

BID IDENTIFICATION NO-C.C.E-KHORDHA(R&B)CIRCLE-02/2026-27
SL No.03

GOVERNMENT OF ODISHA

WORKS DEPARTMENT



DOCUMENTS FOR COVER - I

**TECHNICAL BID DOCUMENTS / DETAILED TENDER CALL NOTICE FOR
THE WORK**

**“Construction of Additional Classrooms with Toilet for Girls Student with Disabled
Friendly Facilities at Godavarish Mahavidyalaya, Banpur in the District of Khordha ”**

ESTIMATED COST: - Rs. 4,11,14,351.00

**OFFICE OF THE CHIEF CONSTRUCTION ENGINEER,
KHORDHA(R&B) CIRCLE, KHORDHA**

COVER-I

TECHNICAL BID DOCUMENTS

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GOVERNMENT OF ODISHA
OFFICE OF THE CHIEF CONSTRUCTION ENGINEER, KHORDHA (R&B) CIRCLE,
KHORDHA

Mail i.d.. rbcirclekhurda@gmail.com

Bid Identification No. CCE-Khordha (R&B) Circle-02/2026-27 dt 17.04.2026

No. 982 Dated. 28/04/2026

1st Corrigendum to TCN No. 02 of 2026-27.

Due to some unavoidable circumstances the following changes are made for the work as noted below. The date of availability of the bid and the date of opening of bid is hereby modified as follows.

Sl No	Name of the work	Existing Last Date & time availability of bid / Opening of Bid on portal	Revised Date & time availability of bid on portal / Opening of Bid on portal.
1	Development and renovation of Upper Maa Maninag Temple at Ranpur in Nayagarh District for the year 2025-26.	10.00 AM of dt 28.04.2026 up to 05.00 PM of dt 14.05.2026 Dt- 15.05.2026 at 11.30 AM	10.00 AM of dt 13.05.2026 up to 05.00 PM of dt 29.05.2026 Dt- 30.05.2026 at 11.30 AM
2.	Development and Renovation of Ladu Baba Temple at Saranakula in the district of Nayagarh for the year 2025-26.	10.00 AM of dt 28.04.2026 up to 05.00 PM of dt 14.05.2026 Dt- 15.05.2026 at 11.30 AM	10.00 AM of dt 13.05.2026 up to 05.00 PM of dt 29.05.2026 Dt- 30.05.2026 at 11.30 AM
3.	Construction of Additional Classrooms with Toilet for Girls Student with Disabled Friendly Facilities at Godavarish Mahavidyalaya, Banpur in the District of Khordha	10.00 AM of dt 28.04.2026 up to 05.00 PM of dt 14.05.2026 Dt- 15.05.2026 at 11.30 AM	10.00 AM of dt 13.05.2026 up to 05.00 PM of dt 29.05.2026 Dt- 30.05.2026 at 11.30 AM

The other terms & conditions stipulated in the Original tender call notice for all other works remain unchanged.

Sd/- Er. M.K.Mahananda
Chief Construction Engineer
Khordha (R&B) Circle, Khordha

Memo No 983 {Estg.} /Dated 28/04/2026
Copy submitted to the Principal Secretary to Government of Odisha, Works Department, Bhubaneswar for favour of kind information.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
28.04.26 02.54.26

Memo No 984 {Estg.} /Dated 28/04/2026
Copy submitted to the Engineer-in-Chief (Civil-cum-Roads), Odisha, Nirman Soudha, Bhubaneswar for favour of kind information.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
28.04.26 02.54.26

Memo No 985 {Estg.} /Dated 28/04/2026
Copy submitted to the Chief Engineer (Roads-II) Odisha, Bhubaneswar for favour of kind information.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
28.04.26 02.54.26

Memo No 986 {Estg.} /Dated 28/04/2026
Copy submitted to the Chief Engineer (Buildings-II) Odisha, Bhubaneswar for favour of kind information.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
28.04.26 02.54.26

Memo No 987 {Estg.} /Dated 28/04/2026
Copy submitted to the Chief Engineer, P. I&P, Nirman Soudha, Bhubaneswar for favour of kind information.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
28.04.26 02.54.26



OFFICE OF THE CHIEF CONSTRUCTION ENGINEER

KHORDHA (R&B) CIRCLE, KHORDHA

2nd Corrigendum to Tender Call Notice.

Bid Identification No.CCE-Khordha (R&B) Circle-02/2026-27 dt 17.04.2026.

No 1152 Dt 12/05/2026

1. The tender for the works invited vide Bid Identification No. CCE-Khordha (R&B) Circle-02/2026-27 dt 17.04.2026 vide letter no. 871 dt 17.04.2026 have been modified as follows.

Modification in Critical dates:-

- 1) Date and Time of sale and receipt of Bids: From 10.00 AM of Dt. 19.05.2026 to 5.00 PM of Dt. 04.06.2026. instead of from 10.00 AM of dt 13.05.2026 to 05.00 PM of dt 29.05.2026.
- 2) Last Date for Submission of Bid:- 5.00PM of Dt. 04.06.2026 instead of from 05.00 PM of dt 29.05.2026 .
- 3) Date of Opening of the Bid :- 11.30 AM of 05.06.2026 instead of from 11.30 AM of dt 30.05.2026 .

The other terms & conditions stipulated in the Original tender call notice remain unchanged.

Memo No 1153 Dt 12/05/2026

Copy forwarded to the Deputy Secretary to Government, Department of Information & Technology, Odisha, Bhubaneswar for information.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
12.05.26

Memo No 1154 Dt 12/05/2026

Copy forwarded to the Director, Printing Stationary and Publication, Government of Odisha, Madhupatana, Cuttack -10 for information and necessary action. He is requested to arrange for publication in next issue of Odisha Gazette.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
12.05.26

Memo No 1155 Dt 12/05/2026

Copy submitted to the Principal Secretary to Government of Odisha, Works Department, Bhubaneswar for favour of information.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
12.05.26

Memo No 1156 Dt 12/05/2026

Copy Deputy Director (Advertisement), and Deputy Secretary to Government, I&R.P. Department, Odisha, Bhubaneswar for wide circulation for favour of information.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
12.05.26

Memo No 1157 Dt 12/05/2026

Copy submitted to the Engineer-in-Chief (Civil), Odisha, NirmanSoudh, Bhubaneswar, E.I.C. Water Resources, Bhubaneswar for favour of information and wide circulation.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
12.05.26

Memo No 1158 Dt 12/05/2026

Copy submitted to the Chief Engineer (Roads-I & II), Odisha / Chief Engineer (Bridges), Odisha //Chief Engineer (Buildings-I & II) Odisha / Chief Engineer, R.D.Q. & P, / Chief Engineer, Rural Works-I /II, / Chief Engineer, N.H, / Chief Engineer, P.H (Urban), Odisha, Bhubaneswar, / M.D, O.B & CC Ltd. Bhubaneswar/Collector, Puri/Khordha/Nayagarh for of information and wide circulation.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
12.05.26

Memo No 1159 Dt 12/05/2026

Copy forwarded to the Superintending Engineer, Khordha/Nayagarh/Puri (R&B) Division for information and wide publication.

Chief Construction Engineer
Khordha (R&B) Circle, Khordha
12.05.26

Chief Construction Engineer
Khordha (R&B) Circle, Khordha

GOVERNMENT OF ODISHA
OFFICE OF THE CHIEF CONSTRUCTION ENGINEER, KHORDHA (R&B) CIRCLE, KHORDHA
INVITATION FOR BIDS (IFB)
Tender call Notice

Bid Identification No. CCE-Khordha (R&B) Circle-02/2026-27 No. 871 Dtd. 17.04.2026

1. The Chief Construction Engineer, Khordha (R&B) Circle, Khordha on behalf of Governor of Odisha invites percentage rate bid in double cover system for the Buildings works mentioned below from A & B Class contractor registered with the State Governments and contractors of equivalent Grade / Class registered with Central Government / MES / Railways for execution of Building works. The proof of registration from the appropriate authority shall be enclosed along with the bid.

Sl. No	Name of work	Value of work Excluding GST (In `) Put to tender	Concerned (R&B) Division	Security Amount (In `) (On-line)	Cost of Bid document (In `) (On-line)	Class of bidder	Period of completion
1	2	3	4	5	6	7	8
1.	Development and renovation of Upper Maa Maninag Temple at Ranpur in Nayagarh District for the year 2025-26.	Rs. 2,29,24,819.00	S.E, Nayagarh (R&B) Division, Nayagarh	Rs.2,30,000.00	10000.00 (On-line)	A & B Class	6 (Six Calendar Months)
2.	Development and Renovation of Ladu Baba Temple at Saranakula in the district of Nayagarh for the year 2025-26.	Rs. 2,57,21,565.00	S.E, Nayagarh (R&B) Division, Nayagarh	Rs.2,58,000.00	10000.00 (On-line)	A & B Class	6 (Six Calendar Months)
3.	Construction of Additional Classrooms with Toilet for Girls Student with Disabled Friendly Facilities at Godavarish Mahavidyalaya, Banpur in the District of Khordha	Rs. 4,11,14,351.00	S.E, Khordha (R&B) Division, Khordha	Rs.4,12,000.00	10000.00 (On-line)	A Class	9 (Nine Calendar Months)

2. 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 website: www.tendersorissa.gov.in.
3. The Bidder shall transfer Online the Earnest Money deposit/Bid Security of the amount specified for the work in the table col.5 above as part of its bid through a process as mentioned under DTCN.
4. The Bid documents will be available in the website: www.tendersorissa.gov.in from **10.00 AM of dt 28.04.2026 up to 05.00 PM of dt 14.05.2026** for online bidding.
5. The bidder must possess compatible Digital Signature Certificate (DSC) of Class-II or Class-III.
6. Bids shall be received only on "on line" on or before **5.00 PM of dt 14.05.2026**.
7. Bids received on line shall be opened at **11.30 Hours on dt 15.05.2026** in the office of the Chief Construction Engineer , Khordha (R&B) Circle, Khordha in the presence of the bidders who wish to attend. Bidders who participated in the bid can witness the opening of bids after logging on to the site through their DSC. If the office happens to be closed on the last date of opening of the bids as specified, the bids will be opened on the next working day at the same time and venue.
8. The Bidder shall transfer online the cost of Bid documents for Rs.10000.00 towards cost of the Bid through a process as mentioned under DTCN.
9. After uploading of technical evaluation, the bidders will have 3 days to lodge any complain / Grievance regarding the evaluation and in no circumstances the grievance/complain will be entertained after 3 days of technical evaluation.
10. Other details can be seen in the bidding documents.
11. The authority reserves the right to cancel any or all bids without assigning any reason.
12. The Addendum/ Corrigendum if any will be hosted in the website only.

Sd/-M.K.Mahananda
Chief Construction Engineer,
Khordha (R&B) Circle, Khordha

Memo No:- 872 / Dt. 17.04.2026

Copy forwarded to the Deputy Secretary to Government, Department of Information & Technology, Odisha, Bhubaneswar for information.

Chief Construction Engineer
Khordha(R&B) Circle, Khordha

Memo No 873 / Dt. 17.04.2026

Copy forwarded to the Director, Printing Stationary and Publication, Government of Odisha, Madhupatana, Cuttack –10 for information and necessary action. He is requested to arrange for publication in next issue of Odisha Gazette.

Chief Construction Engineer,
Khordha (R&B) Circle, Khordha

Memo No:- 874 / Dt 17.04.2026

Copy submitted to the Principal Secretary to Government of Odisha, Works Department, Bhubaneswar for favour of kind information.

Chief Construction Engineer,
Khordha (R&B) Circle, Khordha

Memo No :- 875 (3)/ Dt 17.04.2026

Copy submitted to the Engineer-in-Chief (Civil-Cum-Roads), Odisha, NirmanSoudh, Bhubaneswar, E.I.C., Water Resources, Bhubaneswar, for favour of kind information and wide circulation.

Chief Construction Engineer,
Khordha (R&B) Circle, Khordha

Memo No:- 876 (8)/ Dt 17.04.2026

Copy submitted to the Chief Engineer (Roads-I & Roads-II), Odisha / Chief Engineer (Buildings-I & Buildings II) Odisha / Chief Engineer (Bridges) Odisha// Chief Engineer, R.D.Q. & P, / Chief Engineer, Rural Works-I /II, / Chief Engineer, N.H-I & II, / Chief Engineer, P.H (Urban), Odisha, Bhubaneswar, / M.D, O.B & CC Ltd. Bhubaneswar for favour of kind information and wide circulation.

Chief Construction Engineer,
Khordha (R&B) Circle, Khordha

Memo No :- 877 (3)/ Dt 17.04.2026

Copy submitted to the Collector, Nayagarh/Puri/Khordha, / for favour of kind information and wide publication.

Chief Construction Engineer,
Khordha (R&B) Circle, Khordha

Memo No 878 dt 17.04.2026

Copy forwarded to the Superintending Engineer, Nayagarh(R&B) Division, Nayagarh /Superintending Engineer, Khordha/Puri (R&B) Division for information and wide publication.

Chief Construction Engineer,
Khordha (R&B) Circle, Khordha

CHECK LIST TO BE FILLED UP BY THE BIDDER

Sl. No	Particulars	Reference to Clause no.	Whether furnished		Reference to Page no.
			Yes	No	
01.	Cost of tender paper Rs. 10,000.00 (Online)	D.T.C.N Clause No.04			
02.	E.M.D for Rs. 4,12,000.00(Online)	D.T.C.N Clause No.06			
03.	Additional Performance Security in case the bidprice/rate is less than the estimated cost put totender	D.T.C.N Clause No.30 (i)			
04.	Copy of valid Registration Certificate	D.T.C.N Clause No.05			
05.	GSTIN Registration Certificate	D.T.C.N Clause No.05			
06.	Copy of PAN Card	D.T.C.N Clause No.05			
07.	No Relationship Certificate in Schedule – A	D.T.C.N Clause No.15			
08.	Works Experience -	D.T.C.N Clause No.16			
(A)	List of projects executed that are similar in nature to the work (Schedule-D1)				
(B)	Works in hand-List of projects in progress that are similar in nature to the work (Schedule-D2)				
09.	Information regarding current litigation, debarring / expelling of the tender or abandonment of the work by the tenderer (Schedule-E)	D.T.C.N Clause No.13			
(B)	Affidavit (Schedule-F)	D.T.C.N Clause No.13			
10.	Bid Capacity Total value of Civil Engineering construction work performed in the last five year with certificate from chartered Accountant. Statement showing the value of existing commitments and on-going works as well as stipulated period of completion counter signed by Superintending Engineer . Scheduled –G	D.T.C.N Clause No.14			
11	The civil contractor in order to take part in the composite tender should enter into an M.O.U. (Memorandum of Understanding duly notarized) with eligible registered electrical contractor having valid H.T. / L.T. license; for execution of electrical installation and other electrical works and a copy of such M.O.U. should be attached with the tender as per the proforma at Schedule- J which shall form a part of tender. A copy of electrical license/GST/PAN should also be enclosed with the tender papers, the original of which need to be furnished during verification. The above M.O.U. is not required in case of the civil contractor having valid registration in H.T. / L.T. electrical license with the same name & style	D.T.C.N Clause No-05			
12.	Tools & Plants and machineries as per the requirement in Schedule-C (Minimum 70% marks to be obtained). (Proof of ownership of Tools & Plants and machineries are to be furnished in shape of copy of invoices / required sale deed in case of purchase / required lease deed with owner ship documents of the leaser duly attested.	D.T.C.N Clause No.10			
	List of plants and equipment	Requirement			
1.	Tipper	2 Nos			
2.	Concrete Mixture with Hopper	2 Nos			
3.	Hydraulic Excavator/Loader	1 No			
4.	Generator 33 KVA	1 No			
5.	Complete staging, shuttering, Steel centering arrangement for steel shuttering – Not older than 3 years (No marks will be awarded if the shuttering material	1000 Sqm			

	area is less than 1000 sqm)				
6.	Needle Vibrator	2 Nos			
7.	Plate Vibrator	2 Nos			
8.	Water Tanker (Capacity 5000 Ltr)	1 No			
(B)	Certificate by the Superintending Engineer under whom the machineries/equipments are deployed as per Annexure-III of Schedule-C	D.T.C.N Clause No.12			
(C)	Time Schedule for movement of equipments / machineries available with the tenderer from one site to work site as per Annexure-IV of Schedule-C	D.T.C.N Clause No.12			

**OFFICE OF THE CHIEF CONSTRUCTION ENGINEER,
KHORDHA (R&B) CIRCLE, KHORDHA
CONTRACT DATA**

A. GENERAL INFORMATIONS

SI No	Item	Details
1	Bid Identification No.	C.C.E.KHORDHA.(R&B) <u>CIRCLE 02/2026-27</u>
2	Name of the Work	Construction of Additional Classrooms with Toilet for Girls Student with Disabled Friendly Facilities at Godavarish Mahavidyalaya, Banpur in the District of Khordha
3	Officer inviting tender	Chief Construction Engineer, Khordha (R&B) Circle, Khordha
4	Superintending Engineer concerned with head quarters authorised as Engineer-in-charge of this work.	Superintending Engineer, Khordha(R&B)Division, Khordha
5	Chief Construction Engineer with head quarter	Khordha(R&B) Circle, Khordha
6	Accepting Authority	Chief Construction Engineer, Khordha (R&B) Circle, Khordha
7	Estimated Cost	Rs. . 4,11,14,351.00

B. BID INFORMATION

8	Intended completion period/Time period assigned for Completion as per clause 9 of DTCN	9 (Nine) calendar Months
9	Last Date & time of submission of Bid (Clause No. 2 of DTCN.)	Time 17.00 PM Date:04.06.2026
10	Cost of Bid Document (Clause No. 4 of DTCN.)	
	i	Cost of bid document
		Rs. 10,000/- (To be remitted Online)
11	Bid Security (Clause No. 6 of DTCN.)	
	i	Amount
		Rs. 4,12,000.00 (To be remitted Online)
	ii	Type of instrument
		As specified in the Bid document
12	Additional Performance Security (Clause No.30 (i) of DTCN.)	
	i	Amount
		<u>I, where the bid price is below 0% but not below 10% of the project cost put to bid,</u> no additional performance guarantee/security percentage is required. <u>II, where the bid price is below 10% but not below 20% of the project cost put to bid,</u> 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; <u>III, where the bid price is 20% or more below of the project cost put to bid,</u> 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 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
	ii	In favour of
		Superintending Engineer, Nayagarh(R&B)Division, Nayagarh

	iii	Type of instrument	As specified in the Bid document
13	Bid validity period	(Clause No. 11 of DTCN.)	90 days
14	Minimum period of contract / agreement / lease deed of equipment and machineries as per Clause 12(iv) of DTCN.		09(Nine) calendar months from last date of receipt of Bid documents
14	Currency of Contract		Indian Rupees
15	Language of Contract		English
16.	Similar Nature of work as per Clause 16 of		To qualify the technical bid the bidder must have completed satisfactory at least one framed structure composite building work having cost not less than 164.45 lakhs composite building works (Including EI& PH) with in any of the preceding 5 financial years(2020-2025).
	DTCN		

Procedure to participate in online bidding- procurement

1. PARTICIPATING IN THE BID IN THE E-

PROCUREMENT PORTAL: The Contractor/Bidder intending to participate in the bid is required to register in the Portal using his/her active personal/official e-mail ID and his Login ID and attach his/her valid Digital Signature Certificate (DSC) to his/her unique Login ID. The DSC used must be of appropriate class (Class II or Class III) issued from a registered Certifying Authority such as n-Code, Sify, TCS, MTN etc. He/She has to submit the relevant information as asked for about the firm/contractor. The portal registration of the bidder/firm is to be authenticated by the State Procurement Cell after verification of original valid certificates/document such as (i) PAN and

(ii) Registration Certificate (RC)/GST Registration Certificate and GSTIN (for procurement of goods) of the concerned bidder. The time period of validity in the portal is at par with validity of RC/GST Registration Certificate and GSTIN. Any change of information by the bidder is to be authenticated by the State Procurement Cell. After successful authentication bidder can participate in the online bidding process.

Contractor not registered with Government of Odisha, can participate in the e-procurement after necessary enrolment in the portal but has 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.

- a. To log on to the portal the Contractor/Bidder is required to type his/her *username* and password. The system will again ask to select the DSC and confirm it with the password of DSC. For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective CA stored in system database. The system checks the unique ID, password and DSC combination and authenticates the login process for use of portal.
- b. The tender documents uploaded by the Tender Inviting Officer in the website <https://tendersodisha.gov.in> will appear in the section of "Upcoming Tender" before the due date of tender sale. Once the due date has arrived, the tender will move to "Active Tender" Section of the *homepage*. Only a small notification will be published in the newspapers specifying the work details along with *mention* of the specific website for details. The publication of the tender will be for specific period of time till the last date of submission of bids as mentioned in the 'Invitation for Bid' after which the same will be removed from the list of Active tenders. Any bidder can view or download the bid documents from the website.
- c. Contractor exempted from payment of EMD will be able to participate in the tender directly by uploading documentary evidence to show his eligibility for such exemption.
- d. The *software* application has the provision of payment of cost of tender document through payment gateway of *authorized* bankers by directly debiting the account of the bidders.

- 1.1. Furnishing scanned copy of such documents is mandatory along with the tender documents otherwise his/her bid shall be declared as non-responsive and thus liable for rejection. Bidders participating through Joint Ventures shall declare the authorized signatory through Memorandum of Understanding duly registered and enroll in the portal in the name and style of the joint

- venture company. It is mandatory that the DSC issued in the name of the authorized signatory is used in the portal.
- 1.2. In the case of any failure, malfunction, or breakdown of the electronics system used during the procurement process, the tender inviting officers shall not accept any responsibility for failures or breakdowns other than in those systems strictly within their own control.
 - 1.3. Any third party/company/person under a service contract for operation of a procurement system in the State or his/her subsidiaries or their parent companies shall be ineligible to participate in the procurement processes that are undertaken through the procurement system irrespective of who operates the system.
 - 1.4. For submission of Bid through the E-Procurement Portal, the bidders shall upload the scanned copy/copies of document in prescribed format wherever warranted in support of eligibility criteria and qualification information. The online bidder shall have to produce the original documents in support of the scanned copies and statements uploaded in the portal before the specified date as per DTCN.
 - 1.5. Each bidder shall submit only one bid for one package. A bid is said to be complete if accompanied by cost of bid document and appropriate Bid Security Declaration. The system shall consider only the last bid submitted through the E-Procurement portal.
 - 1.6. The bidder may ask a question related to tender online in the procurement portal using his/her DSC, provided the questions are raised within the period of seeking clarification as mentioned in tender call notice/Bid. The Officer inviting the Bid/Procurement Officer-Publisher will clarify queries related to the tender.
 - 1.7. The details of drawings and documents pertaining to the works available with the officer inviting the Bid as well as in the office of the Chief Construction Engineer and Superintending Engineer as mentioned in the Contract Data will be open for inspection by the bidders. The bidder is required to download all the documents for preparation of his bid. It is not necessary for the bidder to upload other Bid documents (after signing) while uploading his bid. He is required to upload documents related to his eligibility criteria and qualification information and Bill of Quantities duly filled in. It is assumed that while participating in the bid, the bidder has referred all the drawings and documents. Seeking any revision of rates or backing out of the bid claiming for not having referred to any or all documents provided in the Bid by the Officer Inviting the Bid will be construed as a plea to disrupt the bidding process and in such cases the bidders shall be barred from tendering for a period of 180 days.
 - 1.8. Any addendum/corrigendum/cancellation of tenders shall be published in the website <https://tendersodisha.gov.in>, notice board and through paper publication and such notices shall form part of the bidding documents.
 - 1.8.1. The system generates a mail to those bidders who have already uploaded their tenders and those bidders if they wish can modify their tenders. The bidders are required to check the website till last date and time of bid submission for any addendum/corrigendum/cancellation thereof. Tender inviting authority is not responsible for communication failure of system generated mail. All the volumes/documents shall be uploaded/provided in the portal by the Officer inviting the bid. The bidder shall carefully go through the document and prepare the required documents and upload the scanned documents in Portable Document Format to the portal in the designated location of Technical Bid. He will fill up the rates of items or percentage in the BOQ downloaded for the work in designated Cell and upload the same in designated location of Financial Bid. Bidders are to submit only the original BoQ uploaded by publisher after entering the relevant fields without any alteration/deletion/modification. Multiple BoQ submissions shall lead to cancellation of bid. In case of item rate tender, bidders shall fill in the rates other than Zero value in the specified cells. In the percentage rate tender, the bidder quoting Zero value is valid and will be taken as Schedule of Rates. Submission of documents shall be effected by using DSC of appropriate class.

2. PAYMENT OF FEMD/BID SECURITY AND COST OF BID DOCUMENTS: The Bidder shall furnish,

aspartofhisBidinshapeofBidsecurityDeclarationasmentionedintheContractData.Non-submissionofbidsecuritydeclarationwithinthedesignedperiodshalldebarthebidderfromparticipatingintheonline

biddingsystemandhisportalregistrationshallbecancelled.Hisnameshallalsobeinformedtotheregisteringauthorityoforcancellationofhisregistration.

~~2.1~~ TheEMDorBidSecuritypayablealongwiththebidis1%oftheestimatedcontractvalue(ECV)orasmentionedinthebid document.

~~2.2~~ Deleted.

~~2.3~~ Thetenderacceptingauthoritywillverifytheoriginalsofallthescanneddocumentsofthesuccessfullowestbidderonlywithin5daysofopeningofthetender(pricebid).Intheeventualityoffailureonthepartofthelowestsuccessfulbidder to procedure the original documents, he will be barred in future from participating in tender for 3 years and will be blacklisted by the competent authority. In such situation, successful bidder will be required to produce his original documents for consideration of his tender at the negotiated rate equal to L1 bidder.

~~2.4~~ ContractorexemptedfrompaymentofEMDwillbeabletoparticipateinthetenderdirectlybyuploadingdocumentary evidence towards his eligibility for such exemption.

~~2.5~~ GovernmentofOdishahasintroducedepaymentgatewayintotheportalforpaymentofcostofBidandBidSecurity/EarnestMoneyDeposit.Theprocessofusing

paymentgatewayismentionedinthe"***ProcedureforElectronicreceipt,accountingandreportingofCostofTenderPaperand EarnestMoneyDepositsonsubmissionofbids***"

3. FORMAT AND SIGNING OF BID: (Logging to the Portal)-

The Contractor/Bidder is required to type his/her Login ID and Password. The system will 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 CA stored in system database. The system checks the unique Login ID, Password and DSC combination and authenticates the login process for use of portal.

The bidder can download the tender of his choice and save it in his system and undertake the necessary preparatory work off-

line and upload the completed tender at his convenience within the final date and time of submission. The bidders shall only submit single copy of the required documents and Price Bid in the portal. In the Financial bid, the bidder cannot leave any figure blank. He has to only write the figures, the words will be self-generated. The Bidders are advised to upload the completed Bid document well ahead of the last date & time of receipt to avoid any last moment problem of power failure etc.

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

3.2. The bidders shall log on to the portal with his DSC and move to the desired tender for uploading the documents in appropriate place one by one simultaneously checking the documents. Once the Bidder

make sure that all the documents have been up-

loaded in appropriate place he clicks the submit button to submit the bid to the portal.

3.2.1. The bid once submitted cannot be retrieved or corrected. Tender cannot be pre-

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

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

3.2.3. The Bidder should ensure clarity of the document uploaded by him to the portal especially the scanned documents by taking out sample printing. Non-submission of legible documents may render the bid non-responsive. However, the Officer inviting the Bid if so desires can ask for legible copies or original copies for verification within a stipulated period provided such **document in no way alters the Bidder's price bid. If the Bidder fails to submit the original documents within the stipulated date, he will be debarred from tendering for a period of 180 days.**

SUBMISSION OF BIDS:-

- 3.3. The bidders shall carefully go through the tender and prepare the required documents. The bid shall have a Technical Bid and a Financial Bid. The Technical bid generally consists of GSTIN, PAN, Registration Certificate, Affidavits, Profit Loss statement, Joint venture agreement, List of similar nature of works, work in hand, list of machineries and any other information required by OIT. The Financial Bid shall consist of the Bill of Quantities (BOQ) and any other price related information/undertaking including rebates.
- 3.4. Bidders are to submit only the original BOQ (in .xls format) uploaded by Procurement Officer Publisher (Officer Inviting Tender) after entering the relevant fields without any alteration/ deletion/ modification. Multiple BOQ submission by bidders shall lead to cancellation of bid. In case of item rate tender, bidders shall fill in the rates other than zero value in the specified cells without keeping it blank. In the percentage rate tender the bidder quoting zero percentage is valid and will be taken at par with the estimated rate of the work put to tender.
- 3.5. The bidders 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 location of Technical Bid.
- 3.6. The bidders 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 bidders shall type rates in figure only in the rate column of respective items (s) without any blank cell in the rate column in case of item rate tender and type percentage excess or less up to two decimal place only in case of percentage rate tender.
- 3.7. The bidders shall log 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.
- 3.8. Bids cannot be submitted after due date and time. The bid once submitted cannot be viewed, retrieved or corrected. The Bidders should ensure correctness of the Bid prior to uploading and take printout of the system generated summary of submission to confirm successful uploading of bid. The bid cannot be opened even by the OIT or the Procurement Officer Publisher/ opener before the due date and time of opening.
- 3.9. Each process in the e-procurement is time stamped and the system can detect the time of login of each user including the Bidder.
- 3.10. The Bidders should ensure clarity/legibility of the document uploaded by him to the portal.
- 3.11. The system shall require all the mandatory forms and fields filled up by the contractor during the process of submission of the bid/tender.

- 3.12. The bidders should check the system generated confirmation statement on the status of the submission.
- 3.13. The bidders should upload sufficiently ahead of the bid closure time to avoid traffic rush and failure in the network.
- 3.14. The Tender Inviting Officer is not responsible for any failure, malfunction or breakdown of the electronics system used during the e-procurement process.
- 3.15. The Bidder is required to upload documents related to his eligibility criteria and qualification information and Bill of Materials duly filled in. It is not necessary for the part of the bidder to upload the drawing and the other Bid documents (after signing) while uploading his bid. It is assumed that the bidder has referred all the drawings and documents uploaded by the Officer Inviting the Bid.
- 3.16. The Bidder will not be able to submit his bid after expiry of the date and time of submission of bid

(server time). The date and time of bid submission shall remain unaltered even if the specified date for the submission of bids declared as a holiday for the Officer Inviting the Bid.

- 3.17. The 'Online Bidder' shall digitally sign on all statements, documents, certificates uploaded by him, owning responsibility for their correctness/ authenticity as per IT ACT 2000. If any of the information furnished by the bidder is found to be false/fabricated/bogus, his EMD/ Bid Security Shall stand forfeited and his registration in the portal shall be blocked and the bidder is liable to be blacklisted.

4. SECURITY OF BIDS SUBMISSION:

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

5. DEADLINE FOR SUBMISSION OF THE BIDS:

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

RESUBMISSION AND WITHDRAWAL OF BIDS:

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

- 5.3. Resubmission of bid shall require uploading of all documents including price bid afresh.
- 5.4. If the bidder fails to submit his modified bids within the pre-defined time of receipt, the system shall consider only the last bid submitted.

6. LATE BIDS:

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

7. MODIFICATION AND WITHDRAWAL OF BIDS:

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

8. OPENING OF THE BID:

8.1. Bid opening date is specified during tender creation or can be extended with corrigendum. This date is available in IFB, tender document as well as the homepage of portal. Bid opening can be done by the authorized users which are defined during the tender publication/approval stage. The bids are encrypted using their respective public keys and can be decrypted only on or after the Bid Opening due date and

time. The bid opener's private key will be required to open the bids and all the openers have to log on to the portal during that time.

- 8.1.1. The bidders who participated in the online bidding can witness opening of the bid from any system logging on to the portal with the DSC away from opening place. Contractors are not required to be present during the bid opening at the opening location if they so desire.
- 8.1.2. Each activity is date and time stamped with user details. For time stamping, server time is taken as the reference.
- 8.2. In the event of the specified date of bid opening being declared a holiday for the Officer inviting the Bid/Engineer-in-Charge, the bids will be opened at the appointed time on the next working day.
- 8.3. In case bids are invited for more than one package, the order for opening of the "Bid" shall be that in which they appear in the "Invitation for Bid".
- 8.4. The Bid openers; who have been pre-defined shall log on to the portal with their respective DSC. Unless all the Officers who have been declared as Opening officers, log on to the portal with their DSC the Tender cannot be opened.
- 8.5. In case of non-responsive tender the officer Inviting tender should complete the e-Procurement process by uploading the official letter for cancellation/re-tender.

EVALUATION OF BIDS:-

- All the opened bids shall be downloaded and printed for taking up evaluation. The officer authorized to open the tenders shall sign and number on each page of the documents downloaded and furnish a certificate that "the documents as available in the portal containing nos. of pages".
- 8.5.1. After opening of technical bid, the bidder may be asked in writing/online (in their registered e-mail ID) to clarify on the uploaded documents provided in the Technical Bid, if necessary, with respect to any doubts or illegible documents required for Technical Evaluation. The Officer Inviting Tender may ask for any other document of historical nature during Technical Evaluation of the tender. Provided in all such cases, furnishing of any document in no way alters the 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.
 - 8.5.2. The bidders will respond in not more than 7 days of issue of the clarification letter, failing which the bid of the bidder will be evaluated on its own merit.
 - 8.5.3. Immediately, on receipt of these clarifications, the Evaluating Officers; predefined in the system for the bid, will finalize the list of responsive bidders. They will log on to the site with their DSC and record their comments on the Technical evaluation page in the system. The Officer Inviting the Bid if also the accepting authority, shall log on to the system with his digital signature and check the technical evaluation. He can either accept or pass on to the evaluating officers for re-evaluation. Upon acceptance of technical evaluation by the Accepting authority in the system, the system shall automatically generate a letter to all the responsive bidders and the system shall forward the letter to all the responsive bidder that their technical bid has been evaluated responsive with respect to the data/information furnished by him and the letters shall also intimate him the date & time of opening of financial bid. The system shall also inform the non-responsive bidders in their e-mail ID that their bid has been found non-responsive.
 - 8.6. The Technical evaluation of all the bids shall be carried out as per the information furnished by the Bidders. But evaluation of

the bidder does not exonerate the bidders from checking their original documents and if at a later date the bidder is found to have misled the evaluation through wrong information, action as per relevant clause of DTCN shall be taken against the bidder/contractor.

- 8.7 The Procurement officer-Evaluators will evaluate bid and finalized list of responsive bidders. Opening of price bid and evaluation of lowest bidder is subject to satisfaction of other qualification information.
- 8.7.1 The financial bids of the technically responsive bidders shall be opened on the due date of opening. The Procurement Officer-Openers shall log on to the system in sequence and open the financial bids.
- 8.7.2 The Financial Bid will be opened on the notified date & time in the presence of bidders or their authorised representative who wish to be present.
- 8.7.3 At the time of opening of "Financial Bid", the names of the bidders whose technical bids were found responsive will be announced and the bids of only those bidders will be opened. The remaining bids will be rejected.
- 8.7.4 The responsive bidders' name, the bid prices, the item wise rates, the total amount of each item in case the item rate tender and percentage above or less in case of percentage rate tenders will be announced. Any discounts and withdrawals, and such other details as the officer inviting the tender may consider appropriate, will be announced by him or his authorized representatives at the time of opening.
- 8.7.5 Rebate/discount offer if any uploaded to the system shall be declared and recorded first.
- 8.7.6 The Financial bid of the bidders shall be opened one by one by the designated officers. The system shall auto-generate the Comparative statement.
- 8.7.7 The Bidder can witness the principal activities and view the documents/summary reports for that particular work by logging on to the portal with his DSC from anywhere.
- 8.7.8 Procurement Officer-Openers shall sign one each page of the download BOQ and the Comparative Statement and furnish a certificate to that respect.
- 8.7.9 System provides an option to Procurement Officer/Publisher for reconsidering the rejected bid with the approval of concern Chief Engineer/Head of Department.

9. CLARIFICATION AND NEGOTIATION OF BIDS:

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

10. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT:

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

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

11. BLOCKING OF PORTAL REGISTRATION

- a. 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.
- b. The portal registration blocked in the ground mentioned in the above Para-11.1 shall be unblocked automatically in receipt of revocation order of cancellation/suspension/blacklisting from the concerned authority.
- c. The Officer Inviting Tenders 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/Head of Office if any of the following provisions are violated.
 - i. Fail to furnish original Technical Documents before the designated officer within the stipulated date and time.
 - ii. Backs out from the bid on any day after the last date of receipt of tender till expiry of the bid validity period (including till the extended bid validity period)
 - iii. Fail to execute the agreement within the stipulated date.
 - iv. If any of the information furnished by the bidder is found to be false/fabricated/bogus.

Accordingly the officer Inviting Tenders shall recommend to the Chief Manager (Tech) State Procurement Cell, Odisha for blocking of portal registration of bidder and simultaneously actions shall also be initiated by OFFICER INVITING TENDER for blacklisting as per Appendix-XXXIV of OPWD code Volume-II. The minimum period of blocking of Portal Registrations shall in no case be less than 180 days.

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

1. The State Government have formulated rules and procedures for Electronic receipt, accounting and reporting of the receipt-of Cost of Tender Paper and Earnest Money Deposits on submission of bids through the procurement portal of Government of Odisha i.e. "<https://tendersodisha.gov.in>".
2. Electronic receipt of cost of tender paper has been successfully tested through SBI payment gateway. Now it has been decided to introduce electronic receipt of **Cost of Tender Paper and Earnest Money Deposits 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 e-receipts will be made from a single source.
- d) Credit of receipts into the Government accounts and to the designated Bank account of the participating entities indicated in Para 2 above would be faster.

3. Only those bidders who successfully remit their Cost of Tender Paper and Earnest Money Deposit on submission of bids would be eligible to participate in the tender/bid process. The bidders with pending or failure payment status shall not be able to submit their bid. Tender inviting authority, State Procurement Cell, NIC, the designated Banks shall not be held responsible for such pendency or failure.

4. Banking arrangement:

- a) **Designated Banks (SBI/ICICI Bank/HDFC Bank) payment gateway are being integrated with the Procurement portal of Government of Odisha (<https://tendersodisha.gov.in>)**
- b) The Designated Banks participating in **Electronic receipt, accounting and reporting of Cost of Tender Paper and Earnest Money Deposit on submission of bids** will nominate a Focal Point Branch called e-FPB, who is authorized to collect and collate all e-Receipts. Each such branch will act as the Receiving branch and Focal Point Branch notwithstanding the fact that the bidder might have debited his account in any of the bank's branches while making payment.

5. Procedures of bid submission using electronic payment of tender paper cost and EMD by bidder:

- a) **Log on to e-Procurement Portal: The bidders have to log on to 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 tenders 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 a

knowledge receipt for successful bid submission. The bidders should make anote 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 receipt on account of Cost of Tender Paper, thee-

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 Bank store mit the money to the State Government account under different heads. In respect of the cost of tender paper received through thee- 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**, thee-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 Bank store mit 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 Bids as per direction received from TIA through e-procurement system.
- e) Back-end Transaction Matrix of Electronic receipt of Cost of Tender Paper and Earnest Money Deposit on submission of bids is enclosed in the Annexure.

7. Settlement of Earnest Money Deposits submission of bids:

- a) The Bank will remit the Earnest Money Deposits 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 Deposits submission of bid** of defaulting bidder is occasioned for various reasons.

- a) ~~In case the Earnest Money Deposits submission of bids is forfeited, thee~~
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 Deposits submission of bid**, in the State Government Treasury under the appropriate head (8782-Cash Remittances and Adjustments between the officers rendering account to the same Accounts Officer-102-

P.W.Remittances-1683-Remittances-91028-

Remittances into Treasury) after taking the amount as a revenue receipt in their Cash Book under the head 0075-

Misc. General Services-00-101-Unclaimed Deposits-0097-Misc, Receipts-02080-

Misc. Deposits and submit the detail account to DAG (Puri) as a deposit of the Division.

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

9. Role of the Banks:

- a) Make necessary provision/customizations at their end to enable the provision for online payments/refunds as per their 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 referenced 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) Banks should provide timely reports and referenced details to NIC enabling them to carry out their roles 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/ULB on 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/ULB 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 again today.
- g) Similarly, payment gateway (PG) provider will provide a web service to pull the refund and settlement status again today.
- 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>)toenabletheprovisionforelectronicpayment.
- b) TheNIC,Odishawillmodify/rectifytheerrorsinelectronicdatarelatingtotheChartofAccount.
 - c) NICwillprovideaninterfacetoorganisationstodownloadtheelectronicreceiptdata.
 - d) EnableautomaticgenerationofdailyXMLfilesfrome-ProcurementsystemandensuredeliveryofthesametothetheauthorisedBanksforenablingautomaticrefund/settlementoffunds.
 - e) NICshallenablethee-ProcurementportaltogenerateMISasrequiredfortheStateProcurementCellinordertomakeremittanceofthetenderpapercosttotheStateGovernmentaccountusingtheOdishaTreasuryportal.

12. RoleofCyberTreasury:

- a) ThecostofthetenderpaperdepositedbytheSPCusingtheOdishaTreasuryPortalwhichwillbeaccounted forby theCyberTreasury anditshallsubmit theaccounts toA.G(O)aspertheestablishedprocess.
- b) TheCyberTreasurywillprovideMISasrequiredtotheSPCforthepurposeofaccountingandreconciliationoftheelectronicremittancesmadetotheStateGovernmentaccount.

13. RedressalofPublicgrievances:

- a)TheStateProcurementCell,Odisha,NationalInformaticsCentre,Odishaandthee-FPBwillhaveaneffectiveprocedurefordealingwith,publiccomplaintfore-Receiptrelatedmatters.Incase,anymistakeisdetectedbyanyofthestakeholdersinreportingofreceiptoftenderpapercostandEMD,eithersuomotooronbeingbroughttoitsnotice,theStateProcurementCell,Odisha,NationalInformaticsCentre,Odishaunit,CyberTreasuryandthebankwillpromptlytakestepsforrectification.Thee-FocalPointBranchoftheparticipatingBanks,NationalInformaticsCentre,OdishaandtheStateProcurementCell,OdishawillnotifythecontactnumberandaddressoftheHelpDeskforresolutionofanydisputeregardinge-Receipt.

14. Applicabilityandmodificationofexistingrules/orders:

ThemodalitiesprescribedinthisOfficeMemorandumfordownloadingoftenderpaper,submissionandrejectionofbid, acceptanceofBidsaswellasrefundandforfeitureofearnestdepositwillbeapplicableforelectronicsubmissionofbidst hrough e-procurementportal.Existingprovisionsregulatingcostoftenderpaper,earnestmoneydepositinOPWDCodeandOGFRwouldstandmodifiedtotheextentprescribed.

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

ANNEXURE-I

Back-end Transaction Matrix of Electronic receipt and remittance of Cost of Tender Paper and Earnest Money Deposits submission of bids.

	Cost of Tender Paper on submission of bids	Earnest Money Deposit on submission of bids
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<p>Government Departments</p>	<p>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.</p> <p>II. With reference to the Notice Inviting Tender/Bid Identification Number, the amounts realized 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.</p>	<p>I. In case of tenders of Government Departments, amount towards Earnest Money Deposits 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 bank 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.</p> <p>II. In case of forfeiture of Earnest Money Deposits submission of bids, the 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.</p>
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	Cost of Tender Paper on submission of bids	Earnest Money Deposit on submission of bids
State PSUs, Statutory Corporations, Autonomous Bodies and Local Bodies.	<p>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 separate pooling accounts opened in Focal Point Branch called e-FPB of respective designated Banks at Bhubaneswar on T+1 days.</p> <p>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.</p>	<p>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.</p> <p>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.</p>

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

1. The **percentage rate** bids are invited on **ONLINE in double cover system** from **B & “A” Class** contractors registered with the State Governments and contractors of equivalent Grade / class registered with Central Government / MES / Railways 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 Additional Classrooms with Toilet for Girls Student with Disabled Friendly Facilities at Godavarish Mahavidyalaya, Banpur in the District of Khordha . “ at an estimated cost of **Rs. 4,11,14,351.00 (Rupees Four crore eleven lakh fourteen thousand three hundred fifty one)** only. The adopted format for percentage rate is same as that of the form adopted for **item rate** tenders but the word “**Item rate**” shall be replaced by “**Percentage rate**” and the contract will be named as **P-1. Bids from Joint Venture are not allowed.**
2. The Bid documents are available from official website of Government: <https://tendersodisha.gov.in> from **10.00 AM of dt 19.05.2026 to 05.00 PM of dt 04.06.2026** The last date and time of submission of Bid is as per contract data.
3. The Technical Bid documents (Cover-I) will be opened by the assigned officer in the office of the **Chief Construction Engineer, Khordha (R&B) Circle, Khordha** at **11.30** Hours on **05.06.2026** in the presence of the bidders or their authorized representatives who wish to attend.
4. The cost of Bid documents shall be remitted by the bidder through electronic payment using his/her Internet banking enabled account with designated Banks or their aggregator Banks such as SBI/ICICI/HDFC or the bidder having account in other bank can make payment using NEFT / RTGS facilities of designated Banks as per W.D. O.M. No. 6785 dt.09-05-2017 read with W.D. O.M. No. 17254 dt.05-12-2017 as mentioned in the **Contract Data** 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 copy of registration certificate, PAN card, valid GST Registration Number, undertaking/certificates duly filled, affidavit, work experience certificate 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.

The contract will be drawn in PWD P1 Contract form & will constitute 3 parts as follows:-

- | | |
|---------------------|--------------------------------------|
| (a) Part-I | For Civil items of works |
| (b) Part-II | For Electrical items of works |
| (c) Part-III | For P.H. items of work. |

The contract shall be drawn & signed by the Superintending Engineer, K h o r d h a (R&B)Division, Khordha on behalf of the Governor of Odisha.

- (iii) **The Civil items of works as per Part-I of Schedule of quantities, and Electrical items of works (internal) as per Part-II of the Scheduled of quantities of the Agreement shall be supervised, measured and check measured by the Superintending Engineer, K h o r d h a (R&B)Division, K h o r d h a and PH item of work as per Part-III of schedule of quantities of Agreement will be supervised, measured & check measured by Executive Engineer, General Public Health Division No. I, Bhubaneswar.**

The civil contractor in order to take part in the composite tender should enter into an M.O.U. (Memorandum of Understanding duly notarized) with eligible registered electrical contractor having valid H.T. / L.T. license; for execution of electrical installation and other electrical works and a copy of such M.O.U. should be attached with the tender as per the proforma at Schedule- J which shall form a part of tender. A copy of valid electrical license/GST/PAN should also be enclosed with the tender papers, the original of which need to be furnished during verification. The above M.O.U. is not required in case of the civil contractor having valid registration in H.T. / L.T. electrical license with the same name & style.

6. The cost of EMD (Bid Security) shall be remitted by the bidder through electronic payment using his/her Internet banking enabled account with designated Banks or their aggregator Banks such as SBI/ICICI/HDFC or the bidder having account in other bank can make payment using NEFT / RTGS facilities of designated Banks as per W.D. O.M. No. 6785 dt.09-05-2017 read with W.D. O.M. No. 17254 dt.05-12-2017 as mentioned in the **Contract Data**. **The onlinebid must be accompanied with scanned copy of M.O.U.**(Memorandum of Understanding duly notarised) with eligibleregister electrical contractors (Valid Electrical license along with PAN card) along with other relevant documents for composite building works Bidders desirous to hire machineries or equipment's from outside the State or owned but deployed outside the State are required to furnish the bid security as specified in the **Contract Data** in form of above shape and as per the above terms and conditions. Bid not accompanied with EMD as specified above shall be liable for rejection.
7. The lowest preferred bidder is required to produce documents viz original Registration, valid VAT clearance certificate, GST Registration Number, 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.
8. The work is to be completed in all respects within the **time period** as specified in the **Contract Data**. Bidders whose bid is accepted must submit a work programme at the time of execution of Agreement.
9. All **bids** received will remain **valid** for a period as specified in the **Contract Data** after the deadline date for submission of bids and validity of bids can also be extended if agreed to by the bidder and the Department.
10. The Contractors are required to furnish evidence of ownership of principal machineries/equipments in **Schedule-C** as per **Annexure-I for which contractor shall have to secure minimum 80% of marks failing which the tender shall be liable for rejection.**
11. 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**.
12. (i) The contractor shall furnish ownership documents for those machineries which he is planning to deploy for the tendered work if these are not engaged and produce certificate from the Superintending Engineer as per **Annexure-III of Schedule-C** under whom these are deployed at the time of tendering as to the period by which these machines are likely to be released from the present contract. Certificate from the Superintending Engineer of Government of Odisha or Engineer-in-Charge of the project (in case of non-Government projects) under whose jurisdiction the work is going on, shall not be more than 90 days old on the last date of receipt of tender
- (i) (In case the contractor proposes to engage machineries and equipments as asked for in the tender document, owned or hired but deployed outside the State, he/she is required to furnish additional 1% EMD /Bid Security.
- (ii) The entire bid security including the additional bid security shall stand forfeited in case the contractor fails to mobilize the machineries within a period as to be able to execute an item of work as per original programme which will be part of the agreement.
- (iii) The contractor intending to hire/lease 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 as mentioned in contract data from the last date of receipt of Bid documents.
13. 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 scanned copy an **affidavit** at the time of submission of bid about the authentication of bid documents including Bank guarantee. 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**.
14. **Bid Capacity (Applicable for work value put to tender costing more than Rs.3.00 crores) (Vide Works Department Office Memorandum No.6300 dtd.16.6.2011).**

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

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

A= Maximum value of works executed in any one year during the last five years (updated to the current price level)rate of inflation may be taken as 10 per 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 works to be completed during the **next year** (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.

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 statement showing the value of existing commitments and ongoing works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer-in-Charge not below the rank of an Superintending Engineer.

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

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

In case the financial figures and value of completed works are in foreign currency the above enhanced multiplying factors will 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.

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

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

2020-2021.....
 2021-2022.....
 2022-2023.....
 2023-2024.....
 2024-2025.....

Base year shall be taken as 2025-26

15. 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 for such cancellations. The proforma for no relationship certificate is contained in a separate sheet vide Schedule-A.

16. (i) Each bidder is to submit along with bid a note regarding his experience on construction of Buildings work
 ii) The prospective applicant in its name should furnish list of similar nature of work satisfactorily completed in Schedule-D1 and list of works in progress in Schedule-D2.
 iii) The bidder should qualify the Criteria of Similar nature of work as mentioned in Contract Datai. To qualify the technical bid the bidder must have completed satisfactory at least one framed structure composite building work having cost not less than 164.45 lakhs composite building works (Including EI& PH) with in any of the preceding 5 financial years(2020-2025).

17. If an individual makes the application, the individual should sign above his full type written name and current address.
 18. If the application is made by proprietary firm, it shall be signed (with DSC) by the proprietor & furnish full type written name and the full name of his firm with its current address in a forwarding letter.
 19. If the application is made by a firm in partnership, it shall be signed (with DSC) by a partner holding power of attorney for the firm in which case a certified copy of the power of attorney shall accompany the application. A certified copy of the partnership deed and current address of all partners of the firm shall also accompany the application.
 20. If the application is made by a limited company or a corporation, it shall be signed (with DSC) by a duly authorized person holding power of attorney for signing the application in which case a certified copy of the power of attorney shall accompany the application. Such limited company or corporation will be required to furnish satisfactory evidence of its existence along with the technical bid.
 21. 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.
 22. No bidder will be permitted to furnish their bid in their own manuscript papers. All information should be submitted online in English.
 23. Submission of more than one tender by a bidder for a particular work will liable for rejection of all such tender papers.

24. 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 Price Bid appended to the tender document. The estimated cost is excluding GST. The rate of item basing on which estimated cost has been derived are excluding GST on different components to arrive at such 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 offered shall be considered after opening of all packages called in the same Tender Notice. The Contractors who wish to tender for two or more works shall submit separate tender for each. Each tender shall have the **Bid Identification No., Name & Sl. No. of the work (as per IFB)** to which they refer.
 - 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
25. 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. Complain at a future date that plans and specifications have not been seen by the bidders cannot be entertained.
 26. 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.
 27. (i) 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.

(ii) 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 of 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.

28. The offer of bidder shall be inclusive of cost of construction and maintenance of island, ferry service, fair-weather road, service road, foot bridge, pylon base, winch stand and derrick stand etc. as required for the work.
29. It must be definitely understood that the Government does not accept any responsibility for the correctness and completeness of the trial borings shown in the Cross Section.

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

Modification in DTCN Clause No.28 as per Works Department, Govt. of Odisha Office Memorandum No.173 dtd.03.01.2026 and Clarification vide Office Memorandum No.632 dtd.09.01.2026

After careful observation, Government has been pleased to abolish the extant provisions of threshold negative bid caps OF 15% introduced vide Works Department OM No.12366/W dtd.08.11.2013 and amended vide Works Department Om No.1437 dtd.31.01.2013 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.

- **If more than one bid is quoted (decimal upto 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 authorised representatives, the concerned SE/EE of the concerned Division and Divisional Accounts Officer (DAO) will remain present.**
- **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.**

(ii) Clause 36 of Appendix-IX of O.P.W.D. Code, Volume-II by inclusion.

The concessions/ facilities for 10% Purchase preference shall be hereby allowed only to the Individual registered Contractors belonging to Schedule Caste and Schedule Tribe having Registration Certificate upto 'B' Class as per Works Department Resolution No.16262 dtd.30.10.2018.

(iii) Amendment to Para-3.5.5 (v) of OPWD Code Volume-I by inclusion.

Additional Performance Security

(as per Office Memorandum No.4559 dtd.05.04.2021 of Works Department, Government of Odisha)

Additional Performance Security (APS) is being obtained from the Successful Bidder when the Bid amount is less than estimated cost put to tender to the extent, in shape of Term Deposit Receipt pledged in favour of Divisional Officer/Bank Guarantee in favour of the Divisional Officer from any Nationalized /Scheduled Bank in India counter guaranteed by its local branch at Bhubaneswar within seven days of issue of Letter of Acceptance (LoA) by the Divisional Officer (by e-Mail) to the successful bidder otherwise the bid of the successful bidder shall be cancelled and the he will be debarred from tendering for a period of 180 days. Further, proceeding for Blacklisting shall be initiated against the bidder as per amendment to Para 3.5.5 (v) of OPWD Code Volume-I vide Works Department Office Memorandum No.14459/W dated 20.09.2018.

31. 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.
32. 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.
33. 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) 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.
34. The authority reserves the right to reject any or all the tenders received without assigning any reasons there-of what soever.
35. The bid security (earnest money) will be retained and dealt with as per the terms and conditions of the OPWD Code.
36. 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

- li) 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 30 of DTCN as specified in the **Contract Data** and in no other form which including the amount already deposited as bid security (earnest money) shall be 2% of the value of the tendered amount (excluding 1% deposited towards hiring of equipment's/machineries from outside the State if any) and sign the agreement in the **PWD Form P-1** for the fulfilment of the contract in the office of the Superintending **Engineer** as specified in the **Contract Data** or as directed. The security deposit together with the earnest money and the amount withheld according to the provision of P1 agreement shall be retained as security for the due fulfilment 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.
 - 1. The notice inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming the bid as issued at the time of invitation of bid and acceptance thereof together with any correspondence leading thereto & required amount of performance security including additional performance security.
 - 2. Standard P.W.D. Form **P-1** with latest amendments.
 - iv) Failure to enter in to the required agreement and to make the security deposit as above shall entail forfeiture of the **Bid Security (earnest money)** .No **contract (tender)** shall be finally accepted online 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 online after **three years** 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) **Amendment to Para 3.5.18 Note – viii of OPWD Code Vol.-I**
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 mile stone liquidated damage will be imposed.
37. 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.
38. 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.
39. 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.
40. In case of any complaint by the labour working about the non payment or less payment of his wages as per latest minimum Wages Act, the Superintending 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 Superintending Engineer is final and binding on the contractor.
41. The contractor shall bear cost of various incidentals, sundries and contingencies necessitated by work in full within the following or similar category.
- a. Rent, royalties and other charges of materials, including all taxes as applicable, ferry, tolls conveyance charge and other cost on account of land and building including temporary building and temporary electric connection to work site as well as construction of service road and diversion road and its 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 temporary occupation of land owned by Govt. at the site of the work.
 - b. Labour camps or huts necessary to a suitable scale including conservancy and sanitary arrangements therein to the satisfaction of the local health authorities.
 - c. Suitable water supply including pipe water supply wherever available for the staff and labour.
 - d. Fees and duties levied by the municipal, canal or water supply authorities.
 - e. Suitable equipments and wearing apparatus for the labour engaged in risky operations.
 - 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. The contractor has to arrange adequate lighting arrangement for the work where ever necessary at his own cost.
42. 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.

43. 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.
44. It should be understood clearly that no claim what-so-ever will be entertained 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.
45. 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.
46. Bid documents consisting of plans, specifications, the schedule of quantities and the set of terms and conditions of contract and other necessary documents can be seen in all the offices issuing the documents and office of the Engineer-in-Chief (Civil) 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.
47. 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 **supersede** the condition of **D.T.C.N.**
48. 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 MoSRT&H, Govt. of India. MoSRT&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.
49. Steel shuttering & centring shall be used which shall be lined with suitable sheeting and made leak proof and watertight.
50. The Department will have the right to inspect the scaffolding, centring and shuttering made for the work and can reject partly or fully such structures if found defective in their opinion.
51. Concrete should be machine mixed unless otherwise ordered in writing by the Superintending Engineer. The contractor should arrange his own concrete mixer, vibrator, and pumps etc, for this purpose at his own cost.
52. Cement shall be used by bags and weight of one bag of cement being taken as fifty (50) Kg.
53. 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.
54. 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.
55. 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.
56. 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 storages 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.
57. 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.
58. 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.
59. Though Departmental issue of cement and steel has indicated, it may not be taken as binding. The contractor must have to arrange by themselves cement, steel, bitumen and every sort of materials from approved manufacturer, get it tested in the Departmental Laboratory and approved by the Department before use.
60. 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.
61. The tentative alignment of the proposed bridge has been shown in the enclosed drawing. However, the department has got the right to shift the actual bridge position within a reasonable range in both U/s and D/s.
62. 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.
63. After completion of the work the contractor shall arrange at his own cost all requisite equipments for testing one unplugged well and specified span free of cost as directed by the Engineer-in-Charge and bear the entire cost of the test.
64. No extra payment will be made for the jungle clearance for taking earth from the borrow areas. Earth work from cuttings shall be economically utilized in filling.
65. If required the stack of road metal and gravel will be measured in boxes of 1.5m × 1.5 M × 0.5M which will be taken as 1.5m × 1.5M × 0.44M = 1 Cum. The soling stones will be measured in the suitable stacks with deduction for voids

- @ 1/6 of volume or more depending upon the looseness of stacking which would be determined on actual observation and deduction.
66. 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.
 67. In the event of any delay in the supply of Department road roller for unavoidable reasons, no extension of time will be granted to the contractor under any circumstances.
 68. Sinking of wells shall be measured as per MoSRT&H Specifications for Road & Bridge works (Latest Revision).
 69. All method of sinking including pneumatic sinking by employment of divers and other equipment shall be included in the rate. Removal of trees, logs of trees or isolated boulders and de-silting of sand or earth from existing well, rectification of tilt and shift if any, etc. shall also be included within the rate.
 70. 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.
 71. When resort has to be made for sinking the wells by air lock and vacuum chamber method rates there of shall be pre-decided by authority accepting the tender.
 72. Construction of coffer dam or island or the work of open excavation or dressing or labour for laying well curbs shall be included in the rate.
 73. For concreting the bottom plugs of well under the method of providing concrete should be either with tremie or any other approved method as well be directed by the Engineer-in charge with 10% extra cement to be used for underwater concreting without any extra cost to the Department.
 74. No claim will be entertained in respect of difficulties during sand blowing met with during sinking of wells.
 75. No part of the bearing for the superstructure shall be allowed to rest on the noses of the piers.
 76. Tor Steel mesh reinforcement shall be provided in the concrete of the girders on the caps of the piers / abutments immediately in contact with the bearing to ensure proper distributions of heavy load.
 77. Lugs and grooves shall be provided in the bearings to prevent them from skewing and getting out of alignment.
 78. Inspection by the Director General of Supplies and Disposals of the bearing during manufacture and X-Ray or Gama Ray examination of castings thickness more than 8 inches and load testing of bearing if considered necessary shall have to be carried out at the contractor's cost. The same procedure for testing may have to be followed for ribbed bearing manufactured by widening.
 79. a) It should be clearly understood that the joints of the bars are to be provided with lapping, welds or bolts nuts as will be directed by the Engineer-in-charge.
 - b) Concrete test specimens 150mm × 150mm × 150mm in size (whether plain or reinforced concrete) for the testing shall be taken for each structural member by a representative of the contractor in the presence of responsible officer of the rank not lower than that of an Assistant Superintending 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. Test should be carried out in accordance with the stipulation in Bridges code section-III.
 - c) Test specimens shall be formed carefully in accordance with the standard method of taking test specimen and no plea shall be entertained later on the grounds that the casting of the test specimen was faulty and that the result of the specimen did not give a correct indication of the actual quality of concrete.
 - d) Plain concrete and reinforced concrete specimens will be tested in 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.
 - e) The construction of well staining by injecting cement or grout in coarse aggregate placed in position shall not be permitted.
 80. The thickness of cement concrete in top plugging should be as per Departmental drawing.
 81. In well sinking, the maximum tolerance permissible in tilt is 1:80 and the shift is 150mm to the normal direction. Where it is not feasible to work these tolerance the contractor shall carry out suitable remedial measures as may be directed by the Engineer-in-charge to overcome the adverse effects of tilts and shifts without any extra cost to the Department and without any damages to the well. Any additional work necessary consequent upon the excess tilt and shift shall be carried out by the contractor at no extra cost to the Department.
 82. Concrete of strength below of the required strength (as determined by actual tests) shall not be accepted.
 83. If the well is beyond rectification the well shall be rejected, the well has to be abandoned and another well to be sunk at a suitable location at the cost of the Contractor. The tilt and shift of the well including compensation is to be abided as per the clauses of MoSRT&H Specification for Roads & Bridge works (Latest Revision).
 84. No claim for carriage of water what-so-ever will be entertained as this has been included in the estimate and the bidder has to quote his / their rate accordingly.
 85. 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.
 86. 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. Likewise 'A' class contractor shall employ under him one Graduate Engineer or two Diploma Holders belonging to state of Odisha. The contractor shall pay to the Engineering personnel monthly emoluments which shall not be less than the emoluments of the personnel of equivalent qualification employed

under the State Govt. of Odisha. The Engineer-in Chief (Civil), Odisha may however assist the contractor with names of such unemployed Graduate engineers and Diploma Holders if such help is sought for by the contractor .The names of such Engineering personnel appointed by the Contractors should be intimated to the tender receiving authority along with the tender as to who would be supervising the work. Each bill of the Super Class, Special Class or 'A' Class Contractor shall be accompanied by an employment Roll of the Engineering personnel together with a Certificate of the Graduate Engineer or Diploma Holder so employed by the contractor to the effect that the work executed as per the bill has been supervised by him. (Vide Works Department No. Codes M-22/91-15384 dated 9.7.91). The required certificate is to be furnished in the proforma contained in a separate sheet vide **Schedule-B.**

87. 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.
88. 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.
89. **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, 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. The rates quoted by the Contractor shall be excluding GST. The GST as applicable for work contract shall be payable to Contractor on each bill amount.
90. The prevailing percentage of I. T. Department of the gross amount of the bill towards income tax will be deducted from the contractor's bill.
91. Prevailing rate of 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.
92. The contractor is required to pay royalty to Govt. towards use of minor minerals and produce such documents in support of their payment to the concerned Superintending 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 Government revenue. This is as per the Gazette Notification No.2280 dtd.15.12.2016 of Steel & Mines Department, Government of Odisha.
93. CESS @ 1 (one)% of the amount of the each bill shall be proportionately deducted from the Contractor's bill at the time of making payment of each bill.
94. Under no circumstances interest is chargeable for the dues or additional dues if any payable for the work.
95. 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.
96. **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 Superintending Engineer.
97. **Trial Boring** - The foundation level as indicated in the body of the departmental drawing is `purely tentative and for the general guidance only. The Department has no responsibility for the suitability of actual strata at the foundation level. The contractor has to conduct his own boring before starting the work and get the samples tested at his own cost to ascertain the S.B.C. and credibility of the strata at founding level. While quoting his rates for tender the contractor shall take in to account of the above aspects.
98. Any defects, shrinkage or other faults which may be noticed within **36 (thirty-six) 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 defect liability period for the work is **36 (thirty- six) calendar months** from the date of successful completion of the work.
99. From the commencement of the works to the completion of the same, they are to be under the contractors charge. The contractor is to be held responsible to make good all injuries, damages and repairs occasioned or rendered necessary to the same by fire or other causes and they hold the Govt. of Odisha harmless for any claims for injuries to person or structural damage to property happening from any neglect, default, want of proper care or misconduct on the part of the contractor or any one in his employment during the execution of the work. Also no claim shall be entertained for loss due to earthquake, flood, cyclone, epidemic, riot or any other calamity whether natural or incidental damages so caused will have to be made good by the contractor at his own cost.
100. **Payment for variation in price** - (Vide Works Department Memorandum No-12606 /W dt.24.12.2012.

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

100(a) (i): **REIMBURSEMENT/RECOVERY DUE TO VARIATION IN PRICES OF MATERIALS OTHER THAN (STEEL, CEMENT, BITUMEN, PIPES & P.O.L.).**

If during the progress of the work the price of any materials (Excluding the cost of steel cement, bitumen & P.O.L.) incorporated in the work (not being materials supplied from the Engineer-in-charge's store) in accordance with clause there of increases or decreases as a result of increase or decrease in the Average wholesale price Index (all commodities), and the contractor there upon necessarily and properly pays in respect of that materials incorporated in the work such increased or decreased price, then he shall be entitled to reimbursement or liable to refund, quarterly as the case may be, such an amount, as shall be equivalent to the plus or minus difference of 85% in between the Average Wholesale price Index (all commodities) which is operating for the quarter under consideration and that operated for the quarter in which the bid was received (last date of receipt) as per the formula indicated below provided that the work has been carried out within the stipulated time or extension thereof as are not attributable to him. If penalty is levied for delayed completion of the work, the contractor shall not be eligible to get price escalation on the above materials on the value of works executed during the extended period.

This clause will be applicable to the contracts where original stipulated period of completion is more than 18 months. In the situation where the period of completion is initially stipulated in the agreement as less than 18(eighteen) months but subsequently the completion period has been validly extended on the ground that the delay in completion is not attributable to the contractor and in the result the total period including the extended period stands more than 18(eighteen)months or more, price escalation for other materials is admissible only for the remaining period excluding 18(eighteen)months there from.

Formula to calculate the increase or decrease in the price of materials:

Price adjustment for increase or decrease in cost of materials other than cement, steel, bitumen, pipes and POL procured by the contractor shall be paid in accordance with the following formula: $V_m = 0.85 \times P_m / 100 \times R \times (M_i - M_o) / M_o$

V_m = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates of materials other than cement, steel, bitumen, pipes and POL.

R = Value of work done during the quarter under consideration excluding the work executed under extra items if any at prevailing schedule of rate/ derived rates.

M_o = The all India wholesale price index (all commodities) prevailed during the quarter of last date of receipt of bids (as published by the Economic Adviser to Govt. of India, Ministry of Industry and commerce, New Delhi).

M_i = The all India wholesale price index (all commodities) for the quarter under consideration as published by Economic Adviser, Govt. of India, Ministry of Industry and commerce, New Delhi. In respect of the justified period extended for completion of the work, the index prevailing at the time of stipulated date of completion or the prevailing index of the period under consideration, whichever is less, shall be considered.

P_m = Percentage of material component (other than cement, steel, bitumen, pipes and POL) of the work, as indicated in clause -98 (d) below.

(a)(ii): REIMBURSEMENT/ RECOVERY OF DIFFERENTIAL COST DUE TO VARIATION IN PRICES OF PRINCIPAL MATERIALS (STEEL, CEMENT, BITUMEN AND PIPES NOT ISSUED BY DEPARTMENT) AFTER SUBMISSION OF TENDER:

If after submission of the tender, the prices of Steel, Cement, Bitumen and Pipes (not being supplied by the Department) increases/ decreases beyond the price(s) prevailing at the time of the last date for submission of tenders including extension for the work, the contractor shall be eligible to get differential cost due to such hike on the value of works executed during the stipulated period and during the extended period when the reason of delay in completion of the work is not attributable to the Contractor. If penalty is levied for delayed completion of the work, the contractor shall not be eligible to get price variation on the above materials on the value of works executed during the extended period.

Reimbursement in case of differential cost due to increase in prices of cement, steel, bitumen and pipes are to be made by the Superintending Engineer with prior approval of tender accepting authority subject to following conditions:

- 1) Contractors have to submit the vouchers showing procurement of different materials from authorized dealers for the said work.
- 2) Differential cost will be allowed only for the works which are progressed as per the approved work programme / revised work programme duly approved by the Engineer in charge.

Recovery in case of decrease in prices of cement, steel, bitumen & pipes shall be made by concerned Superintending Engineer from the Contractor immediately.

The increase/decrease in prices of cement, steel, Bitumen and Pipes for reimbursement/recovery shall be determined as follow.

a) Adjustment towards differential cost of cement

$V_c = (C_i - C_o) / C_o \times$ Actual quantity of cement utilized in the work during the quarter under consideration \times base price of cement as prevailing on the last stipulated date of receipt of tender including extension, if any.

V_c = Differential cost of cement i.e. amount of increase or decrease in rupees to be paid or recovered.

C_i = All India Wholesale price index for cement for the quarter under consideration as published by Economic Adviser, Govt. of India, Ministry of Industry and commerce, New Delhi.

C_o = All India Wholesale price index (as published by Economic Adviser, Govt. of India, Ministry of Industry and commerce, New Delhi) for cement as prevailing on the last stipulated date of receipt of tender.

b) Adjustment towards differential cost of Steel

$V_s = (S_i - S_o) \times$ Actual quantity of steel utilized in the work during the quarter under consideration.

V_s = Differential cost of Steel i.e. amount of increase or decrease in rupees to be paid or recovered.

S_i = Cost of the Steel as prevailed during the period under consideration as fixed by Steel Authority of India. S_o =

Base price of Steel prevailing as on the last date of submission of tender including extension, if any.

c) Adjustment towards differential cost of Bitumen.

$V_b = (B_i - B_o) \times$ Actual quantity of Bitumen utilized in the work during the quarter under consideration. V_b =

Different cost of Bitumen i.e. amount of increase or decrease in rupees to be paid or recovered.

B_i = Average cost of Bitumen prevailed during the period under consideration as fixed by IOCL/BPCL/HPCL.
 B_o = Base price of bitumen as prevailing on the last stipulated date of receipt of tender including extension, if any.

d) Adjustment towards differential cost of pipes.

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

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

P_p = Percentage of pipe component of the work as indicated in the clause 98 (d).

R = Value of work done during the quarter under consideration excluding the value of work executed under extra items, if any, at prevailing schedule of rates or derived rate.

P_i = All India Whole sale price index for the period under consideration as published by Economic Advisor, Govt. of India, Ministry of Industry and Commerce, New Delhi, for the type of pipe under consideration.

P_o = All India Wholesale price index (as published by Economic Advisor, Govt. of India, Ministry of Industry and Commerce, New Delhi) as on the last stipulated date of receipt of tender including extension, if any, for the type of pipe under consideration.

100(b): REIMBURSEMENT/ REFUND DUE TO STATUTORY RISE IN COST OF MINIMUM WAGES BY GOVERNMENT:

If after submission of the tender, the wages of labour increases or decreases as a direct result of the coming into force of any fresh law, or statutory rule or order beyond the wages prevailing at the time of the last date of submission of tenders including extensions, the contractor shall be eligible to get escalation due to such hike on the value of works executed during the stipulated period and during the validly extended period when the delay in completion is not attributable to the Contractor. If penalty is levied for delayed completion of the work, the contractor shall not be eligible to get escalation on labour on the value of works executed during the extended period.

The contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such wages of labour, give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in a position to supply. Engineer-in-Charge may call books of account and other relevant documents from the contractor to satisfy himself about reasonability of increase in prices of wages and actual payment thereof for this purpose, the labour component of the work executed during period under consideration shall be the percentage (as specified in table below) of the value of work done during that period and the increase/decrease in labour shall be considered on the cost of minimum daily wages of any unskilled labourer, fixed by the Government of Odisha under Minimum wages act.

The compensation for escalation for labour shall be worked out as per the formula given below:

$$V_i = 0.85 \times P_i / 100 \times R \times (L_i - L_o) / L_o$$

V_i = increase or decrease in the cost of work during the quarter under consideration due to changes in rates of minimum wages.

R = Value of work done during the quarter under consideration excluding the work executed under extra items if any at prevailing schedule of rate/ derived rates.

L_o = the minimum wages for labour as notified by State Government, as prevailing on the last stipulated date of receipt of tender including extension, if any.

L_i = the minimum wages for labour as notified by State Government & as prevailed on the last date of the quarter previous to the one under consideration. In respect of the justified period extended, the minimum wage prevailing on the last date of quarter previous to the quarter pertaining to stipulated date of Completion or the minimum wage prevailing on the last date of the quarter previous to the one under consideration, whichever is less, shall be considered. P_i = Percentage of labour component of the work, as indicated in the clause 98 (d).

100(c): REIMBURSEMENT/REFUND DUE TO VARIATION IN PRICES OF P.O.L:

Similarly, if during the progress of work, the prices of Diesel, Petrol, Oil and Lubricants increases or decreases as a result of the price fixed thereof by the Government of India and the Contractor thereupon necessarily and properly pays such increased or decreased price towards Diesel, Petrol, Oil and Lubricants used in the execution of the work, then he shall be entitled to reimbursement or liable to refund, quarterly, as the case may be such an amount as shall be equivalent to the plus or minus difference of 85% in between the price of P.O.L., which is operating for the quarter under consideration and that operated for the quarter of last date of receipt of bids as per the formula indicated below provided that the work has been carried out within the stipulated time or extension thereof as are not attributable to him. If penalty is levied for delayed completion of the work, the contractor shall not be eligible to get price escalation on POL on the value of works executed during the extended period.

Formula to calculate the increase or decrease in the price of P.O.L:

$$V_f = 0.85 \times P_f / 100 \times R \times (F_i - F_o) / F_o$$

V_f = Increase or decrease in the cost of work during the quarter under consideration due to Changes in rates for P.O.L. P_f = Percentage of P.O.L. component of the work, as indicated in clause-98 (d) below

R = Value of work done during the quarter under consideration excluding the work executed under extra items if any at prevailing schedule of rate/ derived rates.

F_i = All India Wholesale price index for Fuel, Oil & Lubricant (High Speed Diesel) for the quarter under consideration as published by Economic Adviser, Govt. of India, Ministry of Industry And Commerce, New Delhi. In respect of the

justified period extended, the rates prevailing at the time of stipulated date of completion or the prevailing rates of the period under consideration, whichever is less, shall be considered.

F₀= All India Whole sale price index for Fuel, oil & lubricant (*High Speed Diesel*) as prevailing on the last stipulated date of receipt of tender including extension, if any.

100(d): The following percentages will govern the price adjustment for the entire contract for different types of works as applicable given in the following table:

PERCENTAGE TABLE					
SI No	Category of Works		% Component (Cost wise)		
			Labour (P _i)	POL (P _r)	Steel + Cement + Bitumen+ Other Materials*
1.	R&B Works (% of Component)	Road Works	5	5	90
		Bridge Works	25	5	70
		Building Works	25	-	75
2.	Irrigation Works (% of Component)	Structural Work	20	5	75
		Earth, Canal & Embankment Work	25	10	65
3.	PH Work	Structural Work	25	5	70
		Pipeline Work	5	-	Pipe- 70% *Other materials-25%
		Sewer line	10	-	Pipe- 70% *Other materials-20%

*Note: - Further break up may be worked out considering the consumption of Cement, Steel, Bitumen and pipe in the concerned works for the period under consideration.

Appendix to Bid
Schedule of Adjustment
Data

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

Cl. No-31 of F2/P1 contracts SI No.	Index description	Source of Index	Base value*	Base Date*	Weightage of item**
31 (a) (i)	Other Material	All India Whole sale price index (all Commodities) as published by the Economic Advisor to the Govt. of india., Ministry of Commerce and Industry			39.30%
31 (a) (ii)	Cement	Whole sale price index for cement (ordinary Portland Cement) as published by the office the economic advisor to the Govt. of india , Ministry of			10.20%
31 (a) (iii)	Steel	Whole sale price index for steel (Mild Steel Steel Long products) as published by the office the economic advisor to the Govt. of india , Ministry of			39.15%
31 (a) (iv)	Bitumen (VG-30,)	Office retail price of Bulk Bitumen at the nearest IOC/HPCL depot			0.0%
31 (a) (v)	Pipes	Whole sale price index for the type of pipe under consideration, as published by the office the economic advisor to the Govt of india, Ministry of Commerce and industry			0.0%
31 (b)	Labour	Minimum Wage notified by the labour and Employes State Insurance Department of Govt. of			5%
31 (c)	POL	Office retail price of HSD at nearest IOCL/HPCL/BPCL Consumer Pump depot.			5%

31 (d)	Plant & Machinery	Whole sale price index for Manufacture of Machinery for mining, Quarrying and constructionas published by the office the economic advisor to the Govt. of India, Ministry of Commerce and			1.25%
			Total		100.00%

*Values to be filled up at the time of drawal of contract.

**Valuestobefilledupinthebid document.

100(e): APPLICATION OF ESCALATION CLAUSE:

- (i) The contractor shall for the purpose of availing reimbursement/refund of differential cost of steel, bitumen, cement, pipe, POL and wages , keep such books of account and other documents as are necessary to show that the amount of increase claimed or reduction available and shall allow inspection of the same by a duly authorized representative of Government and further, shall at the request of the Engineer-in-charge, furnish documents to be verified in such a manner as the Engineer-in-charge may require any document and information kept. The contractor shall within a reasonable time of 15 days of his becoming aware of any alteration in the price of such material, wages of labour and/or price of P.O.L. give notice thereof to the Engineer-in-charge stating that the same is given pursuant to this condition alongwith information relating there to which he may be in a position to supply.
- (ii) The compensation for escalation shall be worked out at quarterly intervals and shall be with respect to the cost of work done as per bills paid during the three calendar months of the said quarter. The first such payment shall be made at the end of three months after the month (excluding the month in which tender was accepted) and thereafter at three months interval. At the time of completion of the work, the last period for payment might become less than 3 months, depending on the actual date of completion.

101. For diversion road the contractor will have to make his own arrangement to make the same in private land if necessary for which agreement of such land by the side of C.D. works and the rental charges for such private land shall be borne by the contractor including the proper maintenance with lighting arrangements during the night time and signaling during day time and barricading etc. till the C.D. works are opened to the traffic. No extra cost will be paid to the contractor for the above rental charges etc. His rate in the tender shall include this arrangement, rental charges for the land and maintenance, lighting and removal of such temporary road crust from the private land to bring the land to its original condition etc. complete.

102. The contractor has to arrange the land required for borrowing earth if necessary for the road work at his cost. No extrapayment 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.

103. Where it will be found necessary by the Department, the Officer-in-Charge of the work shall issue an 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 (Superintending Engineer) and to be submitted to the Engineer-in-charge every month.

104. The bidder should conduct three bores at each pier and S.B.C. of soil at foundation level and abutments location 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.

105. The details of foundation, sub-structure and floor protection for execution shall be done in accordance with the test results thus obtained.
106. The contractor shall have no claim whatsoever for the extra quantity of work to be executed in view of above possible changes and payments is to be made as per Clause 10 of the P-1 Contract.
107. 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 MoSRT&H Specifications with latest revision / amendment are also binding on the part of the contractor.
108. No part of the contract shall be sublet without written permission of the concerned Superintending Engineer or transfer be made by power of Attorney authorizing others to receive payment on the contractor's behalf.
109. 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.
110. Any damages caused by natural calamities should be done by the contractor at his own cost. The Department will not be in any way responsible for the same and will not pay any cost towards the repair done by the contractor.
111. 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.
112. 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.
113. 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.
114. 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 summarily 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.
115. Number of tests as specified in I.R.C./MoSRT&H/ISI 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.
116. i) Besides, the firm / contractor shall install full fledged field laboratory at work site for conducting required tests as per IRC/MoSRT&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.
- iii) After completion of the road in all respects the road furniture's should be affixed by the executing agency indicating locations like school, hospital, No-horn etc.
- 117. 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 choukidar for guarding the plant and machinery at site.

If the articles are not returned within the date originally specified or extended by the Engineer-in-charge, in addition to the normal hire charge, a surcharge equal to 10% of the hire charges will be levied for the period that the machinery is not returned. Such period will be treated as working time. In the event of the non-return of the machinery, the full value of the articles at the current market price will be recovered from the contractor's outstanding bills or any bills that may become due in respect of his other work under the state public works Department. The decision of the superintending Engineer 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 authorised 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 logbook 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 here by and between the parties here to as follows :-

(a) In consideration of agreement that hire charges be recovered from their bill for work executed on which this machinery will be used or any other than standing in the names of contractors in the book of the Department or any other Government Department. The Govt. agrees to let the hirer tools and plants for the period to be computed from the date of delivery of the tools and plant to the hirer at the P.W. Department workshop **at headquarters of concerned Superintending Engineer as per**

Contract Data.

- (b) The rate of higher charges will be as mentioned in the schedule attached.
- (c) The hirer shall not transfer, assign or sublet or in any way part with the tools and plants or any part there-of without the previous written approval of the Engineer-in-charge
- (d) On the expiry of the period of the hire, the hirer shall return the tools and plants to the Public Works Department. & workshop / store at **headquarters of concerned Superintending Engineer as per Contract Data** 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 powers on his behalf.

THE SCHEDULE

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

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

Signed by:

- | | |
|--|----|
| 1. | 2. |
| Signed sealed and delivered in the presence of | |
| 1. | 2. |

118. The agency will be responsible for traffic management and maintenance of the stretch of the road (for which the tender has been invited) at his own cost during the period of execution.

119. Even qualified criteria are met, the bidders can be disqualified for the following reasons, if enquired by the Department

- (a) Making a false statement or declaration.
- (b) Past record of poor performance.
- (c) Past record of abandoning the work half way/ recession of contract.
- (d) Past record of in-ordinate delay in completion of the work.
- (e) Past history of litigation.

120. The information furnished must be sufficient to show that the applicant is capable in all respects to successfully complete the envisaged work.

121. stIn case the 1 lowest tenderer or even the next lowest tenderers withdraw in series one by one, thereby facilitating a particular tender for award, then they shall be penalized with adequate disincentives with forfeiture of EMD unless adequate justification for such back out is furnished. Appropriate action for black listing the tenderers shall also be taken apart from disincentivising the tenderer.

122. **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 Superintending 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. As per amendment to Para-3.5.18 Note-VIII of O.P.W.D. Code Volume-I, before acceptance of the tender. The successful bidder will be required to submit a work programme and Milestone basing on the financial achievement so as to complete the work within the stipulated time and in case of failure on part of the agency to achieve the Milestone Liquidated damages will be imposed. .
- 2.1.3. To ensure good progress during the execution of the work, the contractors shall be bound in all cases in which the time allowed for any work exceeds one month to complete, 1/4th of the whole time allowed under the contract has elapsed, 1/2 of the whole of the work before 1/2 of the whole time allowed under the contract has elapsed, 3/4th of the whole of the work before 3/4th of the whole time allowed under the contract has elapsed.
- 2.1.4. If at any time it should appear to the Engineer-in-Charge that the actual process of the work does not conform to the programme to which consent has been given the Contractor shall produce, at the request of the Engineer-in-Charge, a revised programme showing the modifications to such programme necessary to ensure completion of the works within the time for completion. If the contractor does not submit an updated Programme within this period, the Engineer-in-Charge may withhold the amount of 1% of the contract value from the next payment certificate and continue to withhold this amount until the next payment after the date on which the over due Programme has been submitted.

- 2.1.5. An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 2.1.6. The Engineer-in-Charge's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer-in-Charge again at any time. A revised Programme is to show the effect of Variations and Compensation Events.

2.2. Extension of the Completion Date.

- 2.2.1. The time allowed for execution of the works as specified in the Contract data shall be the essence of the Contract. The execution of the works shall commence from the 15 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 Contractors control.
- 2.2.4. Request for reschedule and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- 2.2.5. In any such case a fair and reasonable extension of time for completion of work may be given. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. Non-application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the contractor.

2.3. Compensation for Delay.

- 2.3.1. If the contractor fails to maintain the required progress in terms of clause 2 of 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 Superintending 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 of P-1 Contract, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of extension of time. Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent

milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However no interest whatsoever shall be payable on such withheld amount.

2.4. Bonus for early completion

2.4.1 Amendment to Para 3.5.5 (v) Note – iii of OPWD Code Vol.-I by inclusion

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 Superintending 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 the contract period = 4% of contract value.
- Before 10% to 20% of the contract period = 3 % of contract value.
- Before 5% to 10% of the contract period = 2% of contract value.
- Before 5% of the contract period = 1% of contract value.

The amount of bonus, if payable shall be paid along with final bill after completion of work.

2.5 Management Meetings.

2.5.1. Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

2.5.2 The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

Clause-2 (b) of Percentage Rate 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 Superintending Engineer shall be conclusive evidence), 20% of the value of left over work will be realised from the contractor as penalty.

123. A contractor may be black listed as per amendment made to Appendix XXXIV to OPWD Code Vol.-II on rules for black listing of Contractors vide letter no.3365 dt.01.03.2007 of Works Department, Odisha.

As per said amendment a Contractor may be blacklisted

- a. Misbehaviour/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.

124. **EIGIBILITY CRITERIA:** - To be eligible for qualification, applicants shall furnish the followings.
- a. Required **E.M.D (Bid Security)** as per the **clause No. 06** and **Cost of Bid document as per Clause No.04**. The Engineer contractor having required class of registration and seeking for exemption of EMD need to upload an affidavit stating that they have not availed exemption for 3 (three) no of works during the current financial year.
 - b. Scanned Copy of valid Contractor's Registration Certificate, GST Registration Number, PAN card along with the tender documents as per **Clause No.09**.
 - c. **Information regarding (i) Evidence of ownership of principal machineries / equipments in Schedule-C 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.12. scanned copy of all documents are to be furnished with the bid.**
 - d. Information in scanned copy 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 in schedule "F"** as per **clause 13, Schedule "H"**, No Relationship Certificate in **Schedule – A** as per **clause 15 & Memorandum of Understanding (MOU) Schedule-J** as per **clause No.05**. Non submission of required information schedule A, E, F, J & G shall be treated as non-responsive and the bid shall be summarily rejected .
 - e. Submission of original bid security and tender paper cost as prescribed in the relevant clause of DTCN after last date and time of submission of bid but before the stipulated date & time for opening of the bid.
 - f. information regarding experience in similar nature of works in Schedule-D1 and list of works in progress in Schedule-D2 as per Clause No.16 with scanned copy of experience certificate issued by the Engineer-in-Charge not below the rank of Executive Engineer.
 - g. **The prospective applicant in its name should furnish list of similar nature of work satisfactorily completed in Schedule-D1 and list of works in progress in Schedule-D2. Similar nature of work i.e to qualify the technical bid the bidder must have completed satisfactory at least one framed structure composite building work having cost not less than 247.33 lakhs composite building work (Including EI&PH)with in any of the preceding 5 financial years(2020-2025). Such certificate must be certified from an officer not below the rank of Executive Engineer . .**
 - h. The contractor intending to use/lease equipments/machineries are required to furnish proof of ownership from the company/persons providing equipment/ lease deed and duration of such contract.. **The Contracts/Agreement/Lease deed should be on long term basis for a minimum period of as mentioned in contract data from the last date of receipt of Bid Documents. The Bidder should mention the name of the work in the lease agreement for which the deed is being submitted for hiring of the machineries**

Total: - 124 (One hundred twenty four) clauses only.

The bidder who meets the above minimum eligible criteria shall be qualified.

Special Condition:

All reinforcement steel and structural steel shall be procured from primary producers of steel-SAIL/TATA/JINDAL STEEL/ VIZAG STEEL.

In case of exigency, other brands (primary producers) of steel may be used with proper justification and prior approval of competent authority satisfying the tests as required by BIS's Code.

The Cement of the companies having their own manufacturing units in the State of Odisha is to be used in all works.ACC/OCL/ULTRATECH

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 complex cube test before commencement of work in each batch).
2.	Steel	I.S. 2062 and IS: 1786 (SAIL / TATA/ JINDAL STEEL/ VIZAG STEEL.MAKE)
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. 3025.
6.	Sand / Fine Aggregate	I.S. 2116, 383
7.	Binding wire	I.S. 280 (galvanised minimum 1 mm)
8.	Rain water pipe	I.S. 2527
9.	Construction joints	I.S. 3414
10.	Steel Window Frame	I.S. 1038/83
11.	Steel Door Frame	I.S. 4351/75
12.	Fitting & Fixtures for journey works	Conforming to I.S. 7452/82 strictly conform to I.S. specification and as per direction of Engineer-in-Charge.

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

ITEM OF WORK

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

TECHNICAL SPECIFICATION OF ELECTRIFICATION INSTALLATION WORKS

Construction of Additional Classrooms with Toilet for Girls Student with Disabled Friendly Facilities at Godavarish Mahavidyalaya, Banpur in the District of Khordha .

PART-II (EI)

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

All internal wiring shall be done in conformity to the latest Indian standard specification/Rules, code of practice adopted by CPWD and other standard practices prevalent in the part of the country. For the purpose of the specification the terminology used shall be as defined in IS:732 and IS:1356 of the definition of points wiring. The installation shall be carried out in conformity to all requirements of IE Act, 1910 and IE Rules 1956.

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

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

- a) Switch and ceiling rose are required
- b) In case of wall brackets, bulk head fittings, cables as required up to the lamp holders]
- c) Bushed conduit for porcelain tubing where cables pass through walls.
- d) All wood or metal blocks, boards and boxes, R.J. Boxes sunks or surface type including those required for fan regulator but excluding those under the distribution board and main control switch.
- e) Earth wire from 3 pin socket point to the common earth including connection to the earth dolley.
- f) Earth wire of 18SWG/H.D.B.C. wire for loop earthing of the fixture
- g) All fixing accessories such as clips, nails, screw, plug, rawl plug, wooden plug, round blocks etc. as required
- h) Joint for junction boxes and connecting the same as required
- i) Connections to ceiling rose or connection socket outlet, lamp holders, switch , fan regulators etc

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

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

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

Conduit wiring

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

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

The switch or regulator box shall be made of metal on all sides except on the front where backlight sheet or Perspex cover painted to match the colours of the wall shall be used in case of surface wiring system. For recessed wiring system, these boxes shall be made flush with the conduit of each conduit or section shall be completed before conductors are drawn in. The entire system of conduit after installation shall be tested or mechanical strength and electrical continuity throughout the earthing of the entire installation shall be carried out in accordance with I.E. Rules and standards.

The number of wires drawn in the conduits shall not exceed the numbers those specified in Indian standard specification No.732.

Main and Sub distribution Boards:

The position of main boards for lighting and sub distribution board for different buildings are approximate and the exact location shall be given to the successful tenderer at the time of installation.

The scope of this specification includes installation of the panel boards and distribution boards and making necessary connections. The installation of the boards shall be done strictly in accordance with the details supplied with the specifications; the instructions supplied by the switchgear manufacturer, Indian standard specifications and H.E. rules.

The supplier shall submit the details of installations to the purchaser for his consideration and approval, prior to installation.

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

Earthing

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

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

Installation, testing and Commissioning:

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

The responsibility of the supplier shall include receiving all the equipment and materials at site, storage for required period, handling the same at the site of erection, final execution , erections, revisions of equipment, if any, testing and commissioning and handing over the installation complete in all respect to the entire satisfaction of the purchaser's authorized representative. The supplier shall make good of all the damaged equipment and materials during this period at his own expense.

The supplier shall submit sample of each and every equipment and materials for the final approval of the purchaser's representatives immediately after the acceptance of offer. All the 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 joints by the supplier and the purchaser's authorized representative. The position of light fittings, pipes and board if required, to be changed / shifted due to the change in the building design etc by the purchaser's authorized representative, the same shall be carried out at no extra cost.

All the materials supplied to the contractor according to the Contract condition will be subject to inspection and approval of the officer or his representative from time to time. The contractor will provide all facilities of such inspections free of cost. At the time of inspection, the owner or his representative will have full liberty to reject any such materials, which does not conform to the specification / requirement. No claim for any rejected materials will be entertained by the owner. The contractor will remove all rejected materials from site at his own cost.

No surplus materials procured by the contractor will be accepted by the owner.

The contractor will be responsible to get the Electric installations cleared by the Electrical Inspector of Orissa 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 switch boards
- (c) Earthing installations
- (d) Layout plan showing the entire cable network

On completion of work, the successful tenderer shall supply one set of tracing in transparent linen and five sets of prints of all drawings incorporating all the changes / modifications affected during the execution of the contract. All wiring diagrams shall indicate clearly, the switch board, the runs of main and sub main wiring and the position of all the points with their controls. All the circuits shall be clearly indicated and numbered in accordance with IS:375.

The technical literatures and operating instructions and the maintenance manuals shall also be supplied in triplicate to the purchasers after the completion of the installations work.

Test:

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

All equipment shall be tested at site before the commissioning in accordance with the adopted standard and Indian Electricity Rules. Voltage test shall be carried out on each circuit on completion of wiring and cabling.

Technical Data:

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

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

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

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

Exception to Specifications:

The object of this specification is to have all tenderers quote for equivalent materials and workmanship. It is, however, understood the certain manufacturers may not be able to offer as specified in every case, where the tenderer may find it necessary to deviate from the exact letter and not the intent of the specification, he must specifically state what these deviations may be at the time he submits the tender. All deviations must be grouped in one statement.

No deviations other than those 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 aluminium conductors. The wires used in the lighting installation shall be PVC insulated and sheathed 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 work so that they can be mounted on wall / columns structure etc. as desired. The panel boards, shall be wall mounted type or floor mounted type as specified in the bill of quantities or drawings. Necessary supporting metal frame of approved design shall be provided for all panel boards.

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

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

Two bolted type earthing terminals shall be provided on the switch boards. All individual switches shall be connected with suitable size earth wire to the main earthing terminals of the switchboard.

Hanger Board and shock treatment / charts shall be supplied wherever required.

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

Switches and Plug Sockets

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

Ceiling Fans and Exhaust Fans:

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

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

Fluorescent Fittings:

All fluorescent fittings supplied shall confirm in general to IS:1913 and shall be complete with all standard accessories like choke, starter and capacitor etc

The type of enclosure provided for the fittings shall be of that specified in the bill of quantities and the working drawings. The materials of construction for fittings used for outdoor installations and for use in the work anodes shall be such that they shall withstand the atmospheric condition in that area.

Lamp holders used shall be fully shock proof, spring-loaded rotary type to ensure positive lamp locking. It should also be not possible to touch live parts of the lamp holder both after the lamp has been taken out and during the insertion or removal of the lamp. The starters shall be designed to give designed starting characteristics that shall promote full lamp life. Starter shall have high mechanical strength and topic proof construction. It should be incorporated with radio suppression capacitor o adequate rating and capacity. Power factor improvement capacitors are provided with hermetically sealed housing to ensure long and trouble free service. Terminal soldering tango shall be provided for easy electrical connections. The capacitors in general shall confirm to IS:1569-1963 and P.F improvement up to 0.95 for twin fluorescent light fittings and 0.9 for single fluorescent light fittings is to be maintained.

The ballast provided in the fluorescent fittings shall generally be in accordance to IS:1534.

The ballast should incorporate the following design features.

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

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

- 1) Withstand the atmospheric condition prevailing in the area
- 2) Provide maximum mechanical protection to the tubes and fittings accessories. Assists in maximum and uniform light distribution.

All fittings shall be provided complete with florescent lamps. All lamps shall confirm to IS:2418.

Incandescent Fittings:

The incandescent fittings shall be supplied strictly as per the details given in the enclosed annexure and bill of quantities, deviation if any regarding designs, construction of materials should be specified clearly.

All the metal parts used in construction of the fittings shall have no effect due to dust / fumes / gases likely to exist in the atmosphere. All the bolts, clamps, nuts and guard wire etc shall be galvanized.

The wall fittings shall be provided with necessary hooks / clamps / supports etc for fixing the light fittings on wall / ceiling etc as detailed in the bill of quantities and the working drawings.

Light fittings shall be suitable for connection with 19mm dia. Conduit pipe as required. If fittings are to be connected through PVC cables, glands of adequate size and capacity shall be provided.

The lamp holders provided in the fittings shall confirm to IS:1528.

CODES

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

- a) Indian Boiler Act, 1923 and Rules and Regulations made there under
- b) Indian Electricity Act, 1923 and Rules and Regulations made there under
- c) Indian Factories Act, 1948 and Rules and Regulations made there under
- d) The minimum wages Act
- e) The Women's Compensation Act
- f) The Payment of Wages Act
- g) The Fatal Accident Act
- h) The Industrial Employment Act
- i) The Employment provident Fund Act
- j) Indian Explosive Act 1984 the Rules and Regulations made there under
- k) Indian Petroleum Act 1934, and Rules and Regulations made there under
- l) A.S.M.E. Test Codes
- m) AIRE Test, Codes
- n) American Society of Materials Testing Codes
- o) Standards of the Indian Standards Institution
 - 1) Low Tension Circuit Breakers : IS 2516-1955 Part I Sec.1
 - 2) Switchgear Bus Bars IS 375-1963
 - 3) HRC fuse links IS 2208-1962
 - 4) Distribution fuse boards IS2675-1966
 - 5) Enclosure for Low Voltage switchgear IS21470-1962
 - 6) PVC Cables IS1554-1975
 - 7) Tabular fluorescent lamps for Cameral lighting service IS2418-1963
 - 8) Tungsten Filament Lamps for cameral service IS415-1963
 - 9) Ceiling Fans IS274-1966
 - 10) Flood lights IS1947-1961
 - 11) Wall Glass flame-proof electric light fittings IS2206-1962 (Part 1)
 - 12) Water Tight Electric Light Fittings IS3553-1956
 - 13) Steel Boxes for Enclosure of Electrical Accessories IS5133-1969
 - 14) Fittings for Rigid Steel conduit IS2667-1979
 - 15) Rigid steel circuits for electrical wiring IS3837-1966
 - 16) Accessories for Rigid Steel Conduits for Electrical Wiring IS3837-1966
 - 17) Switch Socket Outlets IS3837-1966
 - 18) PVC Wiring IS694-1977
 - 19) Switches for domestic and similar purpose IS3854-1966
 - 20) PVC wiring IS694-1977
 - 21) Call Bell and Buzzers IS2268-1966
 - 22) Straight through joint boxes and leads sleeves or paper insulated cables- EID-0032-1964
 - 23) Earthing IS3043-1966
 - 24) Electrical Wirng installations IS732-1963
 - 25) Switchgear IS3072-1965(Part I)
 - 26) Lighting protection IS2309 –1969
 - 27) Public Address system IS1882-1962
 - 28) Low Tension switch use units IS4064-1978
 - 29) Code of Practice for Automatic FIRE ALAM system IS2189-1970
 - 30) Specification for Heat Sensitive Fire Detectors IS2175-1977
 - 31) Guide for Safety procedure in Electric work IS5216-1969
 - 32) Rubber Mats for Electric works IS5424-1969
- p) Other internationally approved standards and / or Rules and Regulations touching the subject matter of the contract

PART-III**ADDITIONAL APPENDIX TO BILL OF QUANTITY :****(For P.H. Items of Work)**

Name of the work: Construction of Additional Classrooms with Toilet for Girls Student with Disabled Friendly Facilities at Godavarish Mahavidyalaya, Banpur in the District of Khordha

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.

1. **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.
2. 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
3. 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/
4. 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,
5. The contractor shall maintain a separate site order book for P.H. portion of work.
6. The P.H. portion of work shall be open for inspection by the authorities of P.H. Circle (R&B) Orissa, Bhubaneswar and the higher authorities and instructions imparted during the course of Inspection should be binding on the contractor.
7. 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 utilising the 'same in works. In such event, the payment of such item will be made as per actual on due approval by the competent authority.

11. All materials required for the work shall be supplied by the contractor as per standard specifications appended with due approval by the Engineer in charge of G.P.H. Wing.

In case the materials as per make specified is 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 utilised on prior approval of S.E./ E.E., G.P.H.D, (R & B), **Bhubaneswar** or the officers duly authorised 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.

A. WATER SUPPLY PIPES AND FITTINGS

1. Materials

All galvanized Iron pipes are to be of mild Steel, continuous welded, screwed tubes, medium quality confirming to ISS & bearing ISI Marks, manufactured by reputed firms and approved brands as specified. The pipes shall confirm to I: S 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 Crescent Engineering works or equivalent best quality.

All pvc pipes are to be of medium quality (Schedule- 80) manufactured by reputed firms and approved brands as specified. The pipes shall confirm to ASTM- D- 1785

2. Weight of G.I. pipes for a Metre length:

The per meter weight of different diameters of G.I. pipes for medium class is indicated in the following table.

SI No	Pipe size in mm	Medium class (in kg)
1	15mm	1.22
2	20mm	1.57
3	25mm	2.43
4	32mm	3.13
5	40mm	3.60
6	50mm	5.10

3. Laying of Pipes

The layout of the mains and service Pipes 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 consultant /Engineer In-charge, before taking up the work.

4. 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 of the pipes shall be given as below:

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

The pipes shall be laid on a layer of 75 mm thick sand and filled up with sand up to 75 mm above pipes and the remaining portion of the trench shall then be filled up with excavated earth 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 pipes of M.S./G.I., as approved by the consultant/Engineer-in-charge. The rates should include such a situation

5. 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	2.5m	2.5m	2.5m	3m	3m
Vertical Line	2.5m	3m	3m	3m	3.5m	3.5m

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

In case the Pipes are embedded in walls and floors it should be painted with one coat of anticorrosive paint of approved quality

All pipes should be fixed horizontal and vertical. For taking the Pipes through the walls and floors and roof slabs etc. the holes shall be made by filling with chisel or jumper and not by dismantling the brick work or concrete. After fixing, the holes shall be made good with cement concrete 1:2:4 and properly finished with cement 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 8 cms are to be provided for long horizontal lines and inside the lavatory/ Kitchen etc.

6. 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.

7. Painting

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

8. 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, Cocks, Valves, PVC connection Pipes etc.

9. Jointing

The jointing of G.I. tubes/ pvc pipes and fittings etc. will be done as per the provisions stipulated in the B.I.S specification.

10. Bib cock and Stop Cock

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

11. Full way Valve (Brass)

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

The approximate weight of the valves is indicated below for guidance.

Pipe size in mm	Flanged End valves in Kg	Screwed End valve in Kg
15mm	1.021	0.567
20mm	1.503	0.68
25mm	2.498	1.077
32mm	5.232	1.559
40mm	6.082	2.268
50mm	6.691	3.232

12. Gun-Metal Full way Valve

This shall be of the Gunmetal 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 I.S.I. Mark

13. 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 gunmetal and the float for low pressure in Polyethylene and for high pressure in copper.

Each and every ball valve while in closed position shall withstand an 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.

Polyethylene floats shall be watertight and non-absorbent and shall not contaminate water and with no 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.

14. CUTTING HOLES UPTO 30 CM X 30 CM IN WALLS INCLUDING MAKING GOOD THE SAME;

General: - Square holes of size as specified or as directed by the Engineer-in-charge shall be cut in the masonry or taking pipes. Any damage to the adjoining portion or to any other item shall be made good as directed by the Engineer-in-charge. All dismantled material shall be removed from the site.

Masonry works: - Bricks work etc, shall be made good by using the same class of brick, tile or stone masonry as was cut during the execution of the work. The mortar to be used shall be cement mortar (1:4) as directed by the Engineer-in-charge.

Finishing: - Cement mortar in 1:4 mix shall be used for plastering or pointing as may be required. The surface shall be finished with two or more coats of white wash/colour wash/ distemper/ painting as required but where the surface is not to be white washed, colour washed, distempered or painted, it shall be finished smooth with a floating coat of neat cement or is required to match with the surrounding surfaces.

The specifications for brickwork, stonework and finishing etc. shall be the same as detailed under relevant standards of State P.W.D. specification.

15. CUTTING HOLES UPTO 15 CM X 15 CM IN RCC FLOORS INCLUDING MAKING GOOD THE SAME;

General: - Square holes of size as specified shall be in R.C.C. floor and roofs/chajjas for passing pipes etc. Any damage to the adjoining portion or to any other item shall be made good as directed by the Engineer-in-charge. All the dismantled material shall be removed from the site.

Cement Concrete: - After insertion of pipes etc. the hole shall be repaired with cement concrete 1:2:4 and the surface finished to match the existing surface. The top and bottom shall be finished properly to make the joint leak-proof. The specifications for cement concrete work and finishing etc. shall be the same as detailed under relevant sub-heads of State P.W.D Specifications.

16. Shower rose

The shower rose: - The shower rose shall be of chromium-plated brass of specified diameter. It shall have uniform performance. The inlet size shall be 15 mm or 20 mm as required.

The chromium plating wherever specified shall of grade-B type conforming to IS No. 1068 – 1958. The chromium shall never be deposited on brass unless a heavy coating of nickel is interposed. In the case of iron, a thick coat of copper shall first be applied, then one of nickel and finally the chromium. In finish and appearance, the plated articles, when inspected shall be free from plating defects such as blisters, pits, roughness and unplated areas and shall not be stained or discovered.

A stopcock of the specified size shall be provided to control the inlet water supply to the shower rose.

- (a) Height of shower 1850 to 2000 mm from floor level.
- (b) Height of tap: - 450mm from floor level projecting 150mm from wall.

Flushing Cistern:

17.

The flushing of the Indian water closet (Orissa closet) shall be done by C.I. or polystyrene high level valve less syphonic flushing cistern (PVC low level 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 32mm dia G.I. flush pipe, made from G.I. pipe (Light quality) or 32mm dia PVC pipe as specified in the tender schedule. The flush pipe with an offset should be fixed to wall using C.I. holder bat clamps. The capacity of the cistern should be 10ltrs. As per I.S.S. The cistern shall be fixed on cast iron or rolled steel/PVC cantilever brackets (built in type), which shall be firmly embedded screwed in the wall, with C.C. M20. The cistern shall be provided with 20mm dia PVC. 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 the wall by using C.I. holder bat clamps. The bend and the offset as required in the flush pipe shall be made cold. The inside of the C.I. Cistern shall be painted with two coats of approved black bitumen paint. The outer face of the C.I. 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 painting shall be included in the rate quoted for the flushing cistern.

The inlet connection to the cistern shall be made with 450mm long 15mm dia PVC heavy type connection pipe.

B. SOIL AND WASTE PIPES AND FITTINGS

- (a) These should conform to IS: 1729 – 1964 or its latest revision.
- (b) The pipes and fittings should be true to shape smooth, cylindrical, inner and outer surfaces being concentric, free from cracks and pin holes and neatly dressed. The ends of the pipes and fittings shall be square to their axes.
- (c) Pipes are available with or without ear single socketed or double socketed. These should be procured as per requirement. Usual length of the pipes are 1.8 m but available in specific lengths, if so, ordered.
- (d) Weights and other physical criteria including tolerances are stated in Table – 1.
- (e) LAYING: - The laying is done by spigot – socket joints. The exact lengths are measured at the site, pipes are cut to sizes, if exact lengths of cut pieces are not readily available. In the stack lines, pipes with ears are used. The stack line is fixed to the wall with the help of 100 mm stout nails driven into wooden blocks fixed in the walls properly secured.
- (f) JOINTING: - Jointing is made with the help of spun yarn and cement mortar (1:2). In certain places molten lead is used instead of cement mortar. Where molten lead is used, caulking is done after lead gets cooled.
- (g) **VENTILATION PIPES:** - It should be carried up above the roof (at least 1 m above the parapet) and guarded with provision of a cowl. The stack lines must be secured to the walls by means of M.S. stay and clamps.
- (h) Provision of doors in the fittings is a must so as to clean the line wherever required. The doors must be fitted along with rubber insertion and brass bolts.
- (i) The lavatory waste stack shall be connected directly to the Inspection Chamber / Man hole whereas the wastes from kitchens, basins, sinks, baths are to discharge through gully traps, the gully traps being connected ultimately to Inspection Chamber / Manhole.
- (j) Pipes and fittings must be internally painted with a coat – tar and externally with enamel paint of approved colour.

All soil-waste, vent and anti-siphonage pipes and fittings shall conform to I.S. 1729 – 1964 or as revised from time to time. The pipes shall have spigot and socket ends with bend on spigot end. The pipes and fittings shall be true to shape, smooth and cylindrical, their inner and outer surface being as nearly as practicable concentric. They shall be sound and nicely cast and shall be free from cracks, laps pinholes or other imperfection and shall be neatly dressed and carefully fettled.

The ends of pipes and fittings shall be reasonably square to their axes.

The sand cast iron pipes shall be of the dia as specified in the description of the item and shall be in length of 1.5m, 1.8m and 2m including sockets ends of the pipes unless shorter lengths are either specified or required at junctions etc. The pipes and fittings shall be supplied without ears unless specified or directed otherwise.

All pipes and fittings shall ring clearly when struck over with a light hand hammer, and shall be capable of being easily worked with drill or bib.

TOLERANCES:- The standard weights and thickness of pipes shall be as shown in the following table. A tolerance up to minus 10% may however, be allowed against these standard weights.

TABLE 1

Table showing the standard weight and thickness of SCI / HCI pipes

Sl. No.	Nominal dia of bore(In mm)	Thickness in mm.	Overall weight of pipe excluding ears (in Kg)		
			1.5 m	1.8 m	2.0 m
01	100	5.00	18.14	21.67	24.15
02	50	5.00	9.50	11.41	12.67

A tolerance up to minus 15 percent in thickness and 20mm in length will be allowed. For fittings, tolerance in length shall be plus 25 mm minus 10 mm.

The thickness of fittings and their socket and spigot dimensions shall conform to the thickness and dimensions specified for the corresponding sizes of straight pipes. The tolerances in weights and thickness shall be the same as for straight pipes.

The access door fittings shall be designed so as to avoid dead spaces to avoid accumulation of filth. Doors shall be provided with 3 mm rubber insertion packing land when closed and bolted these shall be watertight.

SAND CAST IRON FLOOR TRAP: - Sand cast iron floor trap shall be P' or S' type with minimum 50 mm seal and shall be of self-cleansing design.

FIXING AND JOINTING: - The pipes and fittings shall be fixed in vertical alignment unless otherwise specified and shall be secured to the walls at all joints with M.S. holder butt6 clamps. The clamps shall be made from 1.6 mm thick M.S. sheet of 30 mm width, bent to the required shape and size so as to fit tightly on the socket of the pipe, when tightened with screw bolts. It shall be formed out of two semicircular pieces hinged with 6 mm dia M .S. pin on one side and provided with flanged ends on the other side with holes to fit in the screw bolt and nut 40 mm long. The clamp shall be provided with a hook made out of 275 mm long 10 mm diameter M.S.bar riveted to the ring at the centre of one semicircular piece. The clamps shall be fixed to the wall by embedding their hooks in cement concrete blocks 100 mm x 100 mm x 100 mm , 1:2:4 mix for which necessary holes shall be made in the wall at proper places. The clamps shall be kept about 25 mm clear of finished face of wall, so as to facilitate cleaning and painting the pipes.

The pipes shall be fixed vertically. The spigot of the upper pipe shall be properly fitted in the socket of the lower pipes such that there is uniform annular space for filling with the jointing material. The annular space between the spigot and socket shall be filled with a few turns of spun yarn socked in cement slurry or blown bitumen grade 85 / 25 or lead caulked. Caulking tools shall press these home. More skins of yard shall be wrapped, if necessary, and shall be rammed home. The joint shall then be filled with stiff cement mortar (1:2) well pressed with caulking tools and finished smooth at top at an angle of 45 degree sloping up. The joint shall be kept wet at least for seven days by tying four folds of gunny bag to the pipe and keeping it moist constantly.

Where pipes are embedded in masonry these shall be fixed in the masonry work as it proceeds. The pipe shall be kept vertical or to the line as directed by the Engineer-in-charge. The pipe shall have a minimum surrounding of 12mm thick cement mortar at every portion of external surface. The mortar shall be of the mix as used in masonry work. The length shall be caulked in with lead as soon as the next length of pipe placed in position. The open end (socket end) of the pipe shall be kept closed till; the next length of pipe is fitted and jointed to prevent any brick bat or concrete or pieces of wood falling in and chocking the pipe.

The spigot end shall butt the shoulder of the socket and leave no gap in between. The annular space between the socket and spigot will be first well packed in with spun-yarn leaving 25 mm from the lip of the socket for the lead. The joints shall then be lead caulked as described in detail under jointing of C.I. S/S pipes with lead joints in public W/S section of this specification. Pipes with ears shall be secured with 40 mm bore steel or iron barrel distance pieces or bobbins and stout C.I. / M.S. nails 10 cm long driven into hard wood plugs fixed in walls. Access doors to fittings shall be provided with 3 mm thick rubber insertion packing and received with screws to make them air / water tight.

All soil pipes shall be carried up above the roof and shall have a wire baboon guard or a cowl as specified.

HEIGHT OF VENTILATION PIPES: - All soil pipes shall be carried up above the roof and shall

have sand cast iron terminal guard. The ventilating pipe or shaft shall be carried to a height of at least 1 mtr. above the outer covering of the roof of the building or in the case of a window in a gable wall or a dormer window it shall be carried up to the ridge of the roof or at least 2 metres above the top of the window. In the case of a flat roof to which access for use is provided, it shall be carried upto a height of at least 1 mtr. above the parapet or 2 metres above the roof whichever is greater and shall not terminate within 2 metres measured vertically from the top of any window or opening which may exist upto horizontal distance of 5 metres from the vent pipe into such building and in no case shall be carried to a height less than 3 metres above plinth level.

Where ventilating pipes are carried in pipe shafts, the shaft shall be of a minimum size of 1 metre x 1 metre. If shafts are also used to give light and air to rooms, the ventilating pipe must be carried to a horizontal distance at roof level of not less than 5 metres from the side of the shaft. The payment for the shaft be made separately.

The pipes above the parapet shall be secured to the wall by means of M.S. stay and clamps as explained below.

M.S. STAYS AND CLAMPS: - Sand cast iron pipes above parapet shall be fixed with M.S. clamps and stays. The clamps shall be made from 1.5mm thick M.S. flat of 32 mm width, bend to the required shape and size to fit tightly on the socket, when tightened with screw bolts. It shall be formed of two semicircular pieces with flanged ends on both sides with holes to fit in the screw bolts and nuts, 40 mm long. The stay shall be minimum one meter long of 10 mm dia M.S. bar. One end of the stay shall be bent to form a hook to be fixed with the clamps by means of bolt and nut and the other end shall be bent for embedding in the wall in the cement concrete block of size 20 cm x 10 cm x 10 cm in 1:2:4 mix. The concrete shall be finished to match with the surrounding surfaces.

OTHER DETAILS: - The connection between the main pipe and branch pipes shall be made by using branches and bends with access door for cleaning.

Floor traps shall be provided with 25 mm dia puff pipe where length of the wastes is more than 180 cm or the floor trap is connected to a waste stack through bends.

The waste from lavatories, kitchens, basins, sinks, baths and other floor traps shall be separately connected to respective waste stack of inspection chamber / upper floors. The waste stack of lavatories will be connected directly to manhole while the waste stack of others shall separately discharge over fully trap.

Every starting manhole shall have a 100 mm sand cast iron vent, terminating at 1 mtr above the parapet of the building.

The main anti-siphonage pipe shall be of 50 mm internal diameter. When more than one branch from water closet / sink are connected with the soil pipe and discharge into it, anti-siphonage from the lowest one should pass through the wall and be carried up outside the building parallel to the soil pipe to a point 1.5 metres minimum above the highest branch. It can then be connected to the soil pipe or it can be carried in dependently. The anti-siphonage pipes of all the intermediate floors, water closets should be joined with the main anti-siphonage pipe. The ventilating pipe shall have internal diameter of not less than 50 mm in all parts and shall be connected with arm of soil pipe on trap through a 45 degree branch, at a point not less than 7.5 cm and not more than 30 cm from the highest part of the trap and on the side of the water seal which is nearest to the soil pipe the jointing shall be done according to the specification for piping materials used in soil, vent or waste pipes.

Joints shall be filled and caulked as described under sub-head "water supply". The depth of lead from the lip of the pipe socket shall be 25 mm.

TESTING: - All sand cast iron pipes and fittings including joints shall be tested by a smoke test to the satisfaction of the Engineer-in-charge and left in working order after completion. The smoke test shall be carried out as stated under.

Smoke shall be pumped into the pipe at the lowest end from a smoke machine, which consists of a bellow and burner. The material usually burnt is greasy cotton waste, which gives out a clear pungent smoke, which is easily detectable by sight as well as by smell if there is leakage at any point of the drain.

PAINTING: - All the sand cast iron pipes and fittings shall be painted with colours with two coats of paint over a coat of primer on exposed surfaces as directed by the Engineer-in-charge. Besides, the sand cast iron pipes and fittings shall be painted with a coat of coal tar to the inside surfaces before laying and jointing of pipes and fittings. The specification for painting as described in the relevant sub-heads of Orissa State P.W.D. specification and revised from time to time shall apply in this case also.

REQUIREMENTS OF JOINTING MATERIALS FOR H.C.I. BUILDING PIPES AND FITTINGS:

The requirement of jointing materials like cement, gasket for Hard Cast Iron pipes and fittings is indicated in the table below.

TABLE

Table showing the requirement of jointing materials for HCI building pipes and fittings.

1. 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 and cement Joints)	Cement in Kg.
100	1.2	0.13	0.12
50	0.36	0.06	0.06

C. Sanitary Ware & Allied Fittings:

1. General:

All sanitary fixtures and their allied fittings should be of first quality, manufactured by reputed manufacture Hindware/ E.I.D. Parry Ltd./Nycer /Madhusudan ceramics or equivalent. These should be approved by the consultant / Engineer-in-charge before use.

2. Squatting pattern W.C. pan (Orissa pattern Closets):

The water closets shall be of vitreous china of specified size and pattern, integral flushing rim. It shall have the flushing inlet at the back. The Orissa closets should be of approved quality confirming to I: S: S: - 2556(part-III).

The squatting type Indian water closets (Orissa closet) shall be sunk in floor sloped towards the pan in a workmanship like manner. The closet shall be fixed on a proper cement concrete base of 1:3:6 proportions, 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 of leak proof.

3. 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 specified. Each basin shall be provided with one 15mm dia C.P. Brass pillar Tap, 32mm dia C.P waste C.P. chain and rubber plug, unions, joints, C.P. Bottle trap casted PVC waste pipe 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)m embedded and fixed in wall with cement concrete, M20. These brackets shall be painted to the required shade with two coats of synthetic enamel paint over coat of priming. The waste of the basin shall discharge into a floor trap or channel through bottle traps PVC waste pipe 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 52foresaid floor trap. The inlet connection to the basin shall be made with 450mm long 15mm dia heavy type P.V.C. connection pipe.

4. Kitchen Sink:

Unless otherwise mentioned the kitchen sink and drain board (if used) shall be of white vitreous china or fire clay as specified and of approved quality, make and brand, confirming to I.S.S. It shall be one-piece construction with integral combined overflow. The size of the sink and drain board shall be specified.

Each sink shall be provided with 15mm dia C.P. brass, Bib Cock, long body 40mm C.P. waste with overflow C.P chain and 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 M20. 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 PVC pipe jointed to the waste of the sink with a brass union nut.

5. Standing Urinals

The urinals shall be flat pattern lipped front basin of required dimension of white/coloured 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 PVC waste pipe, which shall discharge into a channel or floor trap. The lip of urinal shall be kept at 525mm from floor level, while fixing the urinal on the wall.

Where no of urinals are fixed in a line, the distance between the center to center of each urinal shall be kept 750mm and each urinal should be separated from one to other by a partition plate. The center-to-center partition plates shall be kept 750mm.

The partition plates shall be of one-piece kota stone plates, cut to size or partition wall and front corners rounded. The partition plates are embedded in wall with cement concrete and finished smooth. The bottom of the partition plates should be kept 500mm above floor level and top should be kept at 1250 mm above floor level. The plates should project 600mm from wall surface. The width of the plates should be embedded inside the wall and should not be less than 100mm. The thickness of the plates shall be minimum of 25 mm to 32 mm. Thickness of partition wall should be limited to 150mm including smooth surface finishing.

For flushing the urinals each urinal shall be, connected with one 20mm dia G.I. Pipe (Medium class). One end of each of this pipe 15mm PVC connection 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 water pipe line fixed on the wall horizontal above the urinals. In each 20mm dia flush pipe, one 20 mm dia gunmetal gate valve angle stopcock to be fixed. By opening this valve, the water will flow to the rims of urinal through the inlet pipe and flush the urinal. After flush, the valve can be closed to avoid wastage of water. One 40mm dia P.V.C. waste pipe shall be connected to the waste of each urinal, to discharge the waste into the channel or trap. One end of this waste pipe shall be made a cup size to fit into the projected waste and tightened with screws and waste clamp.

6. Squatting Urinal Plates:

The urinal plates shall be of white glazed vitreous china with integral flushing rim of size 450mm X 350mm of approved make and brand as specified. There shall be white vitreous channel with stop and outlet pieces in the 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 upto 12mm from floor level just at the center of each plate, in which one 20mm dia gate valves is fixed at 1500mm above floor level. At 1200m heights, the 20mm dia flash pipe shall be divided into two branches with a tee and fixed horizontal. 300mm on either side and then with the help of elbows, both the branches shall be taken downward and connected to the inlets of the urinal plates at floor level. By operating the valve as above, the water will rush into the rims of the urinal plate and flush it.

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

The partition plates shall be of one-piece kota stone plate, 25 mm to 52mm thick, cut to sizes and front corners rounded. The plates are embedded in wall with cement concrete and finished smooth. The bottom of the partition plates wall shall be kept flushed to Urinal top level, the top level 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.

7. M I R R O R:

Materials: - The mirror shall be of superior glass with edges rounded off or leveled as specified. It shall be free from flaws, specks or bubbles. The size of the mirror shall be 60 mm x 45 mm unless specified otherwise and its thickness shall be not less than 6mm.

The glass for the mirror shall be uniformly silver plated at the back and shall be free from silvering defects. Silvering shall have a protective uniform covering of red lead pain.

Fixing: - The mirror shall be mounted on 6 mm thick plain asbestos sheet ground and shall be fixed on the position by means of CP brass screws and CP brass washers, over rubber washers and wooden plugs firmly embedded in the wall. CP brass clamps with CP brass screws may be alternative methods of fixing where so directed. Chromium plating shall be of grade "B" type conforming to IS 1069-1958 or as revised from time to time. Unless specified otherwise, the longer side shall be fixed horizontally. The height of the bottom edge of the mirror shall generally be 120 cm above the floor level unless otherwise specified.

8. Glass shelf unit

The shelf shall be of glass of best quality with edges rounded off, and shall be free from flaws, specks or bubbles. The size of the shelf shall be 60 cm x 120 cm. Unless otherwise specified and thickness not less than 6 mm. The shelf shall have CP brass guardrail resting on rubber washers on the glass plate and CP brass brackets which shall be fixed with CP brass screws to wooden plug firmly embedded in the walls. Chromium plating shall be of grade "B" type conforming to IS 1068-1958 or as revised from time to time. The height of the glass shelf above the floor level shall be 115 cm unless otherwise specified.

SCHEDULE-A**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 contractors only)**

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

Sl. No.	Name of Engineering personnel appointed for supervising contractor's work with address.	Qualification	Date of Appointment	Monthly emolument	Whether full time engagement and continuous.	If they are superannuated / retired Government service.
1	2	3	4	5	6	7

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

Signature of the tenderer .
Date :-

ANNEXURE – I OF SCHEDULE-C**LIST OF PLANT AND EQUIPMENTS TO BE DEPLOYED ON THE CONTACT WORK(MINIMUM REQUIREMENT)**

Sl. No.	List of plants and equipment's	Minimum Requirement	Marks
(1)	(2)	(3)	(4)
1.	Tipper	2 Nos	10
2.	Concrete Mixture with Hopper	2 Nos	20
3.	Hydraulic Excavator/Loader	1 No	10
4.	Generator 33 KVA	1 No	10
5.	Complete staging, shuttering, Steel centering arrangement for steel shuttering – Not older than 3 years (No marks will be awarded if the shuttering material area is less than 1000 sqm)	1000 Sqm	20
6.	Needle Vibrator	2 Nos	10
7.	Plate Vibrator	2 Nos	10
8.	Water Tanker (Capacity 5000 Ltr)	1 No	10
TOTAL			100

NOTE:

- Capacity of each plant and equipment should be mentioned 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 extra claim shall be entertained.
- While uploading the documents for centring & shuttering items, care should be taken to ensure the following points, failing which the tender is liable for rejection
 - shuttering material area shall not be less than the minimum requirement as mentioned in column(3) above. There is no provision for proportionate marking for this item during evaluation.
 - Area of shuttering materials must be clearly mentioned in the uploaded documents. In case, weight of shuttering materials is given instead of area, then the material properties such as unit weight and thickness of shuttering material must be mentioned in order to convert the same into area..

ANNEXURE – II OF SCHEDULE-C**HIRE CHARGES OF PLANTS AND MACHINERIES**

Sl No.	Description			Usage Rates in Rs.	
	Machine	Activity	Output	Unit	Rate
1.	Dozer D-50-A-15	Spreading Cutting Cleaning	200cum/hour 100cum/hour 150cum/hour	Per hour Per hour Per hour	1592.17
2.	Dozer D-80-A-12	Spreading Cutting Cleaning	300cum/hour 150cum/hour 250cum/hour	Per hour Per hour Per hour	2190.43
3.	Motor Grader 3.35meter blade	Clearing Spreading GSB WMM	200cum/hour 200cum/hour 50cum/hour 50cum/hour	Per hour Per hour Per hour Per hour	1343.48

4.	Tractor with ordinary grader			Per hour	251.30
5.	Hydraulic Excavator of 1cum bucket	Soil ordinary Soil Marshy Soil unsuitable	60cum/hour 60cum/hour 60cum/hour	Per hour Per hour Per hour	730.43
6.	Hydraulic Excavator of 2cum bucket	Soil		Per hour	1624.38
7.	Front End loader 1 cum bucket capacity	Soil loading	60cum/hour	Per hour	452.17

		Aggregate loading	25cum/hour	Per hour	
8.	Tipper 5cum	Transportation of soil, GSB, WMM, Hotmix etc.	5.5cum	Per km. Per tonne.km Per hour	20.87 2.17 506.09
		WMM	60cum/hour	Per hour	864.35
10.	Smooth wheeled Roller 8-10 tonne	Soil compaction BM compaction	70cum/hour 25cum/hour	Per hour Per hour	294.78

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11.	Sheep foot Roller	Soil compaction		Per hour	56.52
12.	Truck mounted water tanker	Water transport	6kL	Per hour	506.09
13.	Tractor	Pulling	50HP	Per hour	200.87
14.	Rotavator	Mixing	25cum/hour	Per hour	9.57
15.	Ripper	Scarifying	60cum/hour	Per hour	15.65
16.	Air compressor	General purpose	170/250cfm	Per hour	170.250
17.	Diesel Compressor		400cfm	Per hour	744.35
18.	Diesel Compressor		300cfm.	Per hour	618.26
19.	Electrical Compressor		500cfm	Per hour	432.17
20.	Wet Mix Plant 60 TPH	Wet Mix	25cum/hour	Per hour	675.65
21.	Wet Mix Plant 75 TPH	Wet Mix	34cum/hour	Per hour	900.87
22.	Mechanical broom hydraulic	Surface cleaning	1250sqm/hour	Per hour	200.00
23.	Bitumen pressure distributor	Applying bitumen coat tack	1750sqm/hour	Per hour	601.74
24.	Emulsion pressure distributor	Applying emulsion coat tack	1750sqm/hour	Per hour	448.70
25.	Hotmix plant-120 TPH	DBM/BM/SDC/ Premix	40cum/hour	Per hour	13,130.43
26.	Hotmix plant-100 TPH	DBM/BM/SDC/ Premix	30cum/hour	Per hour	9710.43
27.	Hotmix plant-60 to 90 TPH	DBM/BM/SDC/ Premix	25cum/hour	Per hour	7765.22
28.	Hotmix plant-40 to 60 TPH	DBM/BM/SDC/ Premix	17cum/hour	Per hour	6217.39
29.	Hotmix plant-8 to 10 TPH	DBM/BM/SDC/ Premix	cum/hour	Per hour	891.30
30.	Paver finisher Hydrostatic with sensor control 100 TPH	Paving of DBM/BM/SDC/ Premix	40cum/hour	Per hour	1500.00
31.	Paver finisher Mechanical 100 TPH	Paving of WMM/PMC Paving of DLC	40cum/hour 40cum/hour	Per hour Per hour	642.61
32.	Paver finisher Mechanical	Paving of DLC	75cum/hour	Per hour	1605.22
33.	Hydraulic Chips Spreader	Surface dressing	1500sqm/hour	Per hour	1478.26
34.	Tandem Road Roller	Rolling of Asphalt surface	30cum/hour	Per hour	641.74
35.	Pneumatic Road Roller	Rolling of Asphalt surface	25cum/hour	Per hour	697.39
36.	Pothole repair machine	Repair of potholes	4cum/hour	Per hour	508.70
37.	Butumen boiler oil fired	Bitumen spraying	1500 litre	Per hour	111.30
38.	Tar boiler	Bitumen spraying		Per hour	64.35
39.	GSB plant 50 cum	Producing GSB	40cum/hour	Per hour	582.61
40.	Mastic Cooker	Mastic wearing coat	1 tonne	Per hour	1379.13
41.	Batching and Mixing plant 15-20 cum.	Concrete Mixing	13cum/hour	Per hour	1043.48

42.	Batching and Mixing plant 30 cum.	Concrete Mixing	20cum/hour	Per hour	1252.17
43.	Batching and Mixing plant 112.5 cum.	Concrete Mixing	75cum/hour	Per hour	2400.00
44.	Batching and Mixing plant 262.5 cum.	Concrete Mixing	175cum/hour	Per hour	4486.96
45.	Transit Mixer	Transporation of concrete mix to site.	4.5cum/hour 3cum/hour	Per hour Per hour	521.74 478.26
46.	Grout pump			Per hour	56.52
47.	Concrete pump of 45 & 30 cum	Pumping concrete	33cum/hour 22cum/hour	Per hour	143.48
48.	Pump with 5HP diesel engine	Pumping of Water		Per hour	51.30
49.	Pump with 10HP diesel engine	Pumping of Water		Per hour	93.91
50.	Pump with 20HP diesel engine	Pumping of Water		Per hour	144.35
51.	Pump with 40HP diesel engine	Pumping of Water		Per hour	241.75
52.	Pump with 40HP electrical	Pumping of Water		Per hour	129.57
53.	Pump with 50HP electrical	Pumping of Water		Per hour	158.26
54.	Cranes 80 tonnes	Lifting purpose		Per hour	717.39
55.	Cranes 35 tonnes	Lifting purpose		Per hour	478.26
56.	Cranes 3 tonnes	Lifting purpose		Per hour	200.00
57.	Crawler mounted crane(18T)	Lifting purpose		Per hour	1493.04
58.	Tower Crane	Lifting purpose		Per hour	479.13
59.	Welding	Welding		Per hour	70.43
60.	Gunning machine without compressor			Per hour	79.13
61.	Mechanical Winch(10T)			Per hour	194.78
62.	Power Winch(40HP)			Per hour	191.30
63.	Concrete Bucket	For pouring concrete	1cum	Per hour	8070
64.	Kerb casting machine	Kerb making	80RM/hour	Per hour	173.91
65.	Concrete Mixer 0.4/0.28 cum 1 cum	Concrete Mixing	2.5cum/hour 7.5cum/hour	Per hour Per hour	153.91
66.	Vibrator(3HP diesel)	Compacting concrete		Per hour	92.17
67.	Piling Rig with Bantonite pump	0.75m dia to 1.2m dia boring attachment	2 to 3RM/hour	Per hour	3065.22
68.	Concrete Paver Finisher with 40HP Motor	Paving of concrete surface	20cum/hour	Per hour	1608.70
69.	Integrated stone crusher	Crushing of spalls Crushing of spalls	100TPH 200 TPH	Per hour	4860.87 10226.09
70.	Stone crusher(electrical)	Crushing of spalls		Per hour	160.00
71.	Crushing & processing plant(electrical)			Per hour	204.35
72.	Concrete paver Finisher with 40HP Motor	Paving of concrete surface	175cum/hour	Per hour	14076.52
73.	Prestressing Jack with Pump & Access	Stressing of steel wires / stand		Per hour	72.17
74.	Generator 100KVA	Generation of Electric Energy	100KVA	Per hour	391.30
75.	Generator 250KVA	Generation of Electric Energy	100KVA	Per hour	978.26

76	Generator 33KVA	Generation of Electric Energy	50KVA	Per hour	208.70
77.	Generator 40KVA	Generation of Electric Energy	KVA	Per hour	369.57
78.	Generator 125KVA	Generation of Electric Energy	KVA	Per hour	786.96
79.	Pneumatic Sinking Plant	Pneumatic sinking of wells	1.5 to 2.0 cum/hour	Per hour	2339.13
80.	Truck 5.5cum per 10 tonnes	Material Transport	4.5cum	Per km. Per ton.km. Per hour	17.39 1.72 484.35
81.	Road Marking machine	Road marking	100sqm/hour	Per hour	52.17
82.	Mobile slurry seal equipment	Mixing and laying slurry seal	2700sqm/hour	Per hour	565.22
83.	Wagon drill			Per hour	111.30
84.	Dimond drill			Per hour	293.91
85.	Inwell rings			Per hour	62.61
86.	Jack hammer			Per hour	7.83
87.	Pneumatic rammer			Per hour	11.30
88.	Pusher leg			Per hour	4.35

ANNEXURE – III OF SCHEDULE-C

**CERTIFICATE TO BE ISSUED BY THE SUPERINTENDINGENGINEER
UNDER WHOM THE MACHINERIES / EQUIPMENTS ARE DEPLOYED. (Not
issued prior to 90 days of receipt of tender)**

Sl. No	Name of the machineries/ equipments	Identification No. / Engine / Chassis No.	Capacity	Year of purchase	Condition (Working / breakdown)	Since when deployed under him	When it is likely to be released from current assignment
1	2	3	4	5	6	7	8

Certified that,

1. I have verified the ownership documents with the identification no. of the Machineries / Equipments.
2. Machines are currently utilized exclusively for the work under the Division.
3. The facts provided are true as on the date of issue of this document to the best of my knowledge.

SUPERINTENDINGENGINEER

ANNEXURE – IV OF SCHEDULE-C

**TIME SCHEDULE FOR MOVEMENT OF EQUIPMENT / MACHINERIES AVAILABLE WITH THE
TENDERER FROM ONE SITE TO WORK SITE WHEN THE CONTRACTOR IS EXECUTING
SEVERAL WORKS**

SI No	Name of Equipment & Machineries	Required No.	Name of the work for which Equipment & Machineries deployed	Name of the Division under whose jurisdiction Equipment & Machineries deployed	Name of the place where equipments and machineries deployed.	Time schedule for movement of equipment/ machineries to work site for use in tendered work
1.	Tipper	2 Nos				
2.	Concrete Mixture with Hopper	2 Nos				
3.	Hydraulic Excavator/Loader	1 No				
4.	Generator 33 KVA	1 No				
5.	Complete staging, shuttering, Steel centering arrangement for steel shuttering – Not older than 3 years (No marks will be awarded if the shuttering material area is less than 1000 sqm)	1000 Sqm				
6.	Needle Vibrator	2 Nos				
7.	Plate Vibrator	2 Nos				
8.	Water Tanker (Capacity 5000 Ltr)	1 No				

Certified that, the above machineries shall be available solely for this work from the date mentioned against them.

Signature

SCHEDULE "C"

PLANT AND EQUIPMENT PROPOSED TO BE EMPLOYED BY THE APPLICANT FOR USE ON THE WORK

Sl. No.	Name of equipment	Total requirement			Equipment in hand			Equipment to be procured					Remarks
		5	6	7	8	9	10	11					
1	2	3	4	5	6	7	8	9	10	11	12	13	14

A. Construction Equipments

B. Vehicle Trucks etc.

Reference Annexure I for list of essential equipments for contracts

1.If leased indicate the date when the current lease expires

Signature

WORKING EXPERIENCE

D-1. LIST OF SIMILAR NATURE OF PROJECTS EXECUTED

Name of Employer	Name of location and name of work	Contract price in Indian Rupees	Items of works	Date of starting the work as per Agreement	Stipulated date of completion of the work as per Agreement	Actual date of completion of the work	Reasons for delay in starting/ completion, if any
1	2	3	4	5	6	7	8

Deleted

Signature

WORKING EXPERIENCE

D- 2. LIST OF SIMILAR NATURE OF PROJECTS IN PROGRESS

Name of Employer	Name of location and name of work	Contract price in Indian Rupees	Items of works	Date of starting the work as per Agreement	Stipulated date of completion of the work as per Agreement	Revised target date of completion of the work, if any	Reasons for slow progress, if any, with the updated billing amount
1	2	3	4	5	6	7	8

Deleted

Signature

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

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

Note:

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

Signature**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 anyof its **constituent partners / I** have abandoned any road/ bridge/Irrigation /Buildings or otherproject work in India nor any contract awarded to us / me for such works have been rescinded during the last five years prior to the date of this bid.
3. The undersigned hereby authorised 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:

Existing commitments and on-going works:

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

*Attach certificate(s) from the Engineer(s)-in-Charge (**Not below the rank of Executive Engineer & Superintending Engineer**)

Schedule-H**Information of Annual Turn Over**

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 Eng Works executed (Excluding GST)(Rs. Lakh)	Escalation Factor	Updated Value of Civil Eng Works executed (Rs. Lakh)
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 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)

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

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

Relationship:

Name:

Designation

Office

Address

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

SI No	Name of the my employee and his designation in the firm	Presently working at	Details of his relatives working in the Department
			Relationship Name: Designation Office Address
			Relationship Name: Designation Office Address

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

Yours Sincerely

Signature of the Tenderer.

Date:-

MEMORANDUM OF UNDERSTANDING

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

AND

Second Party I Sri/Smt....., Aged years, S/O....., At / P.O. / Dist..... (hereinafter called the Second Part) having 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 fulfill all the E.I. works as per the tender schedule by instruction of Engineer-in-Charge.
- 3) That, the First Party shall receive payment, signing the bill the document for the concerned work.
- 4) That, the Second Party shall abide the rules, regulations and specification of E.I. works of above said matter.

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

WITNESS

W₁ -

W₂ -

Total :- 71(Seventy One) pages only

APPROVED for 71 (Seventy One) pages only

C.C.E., Khordha (R&B) Circle, Khordha