



GOVERNMENT OF ODISHA
PANCHAYATI RAJ & D.W DEPARTMENT

COVER-I

TECHNICAL BID DOCUMENTS/DETAILED TENDER CALL NOTICE FOR THE WORK

“Construction of new building for RWS&S Sub-Division & Section office
Boipariguda under Boipariguda Block in the district of Koraput.”

(COMPOSITE TENDER)

Approximate Estimated Cost Put to Tender: Rs.112.85 Lakh (Excluding GST)



ଅତିରିକ୍ତମୁଖ୍ୟଯନ୍ତ୍ରୀଙ୍କକାର୍ଯ୍ୟାଳୟ
ଗ୍ରାମ୍ୟ ପାନୀୟଜଳ ଯୋଗାଣ ଓ ପରିମଳ ମଣ୍ଡଳ, କୋରାପୁଟ
OFFICE OF THE ADDITIONNAL ENGINEER
RURAL WATER SUPPLY & SANITATION CIRCLE, KORAPUT

ଡି.ଏନ୍. କେ. ରୋଡ୍ ଦମକଳ ଷ୍ଟେସନ୍
ପାର୍ଶ୍ବକୋରାପୁଟ, ପିନ୍ - ୭୬୪୦୨୦

At- D.N.K Road, Beside Fire Station
Koraput, Pin-764020
Email-acerwsskpt@gmail.com

Tender Identification No.07 /ACE/RWSS/KPT/2026-27/11.09.2026

The Additional Chief Engineer, RWS&S Circle, Koraput on behalf of the Governor of Odisha invites Percentage Rate Bids in Double cover (P1 contract) from the eligible class of experienced registered contractors through e-Tendering system for the Piped water supply works as detailed in DTCN. The bid should be submitted on-line in the website www.tenderorissa.gov.in separately for the works.

1	Nature of work.	Construction of new building for RWS&S Sub-Division & Section office Boipariguda under Boipariguda Block in the district of Koraput.
2	Time period for completion	Nine (09) Months.
3	Estimated Cost.	112.85 lakhs
4	Total Nos of works	1 nos.
5	Tender cost	Rs.10,000.00
6	Class of Contractor.	"B" & "A"
7	Availability of Bid document in the web site	Dt. 21.09.2026 at 17.00 hours to 30.09.2026 up to 17.00 hours.
8	Date of Seeking clarification.	During the Office hours of 29.09.2026
9	Date of Opening of Bid.	Dt. 01.10.2026 at 11.00 AM

Further details can be seen in the bidding documents which is available in the e-procurement portal <https://www.tendersorissa.gov.in> Subsequent corrigendum if required shall be appeared in the web site Authority reserves the right to reject any or all tenders without assigning any reason thereof.

Sd/-
Addl. Chief Engineer,
RWS&S Circle , Koraput

Memo No. 1291

Dated: 11.09.2026

Copy in duplicate & one soft copy forwarded to the Deputy Director, Information & Public Relation Department, Odisha, Bhubaneswar for information with a request to arrange publication of this tender once in One leading Oriya dailies and one English national daily newspaper. Advertisement Manager may kindly be requested to communicate the copies of the advertisement to this office immediately after publication for record & reference at this end (Approximate total Estimated value of all works of the tender is Rs. 112.85 (Lakhs)

Sd/-
Addl. Chief Engineer,
RWS&S Circle , Koraput

P.T.O

Memo No. 1292 Dated: 11.09.2026

Copy with soft copy submitted to the Director, information & Technology Deptt., Secretariate, Bhubaneswar to post this tender call notice in State Govt. web site for wide publication so as to make the tender competitive. The BID document may also be posted in Govt. web site www.orissa.gov.in to enable prospective bidders to down load it from internet.

Sd/-
Addl. Chief Engineer,
RWS&S Circle , Koraput

Memo No. 1293 Dated: 11.09.2026

Copy along with soft copy forwarded to the DIO, NIC, Koraput, for his information and with a request to publish the tender call notice in the district website.

Sd/-
Addl. Chief Engineer,
RWS&S Circle , Koraput

Memo No. 1294 Dated: 11.09.2026

Copy submitted to the:

1. Engineer-in-Chief, RWS&S Odisha , Bhubaneswar
2. Engineer-in-Chief, P.H(Urban) Odisha , Bhubaneswar
3. All Addl. Chief Engineer, RWS&S Circle/ PH Circle.
4. Addl. Chief Engineer, PMD&I Circle, Bhubaneswar
5. Addl. Chief Engineer, RWPH Circle, Bhubaneswar
6. Addl. Chief Engineer, GPH Circle, Bhubaneswar
7. Collector & District Magistrate Koraput/ Project Director, DRDA , Koraput with request to display this Call notice in their office notice board for wide publicity.
8. All Superintending Engineers,/EE RWS&S Division.
9. All Superintending Engineers,/EE, P.H(Urban) Division.
10. Superintending Engineers, R&B. Division, Koraput
11. Superintending Engineers, RW Division, Koraput
12. Superintending Engineers, RW (PH) Division, Bhubaneswar
- 6 All Superintending Engineers, RWS&S Mechanical Division.
- 7 All Superintending Engineers, GPH Division.
- 8 Asst. Executive Engineer, RWS&S Sub-Division, Jeypore / Laxmipur/ Boipariguda/ Koraput.
- 9 All Junior Engineers under this RWS&S Division with request to display this Call notice in their office notice board for wide publicity.
- 10 D.A.O/Estimating Branch/ Head Clerk/ Cashier/ Office notice board for information and necessary action(extra copy 10 nos)

Sd/-
Addl. Chief Engineer,
RWS&S Circle , Koraput

CONTRACT DATA**A. GENERAL INFORMATION**

SINo	Item	Details
1	Bid Identification No.	07/ACE/RWS&S/KPT/2026-27/11.09.2026
2	Name of the Work	"CONSTRUCTION OF NEW BUILDING FOR RWS&S SUB-DIVISION & SECTION OFFICE BOIPARIGUDA UNDER BOIPARIGUDA BLOCK IN THE DISTRICT OF KORAPUT."
3	Officer Inviting Tender	Additional Chief Engineer, RWS&S Circle, Koraput
4	Executive/Supervising Engineer concerned with headquarters authorized as Engineer-in-charge of this work.	Executive Engineer, RWS&S Division, Koraput
5	Estimated Cost (Rs.)	112.85 lakhs (Excluding GST)
6	Eligible Class of Contractor	'B' & 'A' Class contractors registered with the State Government and contractors of equivalent Grade/Class registered with Central Government/MES/Railways for execution of Civil works.

B. BID INFORMATION

7	Intended completion period/Time period assigned for Completion	09(Nine) Calendar Months
8	Availability of Bid Document in Official Web-Site	From official website of Government: https://tendersodisha.gov.in From 17.00 hours of 21.09.2026 To 17.00 hours of 30.09.2026
9	Last Date & time of submission of Bid	17.00 hours Date-30.09.2026
10	Cost of Bid Document (Clause No-4 of DTCN)	
	i Bank draft amount (online)	Rs.10,000/- To be remitted online.
11	Bid Security (Clause No-6 of DTCN)	
	i Amount (online)	Rs.1,13,000/- (Online)
	ii In favour of	----
	iii Payable to	----
	iv Type of instrument	As specified in the bid document
12	Bid validity period	180 days
13.	Minimum period of contract / agreement / lease deed of equipment and machineries as per Clause No. 10 (iv) of DTCN	09(Nine) Months
14	Clause No-116 of DTCN Qualifying Criteria	
(i)	Similar Nature of work as per Clause 116(i) of DTCN	Completion of new work of Rs. 45.14 lakh (Excluding GST) (i.e. 40% of estimated cost at SL5)

		BaseYear=2026-27 SimilarnatureofWorkmeans:-Constructionof R.C.C M-20/M25/M30 or above grade RCC Framed Building including EI & GPH work (Or) Execution of PUF Insulated Roof Panel including EI & GPH work (Composite Tender)
(ii)	Clause No-116 (ii) of DTCN: - Minimum requirement of annual turnover of Civil construction works (BaseYear).	40% of the estimated cost mentioned at sl no-5
(iii)	Clause No-116 (iii) of DTCN: Required Bid Capacity is to be more than the Estimated cost of the work	1. EstimatedCostoftheWorkasmentionedatSl.5 above. 2. BaseYear—asmentionedatSl.14(i)above 3. PeriodofCompletionofWorkasmentionedatSl.7 above.
15	119 Clause—Signing of Bids	Digital Signature on each page of the document uploaded by the bidder is mandatory.
16	Currency of payment for Contract	Indian Rupee
17	Language of Contract	English

Guidelines / Procedure to be followed in e-procurement as per Works Department, Government of Odisha office Memorandum No.7885 Dt.23.07.2013 / Instruction to bidder

The following shall be made part of the detailed tender call notice.

Appendix-IX(A) of OPWD Code, Vol-II

Executive instructions regarding calling for and acceptance of tenders in e-Procurement.

1. This office memorandum consists of the procedural requirement of e-procurement and shall be made part of the Detailed Tender Call Notice or Instruction to Bidder for all works” tenders hoisted in the portal.
2. The e-procurement portal of Government of Odisha is “<https://tendersodisha.gov.in>”.
3. Use of valid Digital Signature Certificate of appropriate class (Class II or class III) issued from registered certifying authorities (CA) as stipulated by Controller of certifying Authorities (CCA), Government of India such as n-Code, Sify, TCS, MTNL, e-Mudhra is mandatory for all users.
4. The DSC issued to the Department users is valid for the period of two years only All the Department users are responsible to revalidate their DSC prior to expiry.
5. For all purpose, the server time displayed in the e-Procurement portal shall be the time to be followed by all the users.
6. Government after careful consideration have decided to hoist all tenders costing 10 lakhs or above in the e-procurement portal. This will be applicable across all Engineering Departments such as Works Department, Department of Water Resources, Rural Development and Housing & Urban Development Department. Government of Odisha also welcomes hoisting of tenders by any other departments, authority, corporations, and local bodies etc. of the State with prior approval from Works Department. Works Department is the Nodal Department for the implementation of e-Procurement in the State.
7. The e-procurement shall be operated compliant to relevant provisions of OGFR/ OPWD code / Accounts code / Government statutes including any amendments brought from time to time to suit to the requirement of the best national practice.
8. Registration in the e-Procurement portal is without levy of any charges but Government reserves the right to levy

any charges for such value added services in future.

9. Contractor not registered 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 State Government before award of the work as per prevalent registration norms of the State.

10. For the role management “Department” is the Administrative Department, Organization or wing is the Chief Engineer or highest tender accepting authority or equivalent officer, Division is the Executive Engineer or equivalent Officer and Subdivision is the Assistant Engineer or equivalent officer.

11. The e-Procurement software assigns roles for operation of the module for specific function. The terminologies used in the portal and their respective functions in the software are as follows.

11.1 Application Administrator (NIC & State Procurement Cell)

I. Master Management

ii. Nodal Officer Creation

iii. . Report Generation

iv. Transfer of Officer's login ID.

v. Blocking & unblocking of officer's and bidder's login ID.

11.2 Nodal Officer (At organization level not below the Superintending Engineer or equivalent rank)

I. Creation of Users

ii. Role Assignment

iii. Report Generation

iv. Transfer of Officer's login ID.

v. Blocking & unblocking of officer's Login ID.

11.3 Procurement Officer-Publisher (Officer having tender inviting power at any level)

i. Publishing of Tender

ii. Publishing of Corrigendum/addendum/cancellation of Tender

iii. Bid Clarification

iv. Uploading of Pre-Bid minutes.

v. Report generation.

11.4 Procurement Officer-Administrator (Generally sub-ordinate officer to Officer inviting Tender)

i. Creation of Tender

ii. Creation of Corrigendum/addendum/cancellation of Tender

iii. Report generation.

11.5 Procurement Officer Opener (Generally sub-ordinate officer to Officer Inviting Tender)

i. Opening of Bid

11.6 Procurement Officer Evaluator (Generally Sub-ordinate Officer to Officer Inviting Tender)

i. Evaluating Bid

11.7 Procurement Officer-Auditor (Procurement Officer Publisher and/or Accounts Officer/Finance Officer)

i. To take up auditing

12. NOTICE INVITING BID (NIB) or INVITATION FOR BID (IFB):

12.1 The Notice Inviting Bids (NIB) and Bid documents etc., shall be in the Standard formats as applicable to conventional Bids and will be finalized / approved by the officers competent as in the case of conventional Bids.

12.2 The officers competent to publish NIB in case of conventional Bids will host the NIB in portal.

Simultaneously,

an notification should also be published in the newspapers, as per existing rules preferably, in the following format, to effect economy:-

Government of Odisha “e” procurement N

otice Bid Identification No .-----

-
1. Name of the work:.....
 2. Estimated cost: Rs.....
 3. Period of completion.....
 4. Date & Time of availability of bid document in the portal
 5. Last Date/Time for receipt of bids in the portal
 6. Name and address of the O.I.T.:.....

Further details can be seen from the e-procurement portal <https://tendersodisha.gov.in>

12.3 The tender documents published by the Tender Inviting Officer (Procurement Officer Publisher) in the website <https://tendersodisha.gov.in> will appear in the “Latest Active Tender”. The Bidders/Guest Users can download the Bid documents only after the due date & time of sale. The publication of the tender will be for specific period of time till the last date of submission of bids as mentioned in the ‘Notice inviting Bid’ after which the same will be removed from the list of “Latest Active tenders”.

13. ISSUE OF ADDENDA/CORRIGENDA/CANCELLATION NOTICE:

13.1 The Procurement Officer Publisher (Officer inviting Tender) shall publish any addendum/corrigendum /cancellation of tender in the website <https://tendersodisha.gov.in>, notice board and through paper publication and such notice shall form part of the bidding documents.

13.2 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 watch 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.

14. CREATION AND PUBLISHING OF BID:

14.1 All the volumes/documents shall be uploaded in the portal by the tender creating officer (Procurement Officer Administrator) and published by the Officer inviting Tender (Procurement Officer Publisher) using their DSCs in appropriate format so that the document is not tampered with

14.2 The tender document comprise the notice inviting tender, bid document/SBD, drawings in .pdf format and the schedule of quantities / BoQ in .xls format to be uploaded by the Officer inviting Tender.

14.3 Procurement Officer Administrator create tender by filling up the following forms:

I. BASIC DETAILS

II. COVER CONTENT: The Procurement officer Administrator should briefly describe the name and type of documents to be uploaded by the bidder in the following format:

(a) For Single Cover/Packet:

Sl.No.	Cover Type	Document Description	Type
1	Fee/Prequal/Technical/Finance	Tender Cost, EMD, GST Registration Certificate and GSTIN, PAN, Contractor RC	.pdf
		Affidavits, undertakings and any other documents as per SBD/DTCN.	.Pdf

(b) For Two Cover/Packet:

Sl.No.	Cover Type	Document Description	Type
1	Fee/Prequal/	Tender Cost, EMD, GST Registration Certificate and GSTIN, PAN, Contractor RC	.pdf
	7	BOQ	.xls

	Technical	Affidavits, undertakings and any other documents as per SBD/DTCN	.pdf
2	Finance	BOQ	.xls

iii. TENDER DOCUMENT: - The Procurement Officer Administrator should upload the NIT in .pdf format.

iv. WORK ITEM DETAILS

v. FEE DETAILS: The Procurement Officer Administrator should mention the cost of tender paper and EMD amount as laid down in DTCN/SBD.

vi. CRITICAL DATES: The Procurement Officer Administrator should mention the critical dates of tender such as publishing date, document download start date & end date, seek clarification start date & end date (optional), bid submission start date & closing date, bid opening date as per DTCN/SBD.

vii. BID OPENER SELECTION: The Procurement Officer creator can select two / three / four bid openers for a particular bid. If required the bid openers can also be selected within an organization from other procurement units (Circles / Divisions).

viii. WORK ITEM DOCUMENTS: The Procurement Officer Administrator should upload the digitally signed tender document (SBD/DTCN) or any other addition document/drawings in .pdf format and Bill of Quantities in .xls format.

ix. PUBLISHING OF TENDER: The Procurement Officer Publisher shall publish the tender using his/her DSC after detail scrutiny of the fields created and documents uploaded by the Procurement Officer Administrator. Procurement Officer Publisher can publish tenders for multiple procurement units using multiple DSCs procured for each post separately. After being relieved from the additional charges he has to surrender the additional DSCs to the Nodal Officer of the concerned 10alvanized10o.

15. PARTICIPATION IN BID:

15.1 PORTAL REGISTRATION: 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/her Login ID and attach his/her valid Digital signature certificate (DSC) to his/her unique Login ID. 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 PAN and (ii) Registration Certificate (RC) / GST Registration Certificate (for procurement of goods) of the concerned bidder. The time period of validity in the portal is at par with validity of RC. Any change of information by the bidder is to be re-authenticated by the State Procurement Cell. After successful authentication bidder can participate in the online bidding process.

15.1.1 Bidders participating through Joint Venture shall declare the 10 authorized signatory through Memorandum of Understanding duly registered and authorized 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 10 authorized signatory is used in the portal.

15.1.2 Any third party/company/person under a service contract for operation of e-Procurement system in the State or his/her subsidiaries or their parent companies shall be ineligible to participate in the procurement process that 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.

15.2 DOWNLOADING OF BID: 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 before the closing date and time of submission.

8

15.3 CLARIFICATION ON BID: 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.

15.4 PREPARATION OF BID

15.4.1 The bids may consist of general arrangements drawings or typical or any other drawings relevant to the work for which bid has been invited. Bidder may download these drawings and take out print for detail study and preparation of his bid. Any other drawings and documents pertaining to the works available with the Officer inviting the bid will be open for inspection by the bidders.

15.4.2 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.

15.5 PAYMENT OF EMD/BID SECURITY AND COST OF BID DOCUMENTS:

(Amendment vide Works Department Office Memorandum-14468 dt. 20.09.2018 Govt. of Odisha.)

15.5.1 The Bidder shall furnish, as part of his Bid, a Bid security for the amount mentioned under NIT/Contract Data. The bidder shall scan all the written/printed pages of the bid security and upload the same in portable document format (PDF) to the system in designated place of the technical BID. Furnishing scanned copy of such documents is mandatory otherwise his/her bid shall be declared as non-responsive and liable for rejection.

15.5.2 The EMD or Bid Security i.e. Bid Security Declaration form (Schedule-K) as per F.D O.M No.8943 dtd. 18.03.2021 and as per clause No. 06 of DTCN.

15.5.3 "Security for the due fulfillment of a contractor should invariably be taken. The security may be taken in shape of N.S.C/Post Office Savings Bank Account/Post Office Time Deposit Account/Kissan Vikas Patra/Bank Guarantee in favour of the Divisional Officer from any Nationalized/Scheduled Bank in India counter Guaranteed by its local branch at Bhubaneswar towards E.M.D/Initial Security Deposit/any other security deposit from the contractor or Supplier". (For EMD Clause No 06 of DTCN should be referred.)

15.5.4 The Fixed Deposit / Bank Guarantee or any other form as mentioned in detailed tender call notice in respect of Earnest Money Deposit / Bid Security and the Bank Draft in respect of cost of Bid are to be scanned and uploaded in portable document format (PDF) along with the bid. (Not Required)

15.5.5 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. 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 3 years and will be black listed by the competent authority. In such a 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.

15.5.6 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.

15.5.7 Government of Odisha has been actively considering integrating 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 shall be issued separately after it is established.

16. SUBMISSION OF BID:

16.1 The bidder shall carefully go through the tender and prepare the required documents. The bid shall have a Technical Bid & a Financial Bid. The Technical bid generally consists of cost of Bid documents, EMD/Bid Security, PAN Card, GST Registration Certificate, 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.

16.2 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 item 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.

16.3 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.

16.4 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 item(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 place only in case of percentage rate tender.

16.5 The bidder shall log on to the portal with his/her DSC and move to the desired tender for uploading the documents in appropriate place one by one simultaneously checking the documents.

16.5.1 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 summary 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.

16.5.2 Each process in the e-procurement is time stamped and the system can detect the time of log in of each user including the Bidder.

16.5.3 The Bidder should ensure clarity/legibility of the document uploaded by him to the portal.

16.5.4 The system shall require all the mandatory forms and fields filled up by the contractor during the process of submission of the bid/tender.

16.5.5 The bidder should check the system generated confirmation statement on the status of the submission.

16.5.6 The Bidder should upload sufficiently ahead of the bid closure time to avoid traffic rush and failure in the network.

16.5.7 The Tender Inviting Officer is not responsible for any failure, malfunction or breakdown of the electronic system used during the e-procurement process.

16.5.8 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 drawings 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.

16.5.9 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 bids declared as a holiday for the Officer Inviting the Bid.

16.6 SIGNINGOFBID:

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 & his registration in the portal shall be blocked and the bidder is liable to be blacklisted.

17. SECURITYOFBIDSUBMISSION:

17.1 AllbiduploadedbytheBiddertotheportalwillbeencrypted

17.2 The encrypted Bid can only be decrypted /opened by the authorizedopeners on or after the due date and time.

18. RESUBMISSIONANDWITHDRAWALOFBIDS:

18.1 Resubmission of bid by the bidders for any number of times before the final date and time of submission is allowed.

18.2 Resubmissionofbidshallrequireuploadingofalldocumentsincludingpricebidafresh.

18.3 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.

18.4 The bidder should avoid submission of bid at thelast moment to avoidssystem failureormalfunction of internet or traffic jam or power failure etc.

18.5 The Bidder can withdraw his bid before the closure date and time of receipt of the bid by uploading scanned copy of a letter addressing to the Procurement Officer Publisher (Officer Inviting Tender) citing reasons for withdrawal. The system shall not allow any withdrawal after expiry of the closure time of the bid.

19. OPENINGOFTHEBID:

19.1 Bid opening date and time is specified during tender creation or can be extended through corrigendum. Bids cannot be opened before the specified date & time.

19.2 Allbidopenershavetolog-ontotheportalto decryptthebidsubmittedbythebidders.

19.3 The bidders & guest users can view the summary of opening of bids from any system. Contractors are not required to be present during the bid opening at the opening location if they so desire.

19.4 In the event of the specified date of bid opening being declared a holiday for the Officer inviting the Bid, the bids will be opened at the appointed time on the next working day.

19.5 Combinedbidsecurityformorethanoneworkisnotacceptable.

19.6 The electronically submitted bids may be permitted to be opened by the predefined Bid opening officer from theirnew locationif they aretransferred after the issue ofNotice invitingBid andbefore bid opening. Further, action on bid documents shall be taken by the new incumbent of the post.

19.7 In case of non-responsive tender the officer inviting tender should complete the e-Procurement process by uploading the official letter for cancelled / re-tender.

19.8 In case of anycomplainregarding the bid of any Bidder, should be lodged within03(Three)days from the dateof opening of the Bid, otherwise it will not be entertained.

20. EVALUATIONOFBIDS

20.1 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 containingnos of pages".

20.2 The bidder may be asked in writing/ online (in their registered e-mails) to clarify on the uploaded documents provided in the Technical Bid, if necessary, with respect to any doubts or illegible documents. 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 Bidder's 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.

20.3 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.

20.4 The Technical evaluation of all the bids shall be carried out as per information furnished by Bidders.

20.5 The Procurement Officer-Evaluators, will evaluate bid and finalize list of responsive bidders.

20.6 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.

20.6.1 The Financial Bid will be opened on the notified date & time in the presence of bidders or their 14 authorized representative who wish to be present.

20.6.2 At the time of opening of "Financial Bid", bidders whose technical bids were found responsive will be opened.

20.6.3 The responsive bidders' name, bid prices, item wise rates, total amount of each item in case of item rate tender and percentage above or less in case of percentage rate tenders will be announced.

20.6.4 Procurement Officer-Openers shall sign one each page of the downloaded BoQ and the Comparative Statement and furnish a certificate to that respect.

20.6.5 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.

20.6.6 System provides an option to Procurement Officer/Publisher for reconsidering the rejected bid with the approval of concern Chief Engineer /Head of Department.

21. NEGOTIATION OF BIDS:

21.1 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 breakdown of unit rates

22. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT:

22.1 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 & completion of the Works by the contractor as prescribed by the contract & 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.

22.2 The Contractor after furnishing the required acceptable Performance Security & Additional Performance Security, "Letter to 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.

22.3 If the L-1 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. 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 L-2 bidder, if fullfilsother required

criteria, would be called for drawing agreement for execution of work subject to condition that the L-2 bidder negotiates at par with the rate quoted by the L-1 bidder, otherwise the tender will be cancelled.

23. BLOCKING OF PORTAL REGISTRATION:

23.1 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.

23.2 The portal registration blocked in the ground mentioned in the above Para-23.1 shall be unblocked automatically in receipt of revocation order of cancellation/suspension/ blacklisting from the concerned authority.

23.3 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 Chief Engineer/ Heads of Office if any of the following provisions are violated.

23.3.1 Fails to furnish original Technical / Financial (Tender Paper Cost, EMD/Bid Security) instruments before the designated officer within the stipulated date and time.

23.3.2 Backs out from the bid on any day after the last date of receipt of tender till expiry of the bid validity period.

23.3.3 Fails to execute the agreement within the stipulated date.

23.3.4 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.

24. GUIDELINES FOR UNBLOCKING OF PORTAL REGISTRATION:

24.1 UNBLOCKING OF PORTAL REGISTRATION:

Unblocking of portal registration of a contractor shall be done by a Committee consisting of the following members. EIC (Civil)-cum-CPO, - Chairman

Engineer-in-Chief (WR) – Member

Concerned Chief Engineer – Member

Sr. Manager (Finance), SPC – Member Officer

Inviting Tender – Member

Chief Manager (Technical), SPC – Convener

24.2 The Chief Manager (Tech), State Procurement Cell will be the convener and he will maintain all records for this purpose. The Committee shall meet not less than once in a month if required & shall consider the recommendation of the officer inviting tender for unblocking of portal registration. The quorum of the meeting will be four.

24.3 The minimum period of blocking of Portal Registration shall in no case be less than 180 days. After blocking of Portal Registration, the Contractor whose Portal Registration has been blocked may file application to the concerned officer inviting tender showing sufficient ground for unblocking of his portal registration along with a Treasury Challan showing deposit of Rs. 10,000/- (Rupees ten thousand) only (non-refundable) under the head of accounts '0059 – Public Works' as processing fees. The officer inviting tender shall forward the application filed by the contractor to the Chief Manager (Tech), State Procurement Cell.

24.4 On receipt of recommendation from the concerned Chief Engineer along with the copy of challan as mentioned above, the Chief Manager (Tech) being the member Convener of the Committee shall place the case before the Committee for examination and taking a decision in this regard. After examination the Committee may recommend for unblocking of the portal registration of said contractor if the Committee is satisfied that the fault committed by the contractor is either unintentional or done for the first time.

24.5 After scrutiny by the State Procurement Cell if it is found that the portal registration of a contractor has been blocked for the 2nd time the Chief Manager (Tech), SPC may not consider his case to be placed before the Committee and may advise the concerned officer inviting tender to issue show cause notice to the contractor asking him to explain as to why his portal registration shall not remain blocked. On receipt of show cause reply from the

contractor the officer inviting tender shall examine the same & if considered proper he may report to the Chief Manager (Tech), SPC along with his views furnishing the copy of the show cause reply for placement of the same before the committee for taking a decision in respect of blocking/ unblocking. If the Committee found that the contractor is in habit of committing such fault again and again intentionally the committee may advice the concerned officer inviting tender to initiate proceeding for blacklisting as per the existing rule.

Accordingly Office Memorandum No 1027 Dt. 24.01.2009 stands modified.

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> for some time past.
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 outline 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 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. 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-I.
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 bidders' 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 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. 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 authorised 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 organisations 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 authorised 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 in this Memorandum.
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.

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 the bid.	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. 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
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

**DETAILED TENDER CALL NOTICE FOR
BUILDING WORKS.**

1. 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 execution of Civil 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 "Construction of new building for RWS&S Sub-Division & Section office Boipariguda under Boipariguda Block in the district of Koraput." at an approximate estimated cost of Rs.1,12,85,457.00/- (Rupees One Crore Twelve Lakh Eighty-Five Thousand Four Hundred and fifty Seven) only. (EXCLUDING GST)
a) This tender is of composite nature and consisting of Civil, E.I, and PH Works.
b) This detailed Tender Call Notice along with the clauses mentioned herein shall form a part of the contract and agreement.
2. The Bid documents are available in the official website of Government: <http://www.tendersodisha.gov.in> from 17.00 Hours of 14.08.2026 to 17.00 Hours of 24.08.2026.
3. The Technical Bid documents (Cover-I) will be opened by the assigned officer in the office of the Additional Chief Engineer, RWS&S Circle, Koraput Jeypore, Odisha at 11.00 Hours of 25.08.2026 in the presence of the bidders or their authorized representatives who wish to attend.
4. The cost of bid documents is to be remitted online for Rs.10,000.00 towards cost of each bid respectively.
5. The bid is to be submitted in two covers.
(i) Cover-I is to contain scanned EMD, Cost of bid document, scanned copy of registration certificate, PAN card, GST Registration Number, certificates duly filled-in and documents required as per the relevant clauses of this DTCN.
(ii) Cover-II is to contain the price bid duly filled in and signed by the bidder.
6. **The bidder shall remit the EMD/ bid security online as part of bid of the amount as specified in the Contract Data. Bidders desirous to hire machineries or equipment's from outside the State or owned but deployed outside the State are required to furnish the EMD/bid security online as specified in the Contract Data and as per the above terms and conditions.**
7. (i) The lowest eligible bidder is required to produce documents viz original Registration, GST Registration Certificate, GSTIN, PAN card after opening of Technical Bid for verification purpose in the latter stage along with the original documents relating to ownership and hiring of plants and machineries mentioned at Annexure-I of Schedule-C, within five days from the date of opening of the tender (price bid). Furnishing scanned copy of such documents along with the Technical Bid is mandatory otherwise his/ her bid shall be declared as non responsive and thus liable for rejection.
(ii)*AMMENDMENT AS PER LRNO.9100DT17.07.2020 OF Works Department, Govt of Odisha.
Registration of contractors in CDMS:-
As per LRNO.9100dt17.07.2020 of Works Department Govt. Of Odisha, it is instructed to all Categories of contractors in CDMS portal within Dt.31.12.2020 as per the codal provisions vide clause no.12.4 of Appendix IX
(A) of O.P.W.D code , Vol(II) . Hence all class of contractors are requested to register themselves in CDMS portal positively by Dt. 31.12.2020 falling which , the contractors shall not be able to participate in the tender process.

“Noreferencetoanydocumentsofownershipandhiringofplantsandmachineriessubmittedinany

previoustendercasewillbeentertained”

8. (i) The work is to be completed in all respects within 09 (Nine) calendar months from the date of issue of work order. Bidders whose bid is accepted must submit a work programme including E.I (Internal & External) & P.H Work (Internal and External) at the time of execution of Agreement.
- (ii) For the purpose of technical qualification, experience in repair, renovation, maintenance and alteration shall not be considered as eligible technical experience. Only experience in execution of similar new construction works as prescribed in the DTCN shall be considered.
- (iii) The bidder shall submit the detailed year-wise payment breakup of the work claimed towards technical qualification which is mandatory.

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.

- 10.(i) The Contractors are required to furnish evidence of ownership of principal machineries/equipments as per Annexure-I of 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 executing several works he is required to furnish a time schedule for movement of equipment/machinery from one site to work site of the tendered work in Annexure-IV of Schedule-C.

(iii) In case the contractor proposes to engage machineries and equipments as asked for in the tender document, owned or hired but deployed out side the State, he/she is also required to furnish 1% EMD /Bid Security. (As per office memorandum of Govt of Odisha, Works Department Letter no-18138, Dated- 05.12.2018.)

(iv) The contractor intending to hire/lease equipments/machineries are required to furnish proof of ownership from the company/person providing equipments/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 09 (Nine) months from the last date receipt of bid documents. In case of centering & shuttering materials certificate of the Executive 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.

11. An applicant 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 the bid, shall be debarred from qualification. The bidder is to furnish an affidavit at the time of submission of bid about the authentication of bid documents. An affidavit to this effect is to be furnished in Schedule-F. Non furnishing of the scanned copy of information in Schedule – E and required affidavit in Schedule – F, the bid document will be summararily rejected.

12. 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 to make good the loss or damages resulting from such cancellations. The proforma for no relationship certificate is contained in a separate sheet vide Schedule-A..

13. The prospective applicant in its name should furnish list of work satisfactorily completed and list of works in progress in Schedule-B & Schedule- D. Non furnishing of the scanned copy of information in Schedule – B & Schedule- D the bid document will be summararily rejected.

14. If an individual makes the application, the individual should sign above his full type written name and current address.
15. If the application is made by proprietary firm, it shall be signed by the proprietor above his full type written name and the full name of his firm with its current address.
16. If the application is made by a firm in partnership, it shall be signed by all the partners of the firm above their full type written names and current address, or alternatively 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.
17. If the application is made by a limited company or a corporation, it shall be signed by 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.
18. 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.
19. No bidder will be permitted to furnish their bid in their own manuscript papers. All information should be submitted in English. The applicants name should appear on each page of the application along with his signature or the signature of his authorized representative at the bottom of each page.
20. (i) Submission of more than one tender by a bidder for a particular work will liable for rejection of all such tender papers.
(ii) Financial reports for the last five financial years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc. List them below and attach copies.
21. A. Percentage rate contract (vide Works Department letter no. 8310 dt. 17.05.2006) In case of Percentage Rate tender: -
 - (i) The contractor has to quote percentage excess or less over the estimated cost in the prescribed format appended to the tender document. The estimated cost is excluding GST. The rates of item basing on which estimated cost has been derived are excluding GST on different components to arrive at such rates.
In the Percentage Rate Tender the Bidder quoting Zero value is invalid and will be taken as Schedule of Rates.
 - (ii) The Contractors participated in the tender for more than one work may offer conditional rebate. Rebate offer submitted in a separate letter duly scanned shall be opened, declared and recorded first. The rebate so offer 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 I.F.B) to which they refer.
 - (iii) The Contractor will quote percentage excess/less up to Two decimal point only. If he writes the percentage excess/less up to three or more decimal points, the second decimal point shall only be considered without rounding off (vide Works Department O.M No- 7885 dtd. 23.07.2013.)
 - (iv) In the contract P-1 time is the essence. The contractor is required to maintain a certain rate of progress specified 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

B. GST as applicable on works contract shall be paid over the bill amount at the time of payment of bill.

22. (i) The bidder 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 bidder and detailed specifications for Odisha and other relevant specifications and drawings which are for sale. Complaint at a future date that plans and specifications have not been seen by the bidders cannot be entertained.

- 22(ii) Every bidder is expected before quoting his rate to inspect the site of the proposed work. The bidder should also inspect the quarries and approach roads to quarries and satisfy himself/themselves about the quality and availability of materials. In every case the materials must comply with the relevant specifications. Complaints at future date that the availability of materials at quarries has been misjudged cannot be entertained.

- 22(iii) Amendment to para-3.4.16(a)(vii) of OPWD Code, Vol-I by Substitution

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 for materials 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.

23. The drawings if any furnished with the bid are tentative and subject to revision or modification as tendered during the execution as per actual necessity and detail test conducted. But the tendered rate quoted by the bidder 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.

24. If any advance / Secured advance is granted by the Department the same will bear interest at the rate of 18% P.A.

25. The contractor shall properly co-ordinate with the execution of P.H. and Electrical works and take care of the safety of workers.

26. It must be definitely understood that the Government does not accept any responsibility for the correctness and completeness of the trial borings.

27. Additional Performance Security

- (i) Amendment to Appendix-IX, Clause-36 of OPWD Code, Vol.-II

As per Works Department, Government of Odisha Office Memorandum No.173 dated 03.01.2026 and clarification vide Office Memorandum No.632 dated 09.01.2026, the existing provision of threshold negative bid cap has been abolished. Additional Performance Security (APS) shall be obtained on an incremental basis from the successful bidder for bids quoted below the estimated cost put to tender as follows:

1. No Additional Performance Security (APS) shall be required if the bid price is up to 10% below the estimated cost put to tender.
2. If the bid price is more than 10% and up to 20% below the estimated cost, APS shall be calculated at the rate of 0.1% for every 1% below 10% of the estimated cost.
(This APS shall be applied on the bid amount.)

3. If the bid price is more than 20% below the estimated cost, APS shall be calculated at the rate of 0.2% for every 1% below 20%, in addition to 1% of the bid amount.
(This APS shall be applied on the bid amount.)
4. The APS shall be rounded off to the nearest percentage as per standard rounding rules.
5. The APS shall be treated as part of Performance Security.
6. In case of abnormally low bids, the bidder shall be required to submit detailed justification. If the bidder fails to justify the quoted rate satisfactorily, the bid is liable for rejection.

(ii) Finalization of Tender (Lottery Clause)

If more than one bid is quoted (decimals up to two places will be considered for all practical purposes), either at the estimated cost put to tender or below the estimated cost, the tender accepting authority shall finalize the tender through a transparent lottery system in presence of the concerned bidders/their authorized representatives, the concerned Superintending Engineer/Executive Engineer and Divisional Accounts Officer (DAO).

(iii) SC/ST Category Contractors

The benefits to SC/ST category contractors shall be applicable as per Works Department Resolution No.16262 dated 30.10.2018 and subsequent amendments.

If the rate quoted by SC/ST category contractors becomes equal to the L1 bidder after availing applicable price preference, the tender shall be finalized through a transparent lottery system along with other eligible bidders, as per prevailing Government instructions.

Any bidder desirous of availing such benefits shall submit necessary supporting documents/affidavit along with the bid, failing which the claim shall not be entertained at a later stage.

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 hire of 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 of the concerned Division. (pg 52)

On the expiry of the period of the hire, the hirer shall return the tools and plants to the Public Works Department. & workshop / store of the concerned Division in the same good condition in which they were received by him.

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

FIN-WF1-MISC-0102-2025/1/2026

Memo No. 633 /W, dated 9.1.26

Copy along with soft copy forwarded to Gazette Cell, Commerce and Transport (Commerce) Department, Bhubaneswar, for information and necessary action.

They are requested to publish the Office Memorandum in the extraordinary issue of the Gazette and supply 20 (twenty) copies to this Department.

Dec
09.01.2026

EIC-cum-Special Secretary to Government

Memo No. 634 /W., Dt. 9.1.26

Copy forwarded to the P.S. to the Hon'ble Chief Minister, Odisha for the kind information of the Hon'ble Chief Minister.

Dec
09.01.2026

EIC-cum-Special Secretary to Government

Memo No. 635 /W., Dt. 9.1.26

Copy forwarded to the P.S. to the Hon'ble Minister, Law, Works, Excise, Odisha for the kind information of the Hon'ble Minister.

Dec
09.01.2026

EIC-cum-Special Secretary to Government

Memo No. 636 /W., Dt. 9.1.26

Copy forwarded to the OSD to the Chief Secretary, Odisha, for the kind information of the Chief Secretary, Odisha.

Dec
09.01.2026

EIC-cum-Special Secretary to Government

Memo No. 637 /W., Dt. 9.1.26

Copy forwarded to Sr. P.S. to the DC-cum-ACS, Odisha, for the kind information of the DC-cum-ACS, Odisha.

Dec
09.01.2026

EIC-cum-Special Secretary to Government

FIN-WF1-MISC-0102-2025/1/2026

Memo No. 638 /W., Dt. 9.1.26

Copy forwarded to Principal Accountant General (A&E), Odisha, Bhubaneswar/ Principal Accountant General (E & SR Audit), Odisha, Puri Branch, Puri for kind information and necessary action.

Memo No. 639 /W., Dt. 9.1.26

EIC-cum-Special Secretary to Government

Copy forwarded to P.S. to the Principal Secretary to Govt., Finance Department/ H & UD Department/ Works Department for the kind information of the Principal Secretary, Finance Department/ H & UD Department/ Works Department respectively.

EIC-cum-Special Secretary to Government

Memo No. 640 /W., Dt. 9.1.26

Copy forwarded to P.S. to the Commissioner-cum-Secretary to Govt., RD Department/ PR&DW Department for the kind information of the Commissioner-cum-Secretary, RD Department/ PR&DW Department respectively.

EIC-cum-Special Secretary to Government

Memo No. 641 /W., Dt. 9.1.26

Copy forwarded to the Finance Department/ H & UD Department/ RD Department/ PR&DW Department/DoWR/ all other Departments for information and necessary action.

EIC-cum-Special Secretary to Government

Memo No. 642 /W., Dt. 9.1.26

Copy forwarded to the FA-cum-Special Secretary to Government, Works Department for kind information and necessary action.

EIC-cum-Special Secretary to Government

Memo No. 643 /W., Dt. 9.1.26

Copy forwarded to all Collectors & DMs for information and necessary action.

EIC-cum-Special Secretary to Government

FIN-WF1-MISC-0102-2025/1/2026

Memo No. / 644 W., Dt. 2-1-26

Copy forwarded to EIC(Civil-cum-Roads), Odisha /EIC, Water Resources, Odisha/ EIC, Rural Works, Odisha/ EIC (PH), H&UD Department/ EIC (RWSS) PR&DW Department/ EIC, DPQ, Odisha/ EIC, NHs, Odisha/ EIC-cum-Managing Director, OB & CC Ltd., Bhubaneswar, Odisha/ Chief Engineer, Roads-I & II, Odisha / Chief Engineer, Buildings-I & II, Odisha/ Chief Engineer, NHs, Odisha/ Chief Engineer, Bridges, Odisha / Chief Engineer, P&IP, Odisha / Chief Engineer, RD &QP, Odisha /Chief Engineer, RW-I & II, Odisha / Chief Engineer, PH (Urban), Odisha / Chief Engineer, Electricity, Odisha / Managing Director, OCC Ltd., Bhubaneswar/ all State PSUs for kind information and necessary action.

24-01-2026

EIC-cum-Special Secretary to Government

Memo No. / 645 W., Dt. 2-1-26

Copy forwarded to DDG & State Informatics Officer, National Informatics Centre, Odisha State Centre, Bhubaneswar, Email- sio-ori@nic.in for information and necessary action.

24-01-2026

EIC-cum-Special Secretary to Government

Memo No. 646 /W., Dt. 2-1-26

Copy forwarded to the Chief Executive Officer (Administrative), Odisha Computer Application Centre(OCAC), Bhubaneswar, for information and necessary action.

24-01-2026

EIC-cum-Special Secretary to Government

Memo No. 647 /W., Dt. 2-1-26

Copy forwarded to all EICs/CEs/CCes/ SEs/ EEs of the Works Department for kind information and necessary action.

24-01-2026

EIC-cum-Special Secretary to Government

Memo No. 648 /W., Dt. 2-1-26

Copy forwarded to Roads Section/ A/C-I Section /A/C-II Section/ Plan Section / Building Section / Budget Section / N.H. Section / FC & AA Section, Works Department for information and necessary action

24-01-2026

EIC-cum-Special Secretary to Government



FIN-WF1-MISC-0102-2025/1/2026

**GOVERNMENT OF ODISHA
WORKS DEPARTMENT**

OFFICE MEMORANDUM

No. 07764600022025 173 /W., Bhubaneswar Dt. 03/01/20

Sub:- Amendment of Codal & Contractual Provisions.

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 in a viable and successful manner with adoption of following incremental **Additional Performance Security(APS)** system:

1. Additional performance security shall be taken on an incremental basis from the selected bidder for low bid prices in the project works as under:

- 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.

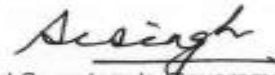
VI. Justification for abnormally low bids shall be scrutinized by the Departmental Technical Committee and recommended to the competent authority of the Administrative Department for the approval of the Additional Performance Security (APS). An abnormally low bid is one in which the Bid price, in combination with other elements of the Bid, appears so low that it 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 analyses of its Bid price in relation to scope, schedule, resource mobilization, allocation of risks and responsibilities, and any other requirements of the bid document. If, after evaluating the price analyses, the procuring entity determines that the Bidder has substantially failed to demonstrate its capability to deliver the contract at the 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**

By order of the Governor

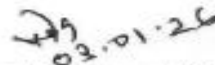


Principal Secretary to Government

Memo No. 174 /W, dated 03/01/26

Copy along with soft copy forwarded to Gazette Cell, Commerce and Transport (Commerce) Department, Bhubaneswar, for information and necessary action.

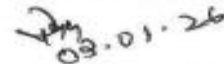
They are requested to publish the Office Memorandum in the extraordinary issue of the Gazette and supply 20 (twenty) copies to this Department.



EIC-cum-Special Secretary to Government

Memo No. 175 /W., Dt. 03/01/26

Copy forwarded to the P.S. to the Hon'ble Chief Minister, Odisha for the kind information of the Hon'ble Chief Minister.



EIC-cum-Special Secretary to Government

Memo No. 176 /W., Dt. 03/01/26

Copy forwarded to the P.S. to the Hon'ble Minister, Law, Works, Excise, Odisha for the kind information of the Hon'ble Minister.

Jh
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 177 /W., Dt. 03/01/26

Copy forwarded to the OSD to the Chief Secretary, Odisha, for the kind information of the Chief Secretary, Odisha.

Jh
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 178 /W., Dt. 03/01/26

Copy forwarded to Sr. P.S. to the DC-cum-ACS, Odisha, for the kind information of the DC-cum-ACS, Odisha.

Jh
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 179 /W., Dt. 03/01/26

Copy forwarded to Principal Accountant General (A&E), Odisha, Bhubaneswar/ Principal Accountant General (E & SR Audit), Odisha, Puri Branch, Puri for kind information and necessary action.

Jh
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 180 /W., Dt. 03/01/26

Copy forwarded to P.S. to the Principal Secretary to Govt., Finance Department/ H & UD Department for the kind information of the Principal Secretary, Finance Department/ H & UD Department respectively.

Jh
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 181 /W., Dt. 03/01/26

Copy forwarded to P.S. to the Commissioner-cum-Secretary to Govt., RD Department/ PR&DW Department for the kind information of the Commissioner-cum-Secretary, RD Department/ PR&DW Department respectively.

Jh
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 182 /W., Dt. 03/01/26

Copy forwarded to the Finance Department/ H & UD Department/ RD Department/ PR&DW Department/DoWR/ all other Departments for information and necessary action.

Jh
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 183 /W., Dt. 03/01/26

Copy forwarded to the FA-cum-Special Secretary to Government, Works Department for kind information and necessary action.

[Signature]
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 184 /W., Dt. 03/01/26

Copy forwarded to all Collectors & DMs for information and necessary action.

[Signature]
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 185 /W., Dt. 03/01/26

Copy forwarded to EIC(Civil-cum-Roads), Odisha /EIC, Water Resources, Odisha/ EIC, Rural Works, Odisha/ EIC (PH), H&UD Department/ EIC (RWSS) PR&DW Department/ EIC, DPQ, Odisha/ EIC, NHs, Odisha/ EIC-cum-Managing Director, OB & CC Ltd., Bhubaneswar, Odisha/ Chief Engineer, Roads-I & II, Odisha / Chief Engineer, Buildings-I & II, Odisha / Chief Engineer, NHs, Odisha/ Chief Engineer, Bridges, Odisha / Chief Engineer, P&IP, Odisha / Chief Engineer, RD &QP, Odisha /Chief Engineer, RW- I & II, Odisha / Chief Engineer, PH (Urban), Odisha / Chief Engineer, Electricity, Odisha / Managing Director, OCC Ltd., Bhubaneswar/ all State PSUs for kind information and necessary action.

[Signature]
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 186 /W., Dt. 03/01/26

Copy forwarded to all CCEs/ SEs/ EEs of the Works Department for kind information and necessary action.

[Signature]
03.01.26

EIC-cum-Special Secretary to Government

Memo No. 187 /W., Dt. 03/01/26

Copy forwarded to Roads Section/ A/C-I Section /A/C-II Section/ Plan Section / Building Section / Budget Section / N.H. Section / FC & AA Section, Works Department for information and necessary action

[Signature]
03.01.26

EIC-cum-Special Secretary to Government

- If the Contractor fails to complete the work, the amount of furnished as additional performance security will be forfeited in addition to the other penal clauses, if any to be imposed.
27. The companies or individuals registered with State Government and contractors of equivalent Grade /class registered with Central Government / MES / Railways having registration for Civil, Electrical and P.H. works having both legal competency and expertise in Civil, Public Health and Electrical Engineering works need put tenders for this composite work and the documentary evidence under appropriate Act in support of their legal competency and expertise to execute Civil, Electrical and P.H. work invariably should accompany their tender papers. The Civil Contractor in order to take part in the Composite tender should enter into a sub-contract agreement in shape of an affidavit with eligible Registered Electrical Contractors having valid H.T./L.T/M.V license (Associate with the sub-contractor). Scanned copy of such agreement (Schedule-J) should be submitted along with the tender otherwise the bid document will be summararily rejected. The Original agreement should be furnished and the Original Electrical License should be produced for verification within 3 (three) working days of Opening of Cover-I (Technical Bid) of the tender. This agreement with the electrical contractor shall also form a part of the tender. If the Civil Contractor is having registration in Electrical works under the same name and style, the question of joint venture does not arise. The tender papers shall bear signature of authorized person of the tenderer, the letter of authorization should accompany tender papers. The 28 authorizations should clearly indicate the name of legal person to sign and enter in to agreement and receiving payment and will be responsible for all contractual obligations for execution of work for Civil, P.H. and Electrical Items of work to the Engineer- in- Charge.
28. (i) The contract will be drawn in P.W.D.P-1 contract
- The contract shall be drawn & signed by Executive Engineer, RWS&S Division, Koraput on behalf of the Governor of Odisha.
- (ii) All the items of the Scheduled of quantities of the Agreement shall be supervised measured and check measured by the Executive Engineer, RWS&S Division, Koraput,
29. 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.
30. The tender containing extraneous conditions not covered by the tender notice are liable for rejection and quotations should be strictly in accordance with the tender call notice. Any change in the wording will not be accepted.
31. i) Schedule of quantities are 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.
- ii) Bidders are to submit only the Original Bill of Quantity uploaded by publisher after entering the relevant fields without any alteration / deletion / modification. Multiple Bill of Quantity submission shall lead to cancellation of Bid.
- iii) The quantity mentioned can be increased or decreased 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.

32. The authority reserves the right to reject any or all the tenders received without assigning any reasons there-of what so ever.
33. The bid security (earnest money) will be retained and dealt with as per the terms and conditions of the OPWD Code.
34. i) The bidder/tenderer whose bid has been accepted will be notified of the award by the Engineer-in-charge 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").
- ii) The Notification of award will constitute the formation of the contract, subject only to the furnishing of a performance security (Initial Security Deposit) and additional performance security as per clause 27 of DTCN in form of Kissan Vikash Patra / Post Office Savings Bank Account / National Savings Certificate / in India counter guaranteed by its local branch at Bhubaneswar duly pledged in favour of the Executive Engineer, RWS&S Division, Koraput and in no other form, which including the amount already deposited as bid security (earnest money) shall be 1% 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 Executive Engineer, RWS&S Division, Koraput and payable at Koraput or as directed.
- The security deposit together with the earnest money 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.
- iii) The agreement will incorporate all correspondence 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, instruction to the bidder, conditions of contract, 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 thereof & required amount of performance security including additional performance security.
- b) Standard P.W.D. Form P-1 with latest amendments.
- iv) Failure to enter into 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 deposit and additional performance security deposit are received by the Engineer-in-Charge. The security will be refunded after One year of completion of the work and payment of the final bill and will not carry any interest.
- v) As concurred by Law Department & Finance Department in their U.O.R. No 848 dtd. 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 bidders/tenderers back out from the offer before acceptance of tender by the competent authority.
- vi) Before acceptance of tender, the successful bidder will be required to submit a work programme and mile stone 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.
35. 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.

36. The contractor should be liable to fully indemnify the department for payment of compensation under workman Compensation Act. VIII of 1923 on any account of the workmen employed by the contractor and full amount of compensation paid will be recovered from the contractor.
37. Bidders are required to abide by the fair wages clause as introduced by Govt. of Odisha, Works Department Letter No.- VIII-R 8/5225 Dtd. 26.02.55 and No.IIM- 56/628842(5) Dtd.27.09.61 as amended from time to time.
38. Incaseofanycomplaintbythelabourworkingaboutthe non-paymentorlesspaymentofhiswagesasper latest minimum Wages Act, the Executive Engineer 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 Executive Engineer is final and binding on the contractor.
39. The contractor shall bear cost of various incidentals, sundries and contingencies necessitated by work in full within the following or similar category.
 - a. Rent,royaltiesandotherchargesofmaterials,octroiduty,allothertaxesincludingalestax,ferry, tolls conveyance charge and other cost on account of land and building including temporary building and temporaryelectricconnectiontoworksitesaswellasconstructionofserviceroadanddiversionroadandits maintenance till completion of work as required by the bidders for Collection of materials, storage, housing of staff or other purpose of the work. No bidder will however be liable to pay Govt. for temporaryoccupation of land owned by Govt. at the site of the work.
 - b. Labourcampsorhutsnecessarytoasuitablescaleincludingconservancyandsanitaryarrangements therein to the satisfaction of the local health authorities.
 - c. Suitable water supply including pipe water supply wherever available for the staff and labour as well as for the work.
 - d. Feesanddutiesleviedbythemunicipal,canalorwatersupplyauthorities.
 - e. Suitableequipmentsandwearingapparatusforthelabourengagedinriskyoperations.
 - f. Suitable fencing barriers, signals including paraffin and electric signal where necessary at works and approaches in order to protect the public and employees from accidents.
 - g. Compensation including the cost of any suit for injury to persons or property due to neglect of any major precaution also become payable due to operation of the workmen compensation act.
 - h. Thecontractorhastoarrangeadequatelightingarrangementfortheworkwhereevernecessaryat hisown cost.
40. After the work is finalized, 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 clean, this should be inclusive of the rate.
41. No payment will be made for bench marks, level pillars profiles and benching and leveling the ground where required. The percentage rate to be quoted should be inclusive of carriage of all materials and incidental item of works.
42. It should beunderstood clearly that noclaim what-so-ever will beentertained to extra items of works,extra quantity of any item besides agreement quantity unless written order is obtained from the Engineer-in- charge and rate settled before the extra items of work or extra quantity of any items of work is taken up.
43. The bidder 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.
44. 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 the office of the Superintending Engineer, Jeypore (R&B) Circle

- Jeypore, Jeypore as well as in the office of the Executive Engineer as mentioned in the contract data during office hours every day except on Sundays and Public Holidays till last date of sale and receipt of bid documents. Interested bidders may obtain further information at the same address. But it must be clearly understood that the bids must be received in order and according to the instructions.
45. Bidders are required to go through each clause of P.W.D. Form P-1 carefully in addition to the clause mentioned herein before tendering. In case of ambiguity, the clauses of P.W.D Form P-1 with latest amendments shall supercede the condition of D.T.C.N.
 46. All reinforced cement concrete work should conform to IRC Code and Bridge Code section I, II, III, IV and VII & latest design criteria for prestressed concrete bridges specifically for road and bridges issued by MORT&H, Govt. of India. MORT&H Specification for Road & Bridge work (Latest Revision) shall be the guiding book for execution, quality assurance, specification and measurement for all items of Road & Bridge works.
 47. Shuttering & centering shall be used which shall be lined with suitable sheeting and made leak proof and water tight.
 48. The Department will have the right to inspect the scaffolding, centering and shuttering made for the work and can reject partly or fully such structures if found defective in their opinion.
 49. Concrete should be machine mixed unless otherwise ordered in writing by the Executive Engineer. The contractor should arrange his own concrete mixer, vibrator, and pumps etc, for this purpose at his own cost.
 50. 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.
 51. The bidder 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 bidder due to delay in procurement of materials.
 52. 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.
 53. If the bidder 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 bidder or from his security deposit or from the proceeds of sale thereof.
 54. The selected bidder may take delivery of departmental supply according to his need for the work issued by the Sub-Divisional office in-charge subject to the availability of the materials. The bidder shall make all arrangement for proper storage of materials but no cost for raising shed for storage, pay of watchman 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 bidder stops the work, he shall have to pay the full penalty as per clause of P-1 agreement.
 55. 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.
 56. 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 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.
57. 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, and every sort of materials from approved manufacturer, get it tested in the Departmental Laboratory and approved by the Department before use.
 58. 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.
 59. No extra payment will be made for removing, spreading and consolidating salvaged materials.
 60. The contractor should at his own cost arrange necessary tools and plants required for the efficient execution of work and the rates quoted should be inclusive of the running charges of each plant and cost of conveyance.
 61. Measurement of earth work in embankment will be done by section measurement after the earth is consolidated including rolling with hand or power road roller and sheep foot roller at optimum moisture condition and no extra payment will be made for the jungle clearance for taking earth from the borrow areas. Earth work from cutting shall be economically utilized in filling.
 62. 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 28 days, after mixing and test conducted in accordance with IS 456 and IS 516 .
 63. The machineries, if available, with the department may be supplied on hire as per normal hire charges of Government in force at the time of execution of work subject to the condition that the contractor will execute in advance an agreement with the Engineer-in-Charge.
 64. In the event of any delay in the supply of Departmental machineries for unavoidable reasons, no extension of time will be granted to the contractor under any circumstances.
 65. 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.
 66. The Contractor will have to submit to the Executive Engineer, RWS&S Division, Koraput monthly return of labour both skilled and unskilled employed by him on the work.
 67. All fittings for doors and windows, PH and 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 before they are used on the work.
 68. After completion of the work the contractor shall arrange at his own cost all requisite equipments for testing buildings, if found necessary and bear the entire cost of such test, including the inspection of Electrical Inspectorate.
 69. The depth of foundation indicated on the drawing are provisional but these may be altered if necessary in the light of the nature of strata indicated by boring which must be taken in advance of actual execution of the foundation.
 70. The Tenderer should furnish along with their tender 1.a list of works, which are at present in their hand 2. List of T&P and 3. list of work executed in the prescribed proforma(s) enclosed herewith in appropriate place of bid document.
 71. 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 *Departmental Control and Research Laboratory Bhubaneswar, Quality control division Cuttack*

- and Zonal Laboratories*, at the cost of the Contractor with no extra cost to the Department.
72. The C.B. bricks should be well burnt and of good qualities. The bricks should be approved by the Engineer-in-charge before use in the work and should conform to the minimum strength as per National Building Code.
73. 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.
74. 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.
75. a) It should be clearly understood that the joints of the bars are to be provided with lapping, welds or bolts nuts will be as 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 Quality Control and Research Laboratory of Cuttack or Bhubaneswar. Tests 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 Government Test Houses at Alipore or Quality Control and Research Laboratory at Bhubaneswar. Cost of testing of all specimens and samples will be borne by the Contractor.
76. Concrete of strength below of the required strength (as determined by actual tests) shall not be accepted.
77. No claim for carriage of water what-so-ever will be entertained.
78. The contractor shall employ one or more Engineering Graduate or Diploma holders as apprentice at his cost if the work as shown in the tender exceeds Rs.2,50,000/-. The apprentices 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 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 Chief Engineer in the manner so that the total expenditure does not exceed one percent of the tendered cost of the work.
79. 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 Holder belonging to the state of Odisha. Like wise '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 proforma contained in a separate sheet vide Schedule-G.

80. 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.
81. Odisha Construction Corporation Ltd. will be allowed price preference up to 3% over the lowest quotation or tender as laid down in works and Transport Department Resolution No-285 date-17.04.1974. The Odisha Bridge and Construction Corporation will also be allowed a price preference to the extent of up to 3% over the lowest tender amount (Where their tender is not the lowest) provided they express willingness to execute the work after reduction of rates by negotiation.
82. Amendment of existing Clauses :- 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.
83. The prevailing percentage of I.T. of the gross amount of the bill towards income tax will be deducted from the contractor's bill.
84. GST on the gross amount of the bill will be deducted from the contractor's bill as tax deduction at source (TDS) as per rules applicable.
85. Construction workers welfare CESS @ 1(one) % of the amount of estimated cost put to tender as per tender notification and in conformity with latest Labour & Employment Department Circular will be proportionately deducted from the contractor's bill at the time of making payment.
86. The contractor is required to pay royalty to Govt. as fixed from time to time and produce such documents in support of their payment to the concerned Executive Engineer 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.

87. Under no circumstances interest is chargeable for the dues or additional dues if any payable for the work.
88. Under section 12 of contractors 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.
89. 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 Executive Engineer.
90. 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.
91. 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/bridge/building for 12 (Twelve) calendar months from the date of successful completion of the work.
92. 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.

94.1 PRICE VARIATION CLAUSE DUE TO INCREASE OR DECREASE IN RATE OF MINIMUM WAGES, PRINCIPAL MATERIALS, POL & OTHER MATERIALS TO BE INCORPORATED IN CONDITION OF CONTRACT (Vide Works Department Memorandum No.15847 dated/19.11.2019)

Contract price shall be adjusted for increase or decrease in rates and price of Labor, Cement, Steel, Bitumen, pipes, POL & other materials component in accordance with the following principles and procedures as per formula given in following paras.

(a.) The price adjustments shall apply for the work done from the date given in the contract data up to end of the initial intended 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.

94.2 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:

94(a)(i) Formula to calculate the increase or decrease in the price of other materials component:

Price adjustment for increase or decrease in cost of local materials other than cement, steel, bitumen, pipes 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 quarter under consideration due to changes in rates of local materials other than cement, steel, bitumen, pipes 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 Govt. of India, Ministry of industry and commerce, New Delhi).

$M_1 =$ The all India whole sale price Index (all commodities) for the month under consideration as published by Govt. of India, Ministry of Industry and commerce, New Delhi .

$P_m =$ Percentage of local materials component (other than cement, steel, bitumen, pipes and POL) of the work,

94(a)(ii):Adjustmenttowardsdifferentialcostofcement.

PriceadjustmentforincreaseordecreaseinthecostofCementshallbepaidinaccordancewiththe following formula

$$V_c = 0.85 \times P_c / 100 \times R_x (C_i - C_o) / C_o$$

V_c =increaseofdecreaseinthecostofworkduringthemonthunderconsiderationduetochangesinthe rates for cement.

C_1 =AllIndiaWholesalepriceindexforordinary 38alvanizcement(OPC)fortheMonthunder consideration(aspublishedbyGovt.ofIndia,MinistryofIndustryandcommerce,New Delhi).

C_o =AllIndiaWholesalepriceindexforordinary38alvanizcement(OPC)on28daysprecedingthedateof opening of Bids aspublished by Govt. of India Ministry of Industry and commerce, New Delhi.

P_c =PercentageofCementComponentofthework.

94(a)(iii):AdjustmenttowardsdifferentialcostofSteel

PriceadjustmentforincreaseordecreaseinthecostofSteelshallbepaidinaccordancewiththe following formula

$$V_s = 0.85 \times P_s / 100 \times R_x (S_i - S_o) \times S_o$$

V_s =IncreaseorDecreaseinthecostofworkduringthemonthunderconsiderationduetochangesinthe rates for steel

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

S_o = The all India wholesale price index for steel (mild steel long products) on28 days preceding the date ofopeningofBidaspublishedbytheMinistryofCommerce&Industry,GovernmentofIndia,NewDelhi.

Note:Fortheapplicationofthisclause,indexof(MildSteellongproducts)hasbeenchosentorepresentsteelgroup.

94(a)(iv):AdjustmenttowardsdifferentialcostofBitumen.

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

$$V_b = 0.85 \times P_b / 100 \times R_x (B_i - B_o) / B_o$$

V_b =Increase or Decrease in the cost of work during the month under consideration due to changes in the rate of Bitumen.

B_i =TheofficialretailpriceofbulkbitumenatIOC/BPCLDepotatnearestcenterforthe15thdayofthe month under consideration.

B_o =TheofficialretailpriceofbulkbitumenatIOC/BPCLDepotatnearestcenteronthe day28daysprior to date of opening of Bids

P_b =PercentageofBitumencomponentofthework.

94(a)(v):Adjustmenttowardsdifferentialcostofpipes.

Priceadjustmentforincreaseordecreaseinthecostofpipeshallbepaidinaccordancewiththefollowing formula :

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

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

P_{pi} =Percentageofpipecomponentofthework.

P_{i1} =AllIndiaWholesalepriceIndexfortheperiodunderconsiderationaspublishedby,Govt.ofIndia, Ministry of Industry and Commerce, New Delhi.

P_{i0} =AllIndiaWholesalepriceIndexofpipeon28daysprecedingthedateofopeningofbidaspublished by the ministry of commerce and Industry, Government of India, New Delhi.

94(b):AdjustmentofLabour Component

PriceadjustmentforincreaseordecreaseinthecostDuetoLabourshallbepaidinaccordancewiththefollowing 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 rates of Local Labour.

L_0 = ThemimumwagesofunskilledlabourasnotifiedbyStateGovernment,ofOdishaasprevailed on the last stipulated date of receipt of tender including extension,if any.

L_1 = The minimum wages for unskilled labour as notified by State Government & as prevailed on the last date of the Monthprevious to the one under consideration

P_1 = Percentageoflabourcomponentofthework.

93. c REIMBURSEMENT/REFUND DUE TO VARIATION IN PRICES OF P.O.L.

Priceadjustmentforincreaseordecreaseinthecostofpol(Fuel&Lubricant)shallbepaidin accordance with the following formula:

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

V_f = Increaseordecreaseinthecostofworkduringthemonthunderconsiderationdueto Changes in rates for P.O.L.

P_1 = PercentageofP.O.Lcomponentofthework.

F_1 = TheofficialretailpriceofHignspeedDiesel(HSD)attheexistingconsumerpumpsof IOC/BPCL/HPCL at nearest center for the 15th day of the month under consideration.

F_0 = TheofficialretailpriceofHignspeedDiesel(HSD)attheexistingconsumerpumpsof IOC/BPCL/HPCL at nearest center on the day 28 days prior to the date of opening of Bids.

NOTE:Fortheapplicationofthisclause,thepriceofHighSpeedDieseloilhasbeenchosentorepresentfuel& lubricants group.

94(d): AdjustmentforPlants&MachinerySpares Component:

PriceadjustmentforincreaseordecreaseinthecostofPlants&MachinerySparesprocuredbythe contractor shall be paid inaccordance with the following formula:

$$V_p = 0.85 \times P_p / 100 \times R_x (P_i - P_o) / P_o$$

V_p = IncreaseorDecreaseinthecostofworkduringthemonthunderconsiderationduetochangeinthe rates for Plants & Machinery Spares.

P_o = Theall India wholesale priceindex for manufacture ofmachineryformining, quarryingand constructionon28daysprecedingthedateofopeningoftheBidsaspublishedbytheMinistryof Commerce and Industry, Govt. of India , New Delhi.

P_i = TheallIndiawholesalepriceindexformanufactureofmachineryformining, quarryingand Construction For the month under consideration as published by the the Ministry of CommerceandIndustry, Govt.ofIndia, NewDelhi.

P_p = PercentageofPlants&MachinerySparescomponentsofthe work.

Note:Fortheapplicationofthisclause,indexofmanufacturingofmachineryformining, quarryingand Construction has been chosen to represent the Plants & Machinery Spares group.

Regarding wholesale price index (WPI) for appropriate commodity for payment of price adjustment, due to change of base year of WPIfrom 1993-94 to 2004-05 & 2011-2012 , 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.

S/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.

94(e): APPLICATION OF ESCALATION CLAUSE:

(I) The contractor shall for the purpose of availing reimbursement/refund of differential cost of steel, bitumen, cement, pipe, P.O.L 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 /or 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 thereto to which he may be in a position to supply.

Percentage Table

SL. No	Category of works		% component (costwise)		
			Labour (P ₁)	POL (P ₁)	Steel + Cement + bitumen + other materials*
1.	R & B Works (% of component)	Road works	5	5	90
		Bridgeworks	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
		Pipe Line Work	5	5	Pipe – 70% * other material – 20%
		Sewer Line	5	5	Pipe – 70% * other material – 20%

*Note- Further breakup may be worked out considering the consumption of Cement, Steel, Bitumen

Pipe and Plants & 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 Bids

Schedule of Adjustment of Data

(For all works , adjustments 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 SI No.	Index Description	Source of Index	Base Value*	Base Date*	Weightage of Item**
31(a)(i)	Other materials	All India wholesale price Index (all commodities) as published by the Economic Advisor to the Govt. of India, Ministry of Industry and commerce, New Delhi .			
31(a)(ii)	cement	whole sale price Index for Cement (Ordinary Portland cement) as published by the Economic Advisor to the Govt. of India, Ministry of Industry and commerce, New Delhi.			
31(a)(iii)	steel	whole sale price Index for Steel (Mild steel –Long products) as published by the Economic Advisor to the Govt. of India, Ministry of Industry and commerce, New Delhi.			
31(a)(iv)	Bitumen (VG-30)	Official retail price of Bulk Bitumen at the nearest IOC/BPCL/HPCL depot.			
31(a)(v)	Pipes	whole sale price Index for the type of Pipe under consideration , as published by the Economic Advisor to the Govt. of India, Ministry of Industry and commerce, New Delhi			
31(b)	Labour	Minimum wages Notified by the Labour and Employee's state Insurance Department Of Govt. of Odisha, India.			5%
31I	POL	Official retail price of HSD at the nearest IOC/BPCL/HPCL consumer pump depot.			5%
31(d)	Plants & Machinery	whole sale price Index for Manufacture of Machinery for Mining, Quarring and Consumption as published by the Economic Advisor to the Govt. of India, Ministry of Industry and commerce, New Delhi			
			Total		100%

*Values to be filled up at the time of Draw of Contract

**Values to be filled up in the Bid Document.

94. The contractor has to arrange the land required for borrowing earth if necessary for the work at his cost. No extra payment by the Department will be made on this account and no claim what-so-ever will be entertained on this ground. The rate quoted by the contractor should be inclusive of all such charges.
95. Where it will be found necessary by the Department, the Officer-in-Charge of the work shall issue a Site 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 Site 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 (Executive Engineer) and to be submitted to the Engineer-in-charge every month.
96. The bidder should conduct S.B.C. of soil at foundation level and furnish the test results in conformity with I.R.C. code at his own cost before execution of the work and rate quoted by the contractor should be inclusive of such bores and S.B.C. tests etc. without any extra cost to the Department.
97. The detail of foundation and sub-structure for execution may be done in accordance with the test results thus obtained.
98. The contractor shall have no claim what so ever for the extra quantity of work to be executed in view of above possible changes and payments is to be made as per Clause 11 of the P-1 Contract.
99. Over and above these conditions, the terms and conditions and rules and regulations and specifications as laid down in Odisha P.W.D. Code, Bridge code and MORT&H Specifications with latest revision / amendment are also binding on the part of the contractor.
100. No part of the contract shall be sublet without written permission of the concerned Executive Engineer or transfer be made by power of Attorney authorizing other to receive payment on the contractor's behalf.
101. 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.
102. Any damages caused by natural calamities should be done by the contractor at his own cost. The Department will not be any way responsible for the same and will not pay any cost towards the repair done by the contractor.
103. The rate quoted by the contractor shall cover the latest approved rates of labours, materials, P.O.L. and Royalties. Arrangement of borrow areas; land, approach road to the bridge site etc. are the responsibility of the contractor.
104. The 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 rate will be inclusive of this.
105. The materials, borrow areas and hutments at site should be arranged by the contractor at his own cost. No future complaint on this account shall be entertained.
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 far 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 books not maintained from the commencement of the work are liable to be summararily rejected. The claim books are 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. i) Besides, the firm / contractor shall install full fledged field laboratory at work site for conducting required tests as per IRC/MORT&H/ISI requirements at his own cost for providing sufficient opportunity for checking from time to time.
- ii) 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.
109. 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 Superintending Engineer 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 into 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 equipments, 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 superintending Engineer 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 this other work under the state public works Department. The decision of the superintending Engineers 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 duly authorized agent daily. In case of contractor contests the correctness of the entries and / or fails to sign the log book, 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 log book and will be binding on the contractor.

AGREEMENT FOR LOANS OF GOVERNMENT TOOLS & PLANTS.

This agreement made the _____ Two Thousand _____ between (here-in-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.

Where as 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 where as 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 hereby and between the parties hereto 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 hire 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 at, Jeypore.
- (b) The rate of higher charges will be as per Government order in vogue.
- I 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, Jeypore 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 Superintending Engineer 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 power 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. Signed sealed and delivered in the presence of
 - 2.
- 1.
 - 2.
110. 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 halfway / recession of contract.
 - (d) Past record of inordinate delay in completion of the work.
 - (e) Past history of litigation.
 111. The information furnished must be sufficient to show that the applicant is capable in all respects to successfully complete the envisaged work.
 112. If L1 bidder does not turn up for agreement after finalization of the tender, then his EMD shall be forfeited and 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.
 113. ADDENDUM TO THE CONDITION OF P1 CONTRACT
 Clause-2(a) of P-1 Contract:- TIME CONTROL (Vide Works Department Office Memorandum No. 24716 dt. 24.12.2005 and No. 8310 dt. 17.05.2006):-
 - 2.1. Progress of work and Re-scheduling programme.
 - 2.1.1. The Executive Engineer / 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.
 - 2.1.2. Within 15 days of issue of the letter of acceptance, the contractor shall submit to the Engineer-in-Charge for approval a Programme commensurate to Clause No. 2.1.3 showing the general methods, arrangements, and timing for all the activities in the Works along with monthly cash flow forecast.
 - 2.1.3. 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, 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 progress 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.
 - 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, 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.
- 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 Contractor's 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 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 Chief Engineer (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 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 Government. 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, the amount shown against that milestones 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. Amendment to para-3.5.5(V) of Note-III of OPWD Code, Vol-1 by modification

Note-(III)-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 Executive Engineer 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 (Seven) days of such completion by the concerned Superintending Engineer, Chief Engineer & the Administrative Department.

“The incentive for timely completion should be on a graduated scale of 1 (one) percent to 5 (five) 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

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 P-1 Agreement: - 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 Executive Engineer shall be conclusive evidence), 20% of the value of leftover work will be realized from the contractor as penalty.

114. BLACKLISTING OF CONTRACTOR;-

A Contractor may be black listed as per amendment made to Appendix XXXIV to OPWD Code Vol.-II on rules for blacklisting of Contractors vide letter no.3365 dt.01.03.2007 of Works Department, Odisha. And Office Memorandum no-10496 dt.12.07.2018 of works Department, Government of 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.
- g) Non-Submission of Additional Performance Security (APS) within stipulated period
- h) Keeping business relationship with a fraud Company in a manner that affects the contract executed with Government or Government Agency for Blacklisting of Contractor.

115. Qualification Criteria on general experience

The Applicant shall meet the following minimum criteria failing which the bid shall be summarily rejected:

- i. The prospective bidder, should meet the requirement as regard completion of at least one similar nature of work during last 5 years from the Base Year as specified in the Contract Data with the major items as mentioned in Contract Data.

The bidder shall furnish the list of such similar nature of works in Schedule-D1, duly certified by Engineer in charge not below the rank of Executive Engineer.

The completion certificates should contain following information.

- a) Name of the work:-
- b) Agreement Amount excluding GST:-
- c) Major Items of work with quantity executed:-
- d) Date of Commencement-
- e) Stipulated date of Completion: -
- f) Actual date of completion:-
- g) Other details if any:-
- h) Value of work done in Indian Rupees excluding GST:-

Value of Work executed by the Applicant shall be updated to current price level (Base Year mentioned in Contract Data) using the escalation factor mentioned below.

- ii. The prospective bidder, should meet the minimum requirement of annual turnover (defined as billing for works in progress and completed in all classes of civil construction works only) as mentioned in the contract data over the last five years from the Base Year as per Contract Data to be updated with the escalation factor stated below. The bidder shall furnish the information in Schedule-H, from his Chartered Accountant.

Escalation factor

Following enhancement factors will be used for the costs 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

In case the financial figures and value of completed works are in foreign currency the above enhanced multiplying factors will not be applied. Instead current market exchange rate (State Bank of India B.C. 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.

iii. Bid Capacity

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 mentioned in Contract Data. The available bid capacity will be calculated as under.

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

A = Maximum value of works executed in any one year (As reported in Schedule– H and certified by Chartered Accountant) during the last five years (updated to the current price level (Base Year) as mentioned in the Contract Data) rate of inflation may be taken as 10 per cent per year (escalation factor) which will take into account the completed as well as works in progress,

B = Value at current price level of the existing commitments and ongoing work to be completed during the time period stipulated in the contract data (period of completion of works for which bids are invited); and

N = Number of years prescribed for completion of the works for which the bids are invited as mentioned in contract data. (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 extent of his proposed participation in the execution of the works.

The information on Existing Commitments as on the date of this bid is to be furnished as per the format in Schedule –G

116. **ELIGIBILITY CRITERIA:** - To be eligible for qualification in the technical bid, applicants shall furnish the followings. Non-furnishing of the following particulars shall be treated as ineligible.

- a) **Required Bid Security/E.M.D. as per the clause No. 06 of DTCN** or as mentioned.
- b) Cost of Tender paper as per Clause No. 04.
- c) Scanned Copy of valid Registration Certificate, GST Registration Certificate and GSTIN, PAN card, along with the other tender documents as per Clause No. 07 (i) & (ii)
- d) Information regarding (i) Evidence of ownership of principal machineries / equipments as per Annexure-I of Schedule-C (ii) Annexure-III of Schedule-C & (iii) Annexure-IV of Schedule-C if required as per Clause No. 10.(iv).
- e) No relation certificate as per clause No. 12 of D.T.C.N (Schedule -A).
- f) Information regarding current litigation, debarring / expelling of the applicant or abandonment of work by the applicant in schedule "E" and affidavit to that effect including authentication of tender documents and Bank guarantee in schedule "F" as per clause 11.
- g) **Required Additional performance security as per the clause No. 27(v).**
- h) Joint venture deed with eligible registered electrical contractors along with other relevant documents for composite Building as per clause-28 of DTCN and Cl.No.16.3 of the Instructions/Guidelines of Bidder for e-procurement. (Schedule-J)
- i) Minimum qualifying requirement of execution of in similar nature of works as per Clause No.116(i) with scanned copy of experience certificate issued by the Engineer-in-Charge not below the rank of Executive Engineer to be furnished in Schedule – D1. **(REQUIRED)**
- j) Certificate from the Chartered Accountant specifying the financial turnover providing his registered UDIN No. for the years to be taken into consideration as per clause no 116 (ii) **REQUIRED**
- k) Submission of the required information on existing commitment in Schedule-G to derive his/their available bid capacity at the expected time of bidding as per Clause 116 (iii).)
- l) Schedule-B (Clause No. 80) is mandatory for "A" Class/ "A" (Degree ENGG.) or Above class of Contractors.
- m) Copy of valid Labour License/Undertaking for submission of Labour License is mandatory
- n) Work completion (Or) Experience Certificate should contain the required data as per columns laid down in the DTCN, including year wise Payment Details.
- o) In case of lease deed, the lessor can provide his/her own machinery to a single bidder only for a particular work instead of multiple bidders participated for the same work in one TCN.
- p) The bidder should not lease his/her own machinery to the other bidder participated for a same work in one TCN.
- q) **Digital Signature on each page of the document uploaded by the bidder is mandatory.**
- r) Other required schedule/information as per DTCN.

Furnishing of such documents along with the Technical Bid is mandatory otherwise, his/her bid shall be declared as non-responsive and thus liable for rejection and action to be taken as per relevant clauses of Instruction to Bidders for e-procurement

CANVASSING IN ANY FORM, DIRECT OR INDIRECT, EXERTING PRESSURE, COERCION, INTIMIDATION, THREATENING AND THUS INTERFERENCE IN THE TENDER PROCESS WILL RENDER THE BID LIABLE FOR REJECTION AND THE LICENSE OF SUCH BIDDER FOR CANCELLATION.

117. 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 been awarded more than two works (excluding this work) with exemption of EMD during the current financial year. The name of the works awarded with exemption of EMD and the tender inviting authority must be mentioned in the affidavit, failing which the tender will be rejected.

118. **Signing of Bids-(Mandatory for all bidders)**

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 & his registration in the portal shall be blocked and the bidder is liable to be blacklisted"

Total:-119(One Hundred Nineteen) clauses only.

APPROVED BY

Sd/-
Additional Chief Engineer
RWS & S Circle, Koraput

TECHNICAL SPECIFICATION OF CIVIL PORTION OF WORK

Materials of following specification are to be used in work. The Tenderer 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. 269/455 (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)and1786(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/Fine Aggregate	I.S.2116,383
7.	Binding wire	I.S.280(alvanized minimum 1mm)
8.	Rainwater 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 works joinery	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. Foundations shall be with conformity to I.S.1080.
3. Stonemasonry (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 washings shall be with conformity to I.S.6278.
9. CC foundations shall be with conformity to I.S.2571.
10. Anti-Termite Treatments 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. Tar felt treatments shall be with conformity to I.S.1346
14. Mosaic flooring with conformity to I.S.2114
15. Steel paintings shall be with conformity to I.S.1477 (Part-I & Part-II) I.S.1661

CERTIFICATE OF NO RELATIONSHIP

I/We hereby certify that I/We* am/are* related/not related(*) to any officer of P.W.D 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.

I/We also note that, non-submission of this certificate will render my/our tender liable for rejection.

(*) – Strike out which is not applicable

Signature of the Tenderer Date:-

SCHEDULE-B

**CERTIFICATE OF EMPLOYMENT OF UNEMPLOYED GRADUATE
ENGINEER / DIPLOMA HOLDERS
(For Super Class / Special Class / 'A' Class Contractor 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– D1

Annexure-II

WORK EXPERIENCE

1. Name of the firm :
2. Total number of years of experience in civil construction work :
3. List of the similar works executed during last 5 years (project wise information be furnished as per 1.2 of Appendix).

(Rs. in lakh)

Name of the work/ location Agmt. No. & Dt.	Name of the employer	Value of Contract price	Total Value of work executed	Financial year-wise Computed amount	Stipulated date of commencement	Stipulated date of completion	Actual completion date	Reasons for delay	Remarks
2	3	4	5	6	7	8	9	10	11

NB: Certification of the employer not below the rank of Executive Engineer/equivalent is to be furnished in support of the above claim

Signature of Bidder

EXISTING COMMITMENTS AND ONGOING WORKS:

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

* The above information is to be certified by the Engineer in Charge / Employer not below the rank of Executive Engineer or equivalent. In case of there is no existing commitment and ongoing works, the bidder will furnish a declaration in shape of affidavit that he has no work in hand in schedule-G. If it is found incorrect the bid shall be summarily rejected

Signature of the Tenderer

Date.....

Information on Annual Turnover

- 1 A table containing value of Civil Engineering Works executed by the Bidder during the last 5 years is as follows:

Sl.No	Financial Year	Value of Civil Engg. Works executed (excluding GST) (Rs.lakh.)	Escalation Factor	Updated Value of Civil Engg. Works executed (Rs.In lakhs)
1	Year 1: FY:20... -		1.61	
2	Year 2: FY:20... -		1.46	
3	Year 3: FY:20... -		1.33	
4	Year 4: FY:20... -		1.21	
5	Year 5: FY:20... -		1.10	

- 2 Certified that the maximum updated value of Civil Engineering Works that have been executed during the F.Y. ____ out of the last 5 years with updated price considering the escalation factor of ____
 _____ and value thereof is Rs.
 _____ lakhs (Rupees ____).

..... For and on behalf of..... (Name of the Bidder)	 Name of the Chartered Accountant: Seal of the audit firm: (Signature, name and designation and Membership No. of signatory)
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LIST OF PLANT AND EQUIPMENT TO BE DEPLOYED ON THE CONTRACT WORK (MINIMUM REQUIREMENT)

Sl.No.	List of plants and equipments	Requirement	Marks
01	Truck/Tipper(10Teach)	01No.	20
02	Water Tanker mounted on Tractor/Truck (Minimum 4000 Ltr. Capacity) (Valid documents of Tractor and trolley/Truck should be furnished.)	01No.	10
03	Concrete Mixture	02Nos.	14
04	Backhoe Loader/Hydraulic Excavator	01No	25
05	Complete 1.staging, 2.shuttering & 3.centering arrangement.	600 Sqm.	1(7)+2(7)+3(7)=21
06	Plate Vibrator	01No	05
07	Needle Vibrator	01No	05
	MINIMUM QUALIFYING MARKS-80	Total	100

- N.B.:1.Submission of forged / fabricated documents/ invoices/ vouchers to prove the purchase & ownership of T&P / Machinery shall be treated as an offence. Such case will be forwarded to the Crime Branch and License issuing authority for needful Penal action.
- Bidders are requested to mention the detail address and Landline Phone Number of the shop / company on the invoices / vouchers to verify the authenticity of purchase of the equipments / machineries.
 - Non-submission of Original bid security and bid cost within the designated period shall debar the bidder from participating in the on-line bidding system and his portal registration shall be blocked. His name shall also be informed to the registering authority for cancellation of his registration as Contractor.
 - The bidder shall furnish a certificate confirming the availability of a minimum of 600 Sq. Mtr. of centering and shuttering materials, issued by an officer not below the rank of Executive Engineer or an equivalent/higher-rank officer of a Government Department/Government Undertaking/PSU, within 90 days prior to the last date of receipt of the tender. Alternatively, a valid purchase bill/invoice for centering and shuttering materials in favour of the bidder, not older than two years and indicating a minimum quantity of 600 Sq. Mtr. of such materials, may be accepted. Failure to submit the prescribed certificate or valid purchase bill/invoice shall result in disqualification of the bidder.
 - Plants and Equipments purchased by the bidder through auction sale will not be considered during technical bid evaluation.
 - Valid permit and fitness certificate of owned/leased vehicle should be furnished otherwise no marks will be awarded for the provided documents.
 - Shuttering Plate Size and quantity should be clearly mentioned on the invoice of purchase/fabrication/making charges vouchers.
 - For tagging material like M.S.pipe/Adjustable props/wooden bullaha of Convenient length should be furnished.
- NOTE:1.Capacity of each plant and equipment should be as per specification attached separately.
- The above equipment should either be owned or availed on long-term lease extended beyond the duration of the work, the authority of which in either case is to be substantiated before award of the work.
 - The equipment mentioned above must be included in Schedule "C" and clearly indicated as "Owned/leased."
 - The above list is not exhaustive. All other machinery/equipments as will be required for satisfactory completion of the work shall have to be deployed by the agency.
 - For deploying additional sophisticated machinery by the agency for completion of the work, no claim shall be entertained.

INFORMATION REGARDING CURRENT LITIGATION, DEBARRING, EXPELLING OR TENDERED OR ABANDONMENT OF WORK BY THE TENDERER

1. a) Is the tenderer currently involved in any litigation relating to the works. Yes/No
If yes, give details:
b)
2. a) 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:

Note:

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

Signature of the 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 our firm M/s _____ nor any of its constituent partners / I have abandoned any road/ bridge/Irrigation /Buildings or other project work in India nor any contract awarded to us / me for such work have been rescinded during the last five years prior to the date of this bid.
3. The undersigned hereby authorized 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.

(Signed by an Authorised Officer of the firm or Bidder)

Date.

MEMORANDUM OF UNDERSTANDING

First Party ISri/Smt....., Aged....years, S/O.....
P.O./Dist (hereinafter called the First Party)

AND

Second Party ISri/Smt....., Aged....years, S/O-
....., At /
P.O. / Dist (hereinafter called the Second Party) having H.T./L.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 fulfil 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 whereof Both the party have signed in presence of

WITNESS

W₁ -

W₂ -

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 purchase order for 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 for 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 pendant 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 is 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 lampholders]
- c) Bushed conduit for porcelain tubing where cables pass through walls.
- d) All wood or metal blocks, boards and boxes, R.J. Boxes sunk 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 dolly.
- f) Earth wire of 16SWG/14SWG/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) Connection to ceiling rose or connection socket outlet, lampholders, switch, fan regulator etc

The point wiring in case of fan and light points shall mean the distance between the control switch and ceiling rose, connector back plate, socket outlet or lampholder 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.

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 dimensions shall be made neatly to fix the conduit in a desired manner. The conduit pipes shall be fixed by means of staples or saddles not more than 600 mm apart. Fixing of standard bends or elbow 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 back light 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 conduit shall not exceed the number of 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 suppliers shall submit the details of installation 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 purchaser and the supplier.

Installation, testing and Commissioning:

The supplier shall be responsible for the installation, testing, commissioning of all the equipment and material 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 equipments 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, the 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 jointly 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 gear, 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 switchboards
- (c) Earthing installations
- (d) Layout plans 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:

Manufacturer's 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) Fuses, switchboard and distribution boards
- b) Light fittings
- c) Conduits and the accessories for them
- d) Switches/plug sockets
- e) Cable and wires

The tenderers shall give along with their tender the following details:

- a) Completed details of earthing electrodes, earthing station and earthing conductors
- b) Details of conduit supports

Exception to Specifications:

The object of this specification is to have all tenderers quote for equivalent materials and workmanship. It is, however, understood that 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 included in the tender will be permitted. These deviations should be listed as per Annexure.

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 aluminum /copper conductors. The wires used in the lighting installation shall be PVC insulated and PVC sheathed copper wire/aluminum 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 metal clad 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 in 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 frame works so that they can be mounted on wall/column 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 aluminum 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/chart shall be supplied wherever required.

At the incoming side of each 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 performance rating of the propeller fans shall be 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 conform 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 areas 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 of 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 conform 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 preheating current for the electrodes
- iii) Proper wave form
- iv) Small 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 fluorescent lamps. All lamps shall conform 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/support set 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.

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 thereunder
- b) Indian Electricity Act, 1923 and Rules and Regulations made thereunder
- c) Indian Factories Act, 1948 and Rules and Regulations made thereunder
- 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 thereunder
- k) Indian Petroleum Act 1934, and Rules and Regulations made thereunder
- 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 IS 2675-1966
 - 5) Enclosure for Low Voltage switchgear IS 21470-1962
 - 6) PVC Cables IS 1554-1975
 - 7) Tubular fluorescent lamps for camera lighting service IS 2418-1963
 - 8) Tungsten Filament Lamps for camera service IS 415-1963
 - 9) Ceiling Fans IS 274-1966
 - 10) Floodlights IS 1947-1961
 - 11) Wall Glass flame-proof electric light fittings IS 2206-1962 (Part I)
 - 12) Water Tight Electric Light Fittings IS 3553-1956
 - 13) Steel Boxes for Enclosure of Electrical Accessories IS 5133-1969
 - 14) Fittings for Rigid Steel conduit IS 2667-1979
 - 15) Rigid steel circuits for electrical wiring IS 3837-1966
 - 16) Accessories for Rigid Steel Conduits for Electrical Wiring IS 3837-1966
 - 17) Switch Socket Outlets IS 3837-1966
 - 18) PVC Wiring IS 694-1977
 - 19) Switches for domestic and similar purpose IS 3854-1966
 - 20) PVC wiring IS 694-1977
 - 21) Call Bell and Buzzers IS 2268-1966
 - 22) Straight through joint boxes and lead sleeves or paper insulated cables- EID-0032-1964
 - 23) Earthing IS 3043-1966
 - 24) Electrical Wiring installations IS 732-1963
 - 25) Switchgear IS 3072-1965 (Part I)
 - 26) Lighting protection IS 2309-1969
 - 27) Public Address system IS 1882-1962
 - 28) Low Tension switch units IS 4064-1978
 - 29) Code of Practice for Automatic FIRE ALARM system IS 2189-1970
 - 30) Specification for Heat Sensitive Fire Detectors IS 2175-1977
 - 31) Guide for Safety procedure in Electric work IS 5216-1969
 - 32) Rubber Mats for Electric works IS 5424-1969

p) Other internationally approved standards and/or Rules and Regulations touching the subject matter of the contract.

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 |
| (v) | Urinals | Ware/Neycer/ISI marked |
| (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/Jaques I.S.I. marked & confirming to latest ISS |
| (e) | Brass Fittings: | Shakti/Anupama/Luster/I.S.I. Marked. |
| (f) | Gun Metal 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 I.S.S. 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) **CementMortar:**
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) **CoarseAggregates:**
The coarse aggregate shall be of hard granite stone and shall generally confirm 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, cold 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 confirm 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) **Sanitaryware & 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 workmanlike 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 Bolt 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 (Bull 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 Bolt 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 450mm 1cm 15mm dia P.V.C. Heavy type

4. **WashHandBasin:**

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. **KitchenSink:**

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. **StandingUrinals:**

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 P.V.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 no. of Urinals are fixed in a line, the distance between the centres 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 plate 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 Urinal 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 the 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. **SquattingUrinalPlates:**

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 200mm from floor level just at the centre of each plate, in which one 20mm dia Gate Valve 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 valves above, the water will rush into the rim 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

- | Dia of Pipe in mm | Thickness in mm | Length of pipe & width piece | |
|-------------------|-----------------|------------------------------|----------|
| | | 1.8 mtr. D/s | 1.8 mtr. |
| 50mm | 5mm | 16.00kg. | 15.00kg. |
| 75mm | 5mm. | 13.83kg. | 16.52kg. |
| 100 mm | 8mm | 24.00kg. | 22.00kg. |
| 150mm | 8mm | 26.70kg. | 31.82kg. |
- Tolerance 10%
3. 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.
(same for lead & cement joint) | Cement kg. |
|--------------------|-------------|---|------------|
| 100 | 1.2kg. | 0.13kg. | 0.12kg. |
| 50 | 0.36kg. | 0.06kg. | 0.06kg. |
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 wastewater pipes shall be connected with the nearest yard gully or a surface drain.
8. The trap 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.

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

9.01TheP.V.C.(S.W.R.)andP.V.C.(Rigid),soilWaste&VentPipes(Spigot&Socket,&couples joints),shallbeofmake&brandasspecified(Under Specificationof materials) confirmingtoI.S.S., B.S.S.&DINaretubeused.

ThemainspecificationofP.V.C.Soil&Wastepipesandfittingareasbelow.

- | | | |
|----|---|--|
| a) | Materials–Un-plasticizedPolyVinyl-Chloride(UPVC). | |
| b) | Color - | Grey |
| c) | Dimensions | - |
| | (i) Diameter | -Fittings-75mm/110mm/63mm&63mm. Pipes
-75mm,110mm,onlengthsof3.or6 mtr. |
| d) | Wall thickness | -Fittings-Minimum3.2mmatanypoint. Pipes
-As per application |
| | ForRainwater | -75mm-1.8.to2.2mm,110mm-2.5.to 3mm |
| | Waste & Soil | -75mm-1.8to2.2mm,110mm-2.5to3mm, 63mm – |
| | Undergrounddrainagewith | |
| | light/NILTraffics | -110mm-2.5to3mm |
| | Light/NilinHeavytraffic | -110mm3.7to4.3mm |
| e) | StandardConfirmingtoAttributesConfirmstoStandardNo. | |
| | i) Fittings&WallB.S.4514,DIN10531 | |
| | Thickness | -DIN19534I.S.7834-PVC (Rigid) |
| | ii) PipeWallthickness | -IS4905 |
| | iii) Rubberring | -IS5382 |
| | iv) Fitting dimensions | -DIN 19531 - P.V.C.,
DIN 19534-S.W.R.IS-
7834V.C.(Rigid) |
| | v) PipeDimensions | -IS4985 |

(a) Laying instructions & Jointing Procedure a-1 JointingofP.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.

a-2.FixingofthePipesandfittingsonwallsurface.

P.V.C.pipesboth(S.W.R.) &(Rigid),fixedonwallsurface,aretobesupportedbyP.V.C.pipeclips, 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 pines. In vertical lines the clips are to be spaced at intervals of one meter to a maximum of two Metres according to pipe diameter. •

a-3 JointingofP.V.C.(Right)PipeFittings

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.

a.4 FixingofP.V.C.pipesandFittingsthroughholesofWallsorChajjaofroofsetc.

The Walt/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.

a-5 AntisiphonagePipes

Alltheantisiphonagepipes andfittingstobeusedare of63mm.Ifthesearenotavailableunderthe items ot 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.

a-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 gent horn on the outlet side. All the Traps used with the closets, should be of

thesize125mmX110mmi.e.Inlet(Socketend)of125mm&outlet(spiritend)of110mmonly.

a-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 trap 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.

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

63mm(O.D.)P.V.C.Pipe to be used for these works either in anti-siphonage system or elsewhere, should be of "Quick Fit" Pipes Class 2 (4kg./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.

a-9 One-jointing rubber ring will be available, with each P.V.C.(S.W.R.) pipe and fitting and hence, the cost of there in 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 center line of the pipes and fittings. Fittings will be counted extra over.

11. Before fixing and painting, the pipe shall be tested hydraulically to pressure 0.4Kg/Cm² for pipes under I.S.-1729/1964 and at a pressure 0.7 Kg/Cm² for pipes under I.S. 3989-1970 without showing any sign of leakage, sweating or other 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 conform 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 lay out 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 50mm	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

Verticalline	2.5m	3m	3m	3m	3.5m	3.5m
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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 3mtrs. 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 10.5 Kg/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.

Diainmm	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
	±Tolerance5%	

11. FootValve

Footvalveisgenerallyplacedatthe lowerendofthesuctionpipeofthecentrifugalpumptoprevent the suction pipe from emptying. On vertical non-return valve may also be fixed in place of foot-valve.

ThefootvalveshallconfirmtoI.S.038-1967.

12. Watermeters(Domestictypes)

Water meter up to 50m 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. Thecock 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. FullwayValve(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 inmm	FlangedEndValvesinkg	ScrewedEndValveinkg
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. GunMetalFullwayValve

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

TECHNICALSPECIFICATIONFORSTONEWAREPIPEETC.

1. StonewarePipes(Materials)

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

InternaldiaofPipeinm.m.	ThicknessoftheBarrelin m.m.	Weightofeachpipeinkg.
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
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The length of pipe 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 be set 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 0.75m 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 equipments 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 Manholes 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, 'should' 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 shall conform 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 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 HCI yard gully shall be of 300mm X 300mm (Inside). Foundation with 100mm thick cement concrete 1.3.6 with hard granite metal of size 40mm from outer surface of wall and Brickwork 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 make the joints practically invisible and certainly not more than 0.8mm in width any where. 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 tiledado

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 colouring 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.
9. 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 S.E. / E.E., G.P.H.D, (R & B), Sambalpur or the officers duly authorized by him.

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.

Sd/-
Additional Chief Engineer
RWS&S Circle, Koraput