorized representatives, the concerned SE/EE of the concerned Division and Divisional Accounts Officer (DAO) will remain present.
3. If the rate quoted by the SC and ST Category Contractors comes to the rate quoted by the L1 bidder(decimal up to two numbers will be taken for all practical purposes) *after availing 10% price preference as per Para 2 of Works Department Resolution No. 27748 dated. 11.10.1977*, the tender shall be finalized by the tender accepting authority through a transparent lottery system along with other categories of contractors.
4. As regards the bidding process in which the tender has been floated before the issue of Works Department Office Memorandum No.173 dt 03.01.2026, the bid shall be finalized as per the earlier provisions in Appendix-IX, Clause 36 of OPWD Code Volume-II.
5. This has been concurred in by the Finance Department in File No. **FIN-WF1-MISC-0102-2025**

By order of the Governor



Principal Secretary to Government

GOVERNMENT OF ODISHA
WORKS DEPARTMENT

No. 4281/W., Bhubaneswar,
07559600052021

Dated 05.03.2025

OFFICE MEMORANDUM

Sub: Preference to Local MSEs/ Start-ups in Procurement of Works

Government in Works Department, in view of the difficulties faced by the Contractors and to facilitate competition in the wake of slow down of economy due to COVID-19 pandemic had exempted local Micro & Small Enterprises (MSEs) and Start-ups from deposit of Bid Security / EMD at the time of participation in tender and also allowed concessional payment of Performance Security @25% of the value of Performance Security to such local Micro & Small Enterprises (MSEs) and Start-ups on being selected in the bidding process vide this Department O.M. No. 503/W dt 17.01.2022.

2. Now, Department of Micro, Small & Medium Enterprises, Government of Odisha have issued Notification No. MSME-IPE-MISC-0060-2019/566/MSME dt 24.01.2024 on "Odisha Procurement Preference Policy for Micro & Small Manufacturing Enterprises" and the said Policy is effective from 24.01.2024. At Para-4 of the said Policy, it is mentioned that the said Policy is not applicable to Procurement of services including works contract (including EPC Contracts).

3. Now, the context and situation basing on which Works Department had issued the O.M. No. 503/W dt 17.01.2022 is no more existing.

4. After careful consideration, Government have been pleased to withdraw this Department O.M. No. 503/W dt 17.01.2022 with effect from the date of issue of the Office Memorandum and accordingly the exemption from deposit of Bid Security/EMD at the time of participation in tender & concessional payment of Performance Security @25% of the value of Performance Security to Local Micro & Small Enterprises (MSEs) and Start-ups as extended vide this Department O.M. No. 503/W dt 17.01.2022 will no more exist w.e.f the date of issue of the Office Memorandum.

5. This Office Memorandum shall be effective from the date of issue. It shall be deemed to be a part of OPWD Code.

Order: Ordered that this shall be published in the next issue of Odisha Gazette.

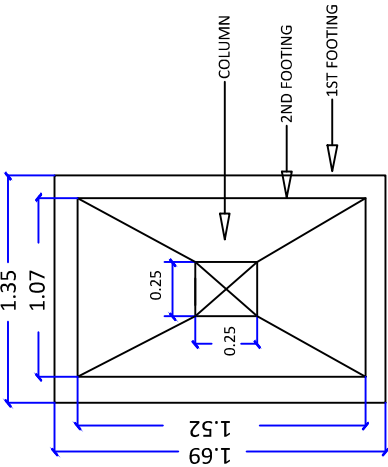
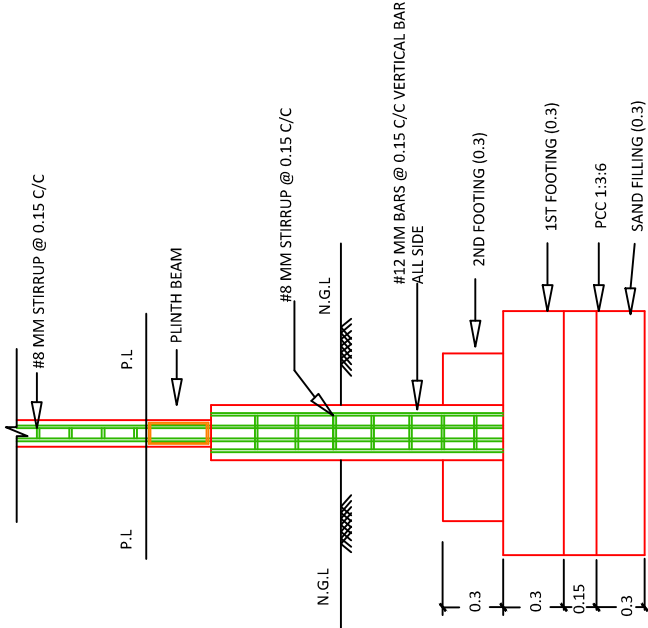
By order of the Governor

(Vir Vikram Yadav, IAS)

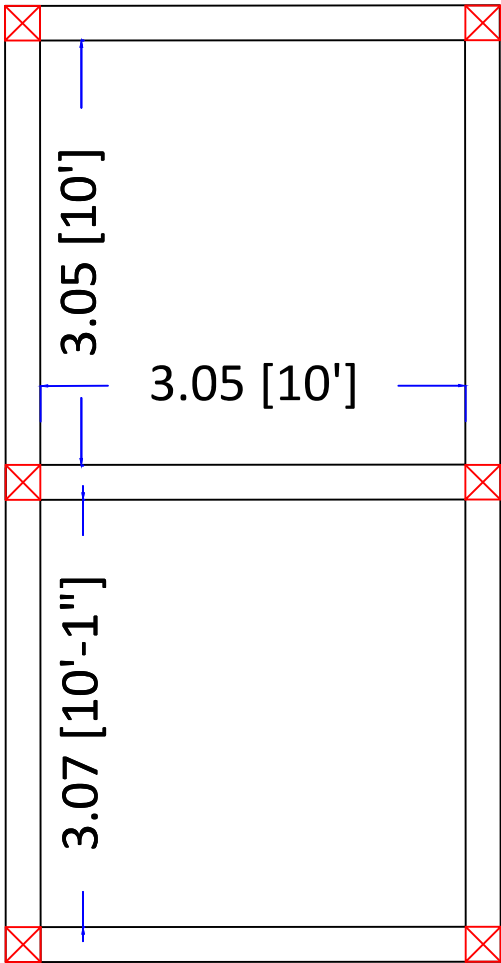
Principal Secretary to Government

NOTES :- 1. ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SPECIFIED 2. ALL DIMENSIONS ARE TO BE CHECKED & VERIFIED BEFORE EXECUTION OF THE WORK 3. THE DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. 4. IF ANY DISCREPANCY FOUND IN THE ARCHITECTURAL & STRUCTURAL DRAWINGS, SHOULD BE BROUGHT TO THE NOTICE OF THIS OFFICE & GOT RECONCILED BEFORE EXECUTION. 5. THIS DRAWING IS A PRIVATE PROPERTY & CONFIDENTIAL DOCUMENTS OF M/S REAL ALIGN ENGINEERING SOLUTIONS PVT. LTD. SO IT MUST NOT BE COPIED OR LENT WITHOUT THEIR CONSENT		
	PROJECT TITLE :- TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT	
	DRAWING TITLE :- CHANGING ROOM PLAN	
	CLIENT :- O.T.D.C	
	SCALE 1 : 1	DATE 27.10.2024
	DRAWN BY NIBEDITA BHOI	CHECKED BY PRONIT KUMAR MISHRA
	CONSULTANTS E-mail : realalignenggnsolutions@gmail.com +91 9853631817 , +91 9778811114 MANGALA LANE, BADAMBADI, CUTTACK	
DRAWING NUMBER AZ / CK / ST / 04		

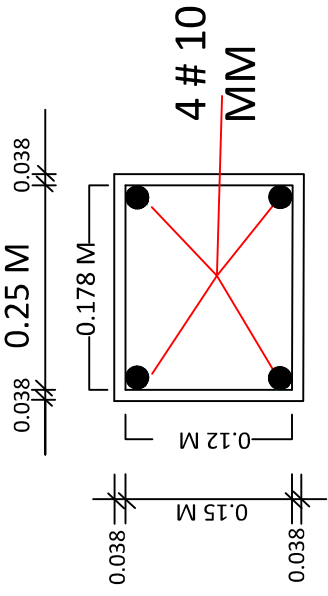
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	PROJECT TITLE :- TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT			
	DRAWING TITLE :- EXCAVATION PLAN OF CHANGING ROOM			
	CLIENT :- O.T.D.C			
	SCALE 1 : 1	DATE 27.10.2024		
	DRAWN BY NIBEDITA BHOI	CHECKED BY PRONIT KUMAR MISHRA		
	CONSULTANTS REAL ALIGN ENGINEERING SOLUTIONS Pvt. Ltd. A Vision to Clear Solutions E-mail : realalignenggsolutions@gmail.com +91 9853631817 , +91 9778811114 MANGALA LANE, BADAMBADI, CUTTACK			
DRAWING NUMBER AZ / CK / ST / 04				

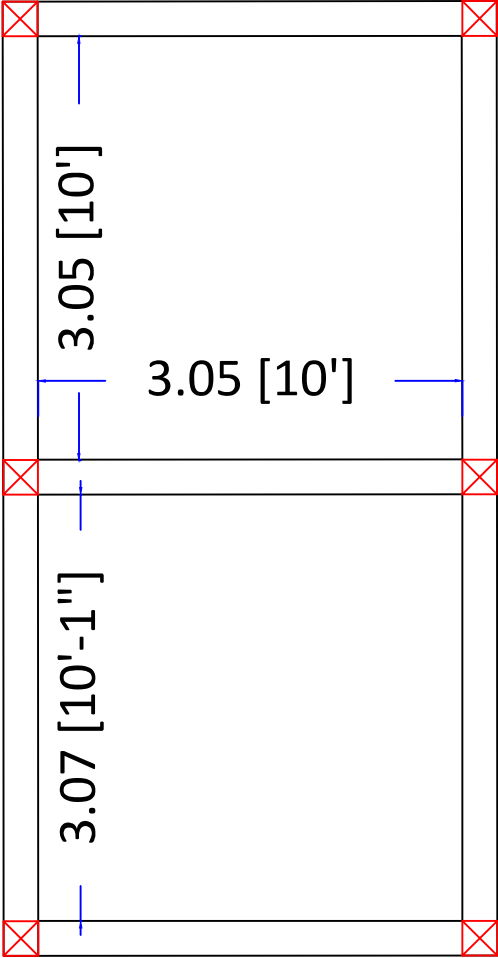
COLUMN (0.25 X 0.25)  PLAN 		NOTES :- - ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SPECIFIED - ALL DIMENSIONS ARE TO BE CHECKED & VERIFIED BEFORE EXECUTION OF THE WORK - THE DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. - IF ANY DISCREPANCY FOUND IN THE ARCHITECTURAL & STRUCTURAL DRAWINGS, SHOULD BE BROUGHT TO THE NOTICE OF THIS OFFICE & GOT RECONCILED BEFORE EXECUTION. - THIS DRAWING IS A PRIVATE PROPERTY & CONFIDENTIAL DOCUMENTS OF M/S REAL ALIGN ENGINEERING SOLUTIONS PVT. LTD. SO IT MUST NOT BE COPIED OR LENT WITHOUT THEIR CONSENT
PROJECT TITLE :- TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT		
DRAWING TITLE :- COLUMN FOOTING CROSS SECTION 0.25 X 0.25		
CLIENT :- O.T.D.C		
SCALE 1 : 1	DATE 27.10.2024	
DRAWN BY NIBEDITA BHOI	CHECKED BY PRONIT KUMAR MISHRA	
CONSULTANTS  E-mail : realaligningsolutions@gmail.com +91 9853631817 , +91 9778811114 MANGALA LANE, BADAMBADI, CUTTACK		
DRAWING NUMBER AZ / CK / ST / 04		

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PROJECT TITLE :- TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT	
DRAWING TITLE :- PLINTH BEAM PLAN 2 OF CHANGING ROOM	
CLIENT :- O.T.D.C	
SCALE 1 : 1	DATE 27.10.2024
DRAWN BY NIBEDITA BHOI	CHECKED BY PRONIT KUMAR MISHRA
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DRAWING NUMBER AZ / CK / ST / 04	



PLINTH BEAM DETAILS

SL. NO.	PLINTH SIZE	LINTEL ID	PLINTH BEAM DETAILS
1	0.25 X 0.38	PB	 The diagram illustrates the cross-section of a Plinth Beam (PB). The overall width is 0.38 M, with 0.038 M on each side. The overall height is 0.25 M, with 0.038 M at the top and bottom. The effective width of the reinforcement cage is 0.12 M, and the effective height is 0.178 M. Four reinforcement bars, labeled 4 # 10 MM, are positioned at the corners of the cage, connected by red diagonal lines. The diagram also shows a 0.15 M dimension for the top reinforcement and a 0.038 M dimension for the bottom reinforcement.

	NOTES :- 1. ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SPECIFIED 2. ALL DIMENSIONS ARE TO BE CHECKED & VERIFIED BEFORE EXECUTION OF THE WORK 3. THE DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. 4. IF ANY DISCREPANCY FOUND IN THE ARCHITECTURAL & STRUCTURAL DRAWINGS, SHOULD BE BROUGHT TO THE NOTICE OF THIS OFFICE & GOT RECONCILED BEFORE EXECUTION. 5. THIS DRAWING IS A PRIVATE PROPERTY & CONFIDENTIAL DOCUMENTS OF M/S REAL ALIGN ENGINEERING SOLUTIONS PVT. LTD. SO IT MUST NOT BE COPIED OR LENT WITHOUT THEIR CONSENT	
	PROJECT TITLE :- TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT	
	DRAWING TITLE :- LINTEL BEAM PLAN 2 OF CHANGING ROOM	
	CLIENT :- O.T.D.C	
	SCALE 1 : 1	DATE 27.10.2024
	DRAWN BY NIBEDITA BHOI	CHECKED BY PRONIT KUMAR MISHRA
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	DRAWING NUMBER AZ / CK / ST / 04	

LINTEL BEAM DETAILS

SL. NO.	LINTEL SIZE	LINTEL ID	LINTEL BEAM DETAILS
1	0.25 X 0.15	LB 1	
2	0.125 X 0.15	LB 2	

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PROJECT TITLE :- TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT	
DRAWING TITLE :- ROOF BEAM PLAN 2 OF CHANGING ROOM	
CLIENT :- O.T.D.C	
SCALE 1 : 1	DATE 27.10.2024
DRAWN BY NIBEDITA BHOI	CHECKED BY PRONIT KUMAR MISHRA
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DRAWING NUMBER AZ / CK / ST / 04	

3.07 [10'-1"]

3.05 [10']

3.05 [10']

ROOF BEAM DETAILS

SL. NO.	ROOF SIZE	LINTEL ID	ROOF BEAM DETAILS
1	0.25 X 0.38	RB	

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PROJECT TITLE :- TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT	
DRAWING TITLE :- FOOTING PLAN OF TOILET BLOCK	
CLIENT :- O.T.D.C	
SCALE 1 : 1	DATE 27.10.2024
DRAWN BY NIBEDITA BHOI	CHECKED BY PRONIT KUMAR MISHRA
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DRAWING NUMBER AZ / CK / ST / 04	

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

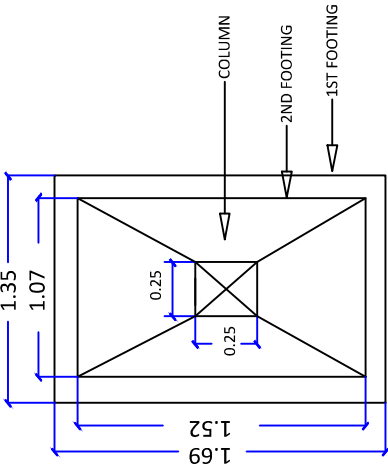
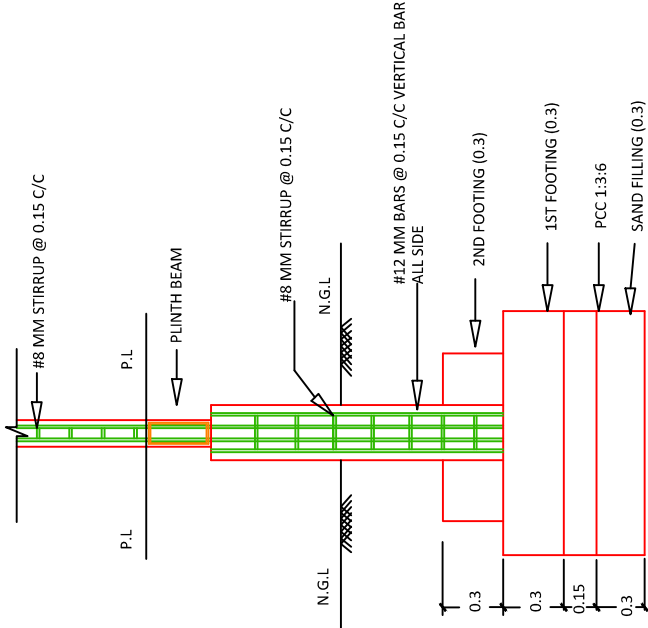
1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

1.23 [4']

1.05 [3'-5"]

COLUMN (0.25 X 0.25)  PLAN 		NOTES :- 1. ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SPECIFIED 2. ALL DIMENSIONS ARE TO BE CHECKED & VERIFIED BEFORE EXECUTION OF THE WORK 3. THE DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. 4. IF ANY DISCREPANCY FOUND IN THE ARCHITECTURAL & STRUCTURAL DRAWINGS, SHOULD BE BROUGHT TO THE NOTICE OF THIS OFFICE & GOT RECONCILED BEFORE EXECUTION. 5. THIS DRAWING IS A PRIVATE PROPERTY & CONFIDENTIAL DOCUMENTS OF M/S REAL ALIGN ENGINEERING SOLUTIONS PVT. LTD. SO IT MUST NOT BE COPIED OR LENT WITHOUT THEIR CONSENT	
PROJECT TITLE :- TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT		DRAWING TITLE :- COLUMN FOOTING CROSS SECTION 0.25 X 0.25	
CLIENT :- O.T.D.C		SCALE 1 : 1	DATE 27.10.2024
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DRAWING TITLE :- PLINTH BEAM PLAN 1 OF TOILET BLOCK	
CLIENT :- O.T.D.C	
SCALE 1 : 1	DATE 27.10.2024
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DRAWING NUMBER AZ / CK / ST / 04	

PB 0.25M X 0.38M

PB 0.25M X 0.38M

PB 0.25M X 0.38M

PB 0.25M X 0.38M

PB 0.25M X 0.38M

PB 0.25M X 0.38M

PB 0.25M X 0.38M

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PB 0.25M X 0.38M

PB 0.25M X 0.38M

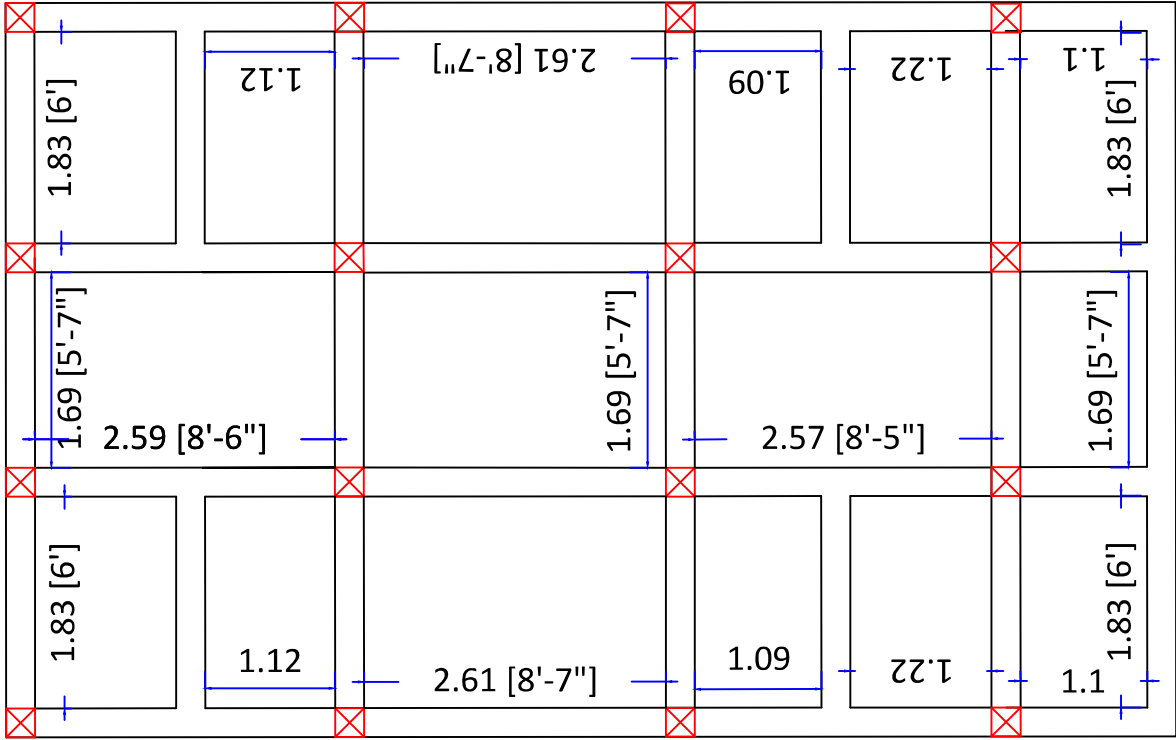
PB 0.25M X 0.38M

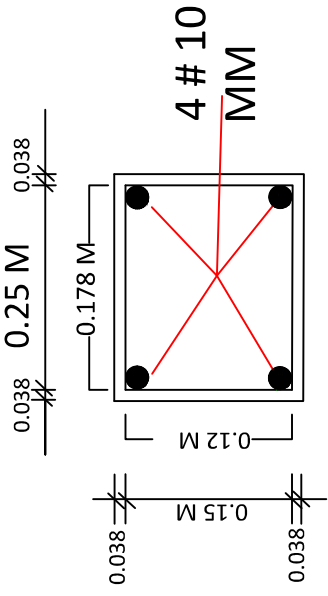
PB 0.25M X 0.38M

PB 0.25M X 0.38M

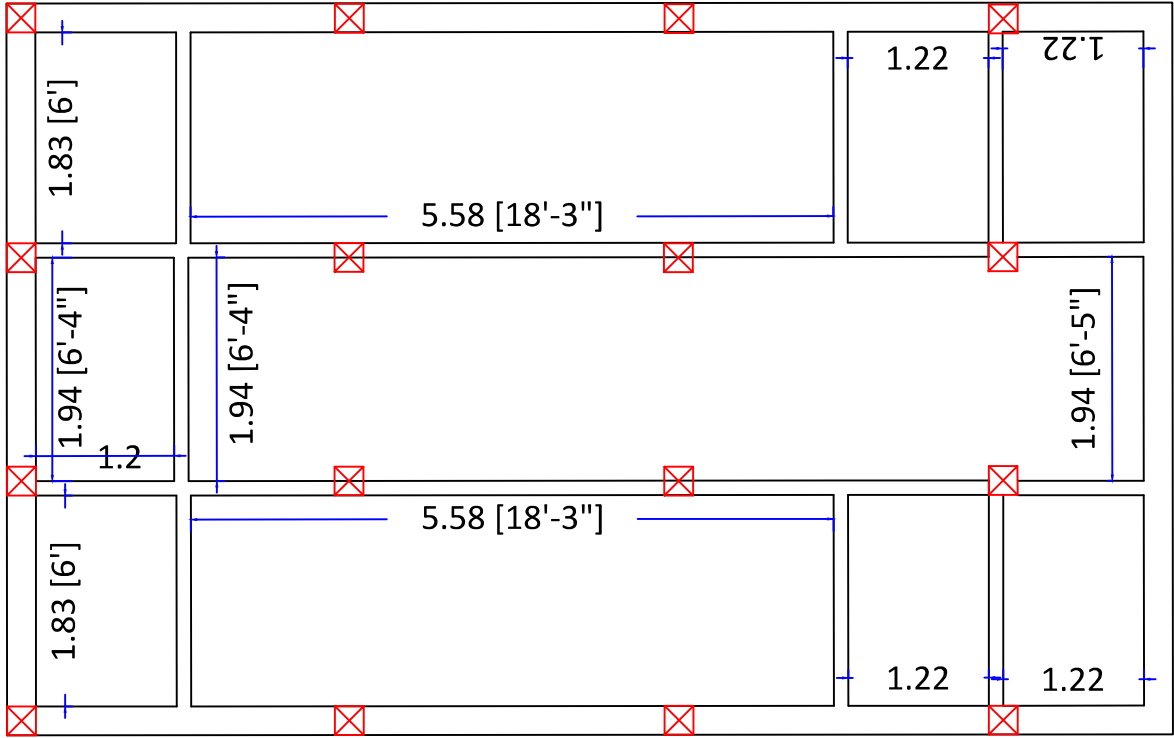
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PROJECT TITLE :-		TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT
DRAWING TITLE :-		PLINTH BEAM PLAN 2 OF TOILET BLOCK
CLIENT :-		O.T.D.C
SCALE	1 : 1	DATE 27.10.2024
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CONSULTANTS		 REAL ALIGN ENGINEERING SOLUTIONS Pvt. Ltd. A Vision to Clear Solutions E-mail : realalignenggnsolutions@gmail.com +91 9853631817 , +91 9778811114 MANGALA LANE, BADAMBADI, CUTTACK
DRAWING NUMBER		AZ / CK / ST / 04



PLINTH BEAM DETAILS			
SL. NO.	PLINTH SIZE	LINTEL ID	PLINTH BEAM DETAILS
1	0.25 X 0.38	PB	 The diagram illustrates the cross-section of a rectangular plinth beam. The overall width is 0.38 M, with 0.038 M segments on each side. The overall height is 0.25 M, with 0.038 M segments at the top and bottom. The internal clear width is 0.12 M and the internal clear height is 0.178 M. Four reinforcement bars, labeled '4 # 10 MM', are positioned at the corners of the internal section, connected by red diagonal lines. The beam is shown resting on a foundation with a 0.15 M depth and 0.038 M width on each side.

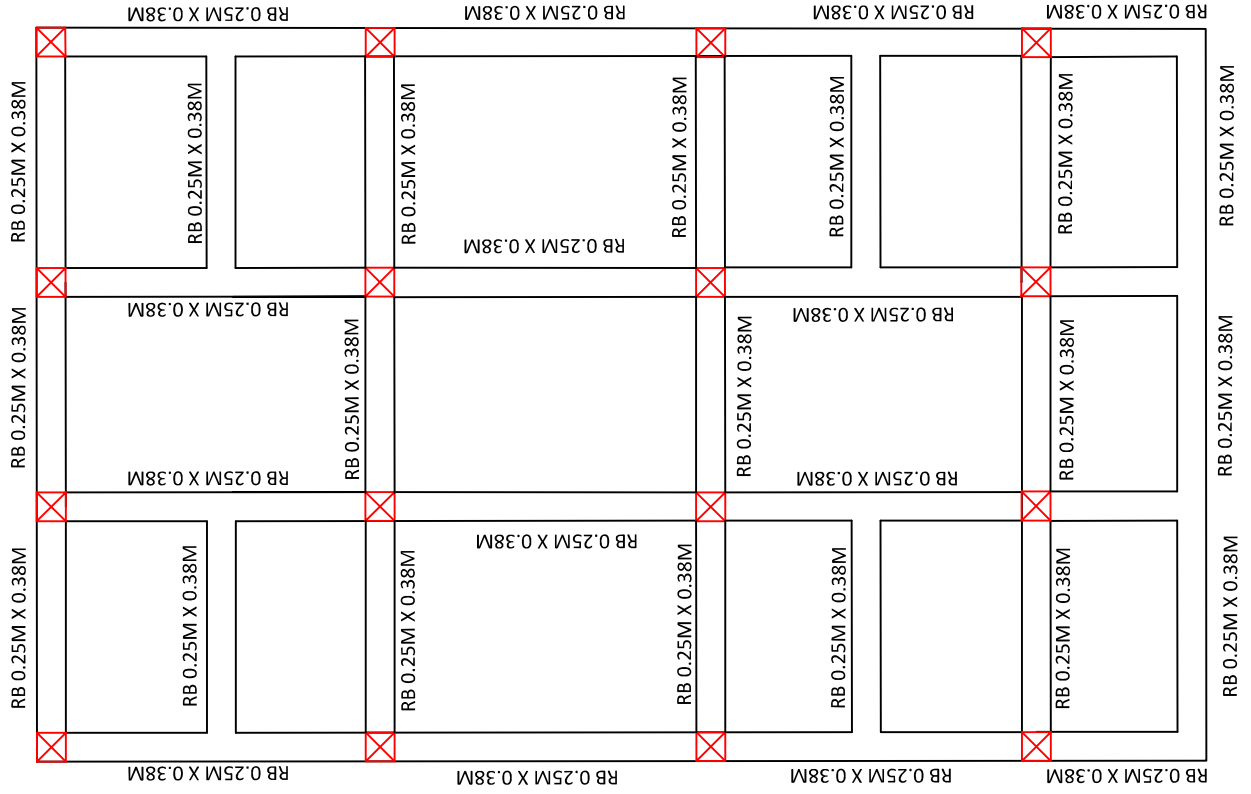
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PROJECT TITLE :-		TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT
DRAWING TITLE :-		LINTEL BEAM PLAN 2 TOILET BLOCK
CLIENT :-		O.T.D.C
SCALE	1 : 1	DATE 27.10.2024
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DRAWING NUMBER		AZ / CK / ST / 04



LINTEL BEAM DETAILS

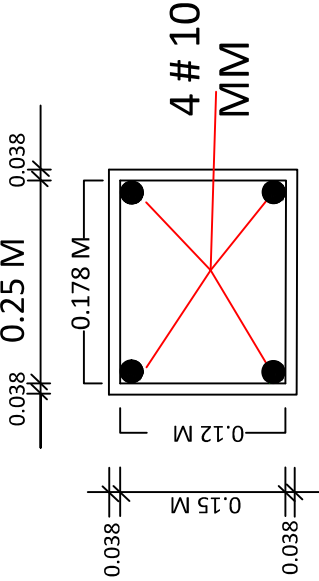
SL. NO.	LINTEL SIZE	LINTEL ID	LINTEL BEAM DETAILS
1	0.25 X 0.15	LB 1	
2	0.125 X 0.15	LB 2	

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PROJECT TITLE :- TOURISM INFRASTRUCTURE DEVELOPMENT OF SATAPADA IN PURI DISTRICT	
DRAWING TITLE :- ROOF BEAM PLAN 1 OF TOILET BLOCK	
CLIENT :- O.T.D.C	
SCALE 1 : 1	DATE 27.10.2024
DRAWN BY NIBEDITA BHOI	CHECKED BY PRONIT KUMAR MISHRA
CONSULTANTS  REAL ALIGN ENGINEERING SOLUTIONS Pvt. Ltd. A Vision to Clear Solutions E-mail : realalignenggnsolutions@gmail.com +91 9853631817 , +91 9778811114 MANGALA LANE, BADAMBADI, CUTTACK	
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DRAWING NUMBER AZ / CK / ST / 04	

The drawing is a rectangular roof beam plan for a toilet block. It features a central rectangular area with a grid of dimensions. The overall width is 1.69 [5'-7"] and the overall height is 1.69 [5'-7"]. The central area is divided into four quadrants by a horizontal and a vertical line. The dimensions for the quadrants are: Top-Left: 1.12 x 1.12; Top-Right: 1.09 x 1.09; Bottom-Left: 1.22 x 1.22; Bottom-Right: 1.1 x 1.1. The dimensions for the outer sections are: Top-Left: 1.83 [6'] x 1.69 [5'-7"]; Top-Right: 1.83 [6'] x 1.69 [5'-7"]; Bottom-Left: 1.83 [6'] x 1.69 [5'-7"]; Bottom-Right: 1.83 [6'] x 1.69 [5'-7"]. The dimensions for the central area are: Top-Left: 1.12 x 1.12; Top-Right: 1.09 x 1.09; Bottom-Left: 1.22 x 1.22; Bottom-Right: 1.1 x 1.1. The dimensions for the outer sections are: Top-Left: 1.83 [6'] x 1.69 [5'-7"]; Top-Right: 1.83 [6'] x 1.69 [5'-7"]; Bottom-Left: 1.83 [6'] x 1.69 [5'-7"]; Bottom-Right: 1.83 [6'] x 1.69 [5'-7"].

ROOF BEAM DETAILS			
SL. NO.	ROOF SIZE	LINTEL ID	ROOF BEAM DETAILS
1	0.25 X 0.38	RB	 The diagram illustrates the cross-section of a roof beam. The total width is 0.25 M, with 0.038 M on each side. The total height is 0.38 M, with 0.038 M at the top and bottom. The effective depth is 0.178 M. The bottom reinforcement consists of 4 # 10 bars. The top reinforcement is shown as two bars. The beam is supported on two walls, each 0.15 M wide. The distance between the centerlines of the supports is 0.12 M.