

BID IDENTIFICATION NO. -SE-08/2026-27

GOVT. OF ODISHA
WORKS DEPARTMENT



BID DOCUMENTS / DETAILED TENDER CALL NOTICE FOR THE WORK

Repair to 2 Nos D-type quarter Building (G+1) of Vigilance Department at Baripada in the District of Mayurbhanj for the year 2026-27.

ESTIMATED COST: - ₹ 17,18,200/- (APPROX.)

**OFFICE OF THE SUPERINTENDING ENGINEER,
MAYURBHANJ (R & B) DIVISION, BARIPADA**

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**OFFICE OF THE SUPERINTENDING ENGINEER, MAYURBHANJ (R & B) DIVISION, BARIPADA
INVITATION FOR BIDS (IFB)**

Bid Identification No.SE- 08/2026-27

E.mail - bpd_eerb@rediffmail.com

1. The Superintending, Mayurbhanj (R&B) Division on behalf of Governor of Odisha invites percentage rate bids in **Single Cover** System respectfully for the construction of work detailed in the table below from the Class of contractors as mentioned incolumn-7 against each work registered with the State Governments and contractors of equivalent Grade/ Class registered with Central Government/MES/ Railways for execution of Civil works. The proof of registration from the appropriate authority shall be enclosed along with the bid.

Sl No	Name of the work	Value of the work (RS)	Concerned T.I.A.	Security Amount (Rs.) (Online)	Cost of Bid Documents (Rs.) (Online)	Class of Bidder	Period of completion
1	2	3	4	5	6	7	8
1	Repair and Renovation of Circuit House Old Kitchen Building and RCC Drain work at Baripada in the District of Mayurbhanj for the year 2026-27.	₹ 40,69,450/-	Superintending Engineer, Mayurbhanj (R&B) Division, Baripada	₹ 40,700/-	₹ 6,000/-	'B'	03 (Three Month)
2	S/R to E.I to repairing of Fire Fighting Pump system at 180 IPD Building at PRMMCH Baripada in the District of Mayurbhanj for the year 2026-27.	₹ 31,70,504/-	Superintending Engineer, Mayurbhanj (R&B) Division, Baripada	₹ 31,750/-	₹ 6,000/-	HT/LT	02 (Two Month)
3	Repair and Renovation of Eye Department Building at DHH Baripada in the District of Mayurbhanj for the year 2026-27.	₹ 27,77,000/-	Superintending Engineer, Mayurbhanj (R&B) Division, Baripada	₹ 27,800/-	₹ 6,000/-	'C' & 'B'	01 (One Month)
4	Repair to 2 Nos D-type quarter Building (G+1) of Vigilance Department at Baripada in the District of Mayurbhanj for the year 2026-27.	₹ 17,18,200/-	Superintending Engineer, Mayurbhanj (R&B) Division, Baripada	₹ 17,200/-	₹ 6,000/-	'D' & 'C'	01 (One Month)

2. Bid documents consisting of plans, specifications, the schedule of quantities and the set of terms and condition of contract and other necessary documents can be seen in the website: www.tendersorissa.gov.in.
3. Bids must be accompanied by Earnest Money deposit/Bid Security of the amount specified for the work in the table col.5 above, pledged in favour of concerned **Superintending Engineer** as specified for the work at Col.-04 above and will have to be in any one of the forms as specified in the bidding documents. Bidders desirous to hire machineries or equipment's from outside the State or owned but deployed outside the state are required to furnish 1% of the amount put to tender as Bid security.
4. Additional performance security shall be deposited by the successful bidder before drawl of the agreement as per Works Department Office Memorandum No. 4559 dated 05.04.2021 within 7 days of issue of L.O.A. by the Divisional Officer (Through email.) otherwise the bid of successful bidder will be cancelled & bid security, if any shall be forfeited at following rate as prescribed by State Govt. (Details as per DTCN)

CONTRACTOR

SUPERINTENDING ENGINEER

5. The Bid documents will be available in the website: www.tendersorissa.gov.in from 10.00 AM of dt. 08.07.2026 to 5.00 P.M. of dt.17.07.2026 for online bidding.
6. The bidder must possess compatible Digital Signature Certificate (DSC) of Class-II or Class-III.
7. Bids shall be received only "online" on or before 5.00 PM of dt.17.07.2026.
8. Bids received on-line shall be opened at 11.00 Hours on dt.18.07.2026 in the office of the Superintending Engineer, Mayurbhanj (R&B) Division, Baripada 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.
9. The Bid security will be paid online. No other form of bid security will be accepted.
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.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5094** Date - **01.07.2026**
Copy submitted to the Director, Printing & Publication, Government of Odisha, Madhupatana, Cuttack-10 for information and necessary action. He is requested to arrange for publication in next issue of Orissa Gazette.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5095** Date - **01.07.2026**
Copy submitted to the Engineer-in-Chief-cum-Secretary to Government, Works Department, Odisha, Bhubaneswar for favour of information.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5096** Date - **01.07.2026**
Copy submitted to the Engineer-in-Chief (Civil) Odisha, Nirman Soudha, Bhubaneswar for favour of information and wide circulation.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5097 (7)** Date - **01.07.2026**
Copy submitted to the Chief Engineer, (DPI & Roads) / Chief Engineer, (Buildings) / Chief Engineer, R.D.Q.& P. / Chief Engineer, Rural Works-I / Chief Engineer, Rural Works-II / Chief Engineer N.H. / M.D. O.B. & C. C. Ltd. Bhubaneswar for favour of information and wide circulation.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5098** Date - **01.07.2026**
Copy submitted to the Chief Construction Engineer, Eastern Circle (R&B) Balasore for favour of kind information and wide circulation.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5099** Date - **01.07.2026**
Copy submitted to the Collector & District Magistrate, Mayurbhanj for information & wide circulation.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5100 (3)** Date - **01.07.2026**
Copy to the Superintending Engineer, Balasore (R&B) Division / Superintending Engineer, Bhadrak (R&B) Division / Superintending Engineer, Rairangpur (R&B) Division, for information and wide circulation.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5101 (3)** Date - **01.07.2026**
Copy forwarded to Sub-Divisional Officer, Baripada / Udala / Betnoti for information & wide Circulation.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5102 (5)** Date - **01.07.2026**
Copy forwarded to D.A.O. / H.C. / Cashier / Asst. Executive Engineer, Estimator / Estimator, Buildings for Information.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5103** Date - **01.07.2026**
Copy to NOTICE BOARD

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division

Memo No. **5104** Date - **01.07.2026**
Copy forwarded to the Deputy Secretary to Government, Department of Information & Technology, Odisha, Bhubaneswar for information.

Sd/- R.G Ray
Superintending Engineer,
Mayurbhanj (R&B) Division



WORKS DEPARTMENT
OFFICE OF THE SUPERINTENDING ENGINEER
MAYURBHANJ (R & B) DIVISION, BARIPADA
e-mail - bpd_eerb@rediffmail.com
Government of Odisha "e" Procurement Notice
Bid Identification No. -S.E. -08/2026-27

1. Number of works - (03) Buildings work & (01) Electrical Work
2. Approximate estimated cost: - 17.18 lakh to 40.69 lakh
3. Period of Completion :- 01 (One) Calendar Months
4. Date & Time of availability of bid documents in the portal:- Dt. 08.07.2026 to 17.07.2026
5. Last Date / Time of receipt of bid in the portal :- Dt. 17.07.2026 up to 5.00 PM
6. Date of Opening of bid:- Dt. 18.07.2026 at 11.00 AM
7. Name & address of the Office inviting bid :- Superintending Engineer, Mayurbhanj (R&B) Division, Baripada

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

Sd/- R.G Ray
Superintending Engineer
Mayurbhanj (R&B) Division

Memo No. 5105

Date - 01.07.2026

CUT OFF DATE FOR PUBLICATION DT.08.07.2026

Copy forwarded to the Deputy Director (Advertisement) & Deputy Secretary to Government of Odisha, I & P.R. Department, Bhubaneswar with a request to get published in One number Oriya Daily, One National English Daily at an early date for wide circulation of tender call notice.

It is to mention that the initial sale date of Bid documents is Dt. 08.07.2026 as such you are requested to *publish the Tender Call Notice prior to this date.*

Complimentary copy of the newspaper containing the tender call notice may please be sent to this office for reference and record.

Enclosure :- C.D. - 1 No

Sd/- R.G Ray
Superintending Engineer
Mayurbhanj (R&B) Division

CONTRACTOR

SUPERINTENDING ENGINEER

GOVERNMENT OF ODISHA
WORKS DEPARTMENT

File No. 07554600032022- 1499^{***} /W., dated. 01.02.2023

OFFICE MEMORANDUM

Sub:- Amendment to Para-3.5.19 (a) (b) of the OPWD Code, Volume-I.

After careful consideration, Government have been pleased to make amendment to Para-3.5.19 (a) (b) of the Odisha Public Works Department Code, Volume-I with the following modification.

“Security for the due fulfilment of a contract should invariably be taken. The security may be taken in shape of N.S.C./ Post Office Savings Bank Account/ Post Office Time Deposit Account/ Kisan Vikas Patra/ Bank Guarantee in favour of the Divisional Officer from any Nationalized Scheduled Bank in India counter guaranteed by its local Branch at Bhubaneswar/ e-Bank Guarantee executed on the National e-Governance Services Limited (NeSL) Digital Document Execution Portal towards E.M.D/initial Security Deposit/ any other security deposit from the contractor or supplier.”

1. This shall take effect from the date of issue of this Office Memorandum.
2. This has been concurred in by Finance Department vide their OSWAS File No. FIN-WFI-MISC-0033-2022.

By order of the Governor

(Vir Vikram Yadav, IAS) 23
Principal Secretary to Government

Memo No. 1500 /W., Dated, 01.02.2023

Copy forwarded to Private Secretary to Hon'ble Chief Minister, Odisha / Private Secretary to Hon'ble Minister, Works, Steel & Mines, Odisha for kind information of Hon'ble Chief Minister, Odisha & Hon'ble Minister, Works, Steel & Mines, Odisha.

FA-cum-Additional Secretary to Government

Memo No. 1501 /W., Dated, 01.02.2023

Copy forwarded to OSD to Chief Secretary, Odisha / Sr. Private Secretary to Development Commissioner-cum-Additional Chief Secretary to Govt. / Sr. Private Secretary to Principal Secretary to Govt., Finance Department for kind information of Chief Secretary / Development Commissioner-cum-Additional Chief Secretary/ Principal Secretary, Finance Department.

FA-cum-Additional Secretary to Government

**OFFICE OF THE ENGINEER-IN-CHIEF (CIVIL-CUM-ROADS), ODISHA,
NIRMAN SOUDHA, KESHARI NAGAR, UNIT-V,
BHUBANESWAR-751001**

File No- CE-Roads-I/01-25 No: 3051 Date: 22.01.2025.

From
Chief Engineer (Roads-I), Odisha,
Bhubaneswar.

To
**All C.C.E.s/ S.E.s/E.E.s of (R&B) Wing
Under Works Department.**

Sub - **Instructions regarding calling of tenders in e-procurement.**

Sir,

With reference to the subject cited above, it is requested that the Clause No.16.6 of "Executive instructions regarding calling for and acceptance of tenders in e-procurement" communicated vide Works Department O.M. No.7885 dtd.23.07.2013 and also mentioned in point (f) under "Tender" in 'e' Tendering chapter of O.P.W.D. Code i.e. "*SIGNING OF BID: The 'Online bidder' shall digitally sign on all statements, documents, certificates uploaded by him, owning responsibility for their correctness/ authenticity as per IT ACT 2000. If any of the information furnished by the bidder is found to be false/ fabricated/ bogus, his EMD/Bid Security shall stand forfeited & his registration in the portal shall be blocked and the bidder is liable to be blacklisted*" may be incorporated in the DTCN and should be strictly adhered to before invitation of tender in e-procurement.

The copy of Works Department O.M. No.7885 dtd.23.07.2013 is enclosed for your information.

Yours sincerely,

Encl: As above


Chief Engineer (Roads-I), Odisha

Copy submitted to E.I.C (Civil-cum-Roads), Odisha, Bhubaneswar for kind information.

**GOVERNMENT OF ODISHA
WORKS DEPARTMENT**

OFFICE MEMORANDUM

No. 07764600022025 173 /W., Bhubaneswar Dt. 03/01/26

Sub:- Amendment of Codal & Contractual Provisions.

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

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

- I. **where the bid price is below 0% but not below 10% of the project cost put to bid**, no additional performance guarantee/security percentage is required.
- II. **where the bid price is below 10% but not below 20% of the project cost put to bid**, the additional performance guarantee/security percentage shall be incremented by 0.1% for every percentage of bid price below 10% of the project cost put to bid starting at 11% with the additional bid performance guarantee being 0.1% and this additional performance guarantee percentage shall be applied on the bid price;
- III. **where the bid price is 20% or more below of the project cost put to bid**, the additional performance guarantee percentage shall be incremented by 0.2% for every percentage of bid price below 20% of the project cost put to bid in addition to 1% of the bid price and this additional performance guarantee percentage shall be applied on the bid price;
- IV. The additional performance guarantee percentage shall be rounded off to the next lower percentage based on whether the decimal point of the percentage of bid price is below 0.5% or next higher percentage based on whether the decimal point of the percentage of bid price is 0.5% or more.
- V. The additional performance security shall be treated as part of the performance security.

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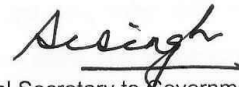
VI. Justification for abnormally low bids shall be scrutinized by the Departmental Technical Committee and recommended to the competent authority of the Administrative Department for the approval of the Additional Performance Security(APS). An abnormally low bid is one in which the Bid price, in combination with other elements of the Bid, appears so low that it raises material concerns as to the capability of the Bidder to perform the contract at the offered price. Procuring Entity may, in such cases, seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to scope, schedule, resource mobilization, allocation of risks and responsibilities, and any other requirements of the bid document. If, after evaluating the price analyses, the procuring entity determines that the Bidder has substantially failed to demonstrate its capability to deliver the contract at the offered price, the Procuring Entity may reject the Bid/ Proposal. However, it would not be advisable to fix a normative percentage below the estimated cost, which would automatically be considered as an abnormally low bid.

2. These amendments shall take effect from the date of issue of the O.M.

3. Accordingly, the relevant existing codal/contractual provision stands modified with effect from the date of issue of this O.M.

4. This has been concurred in by the Finance Department vide **File No. FIN-WF1-MISC-0102-2025**

By order of the Governor



Principal Secretary to Government

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

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

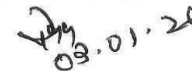
They are requested to publish the Office Memorandum in the extraordinary issue of the Gazette and supply 20 (twenty) copies to this Department.



EIC-cum-Special Secretary to Government

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

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



EIC-cum-Special Secretary to Government

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

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

Jy
03.01.26
EIC-cum-Special Secretary to Government

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

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

Jy
03.01.26
EIC-cum-Special Secretary to Government

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

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

Jy
03.01.26
EIC-cum-Special Secretary to Government

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

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

Jy
03.01.26
EIC-cum-Special Secretary to Government

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

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

Jy
03.01.26
EIC-cum-Special Secretary to Government

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

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

Jy
03.01.26
EIC-cum-Special Secretary to Government

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

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

Jy
03.01.26
EIC-cum-Special Secretary to Government

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

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

Jyoti
03.01.26

EIC-cum-Special Secretary to Government

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

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

Jyoti
03.01.26

EIC-cum-Special Secretary to Government

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

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

Jyoti
03.01.26

EIC-cum-Special Secretary to Government

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

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

Jyoti
03.01.26

EIC-cum-Special Secretary to Government

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

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

Jyoti
03.01.26

EIC-cum-Special Secretary to Government

GOVERNMENT OF ODISHA

WORKS DEPARTMENT

OFFICE MEMORANDUM

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

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

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

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

By order of the Governor



Principal Secretary to Government

Memo No. 633 /W, dated 9.1.26

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

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

Jee
09.01.2026

EIC-cum-Special Secretary to Government

Memo No. 634 /W., Dt. 9.1.26

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

Jee
09.01.2026

EIC-cum-Special Secretary to Government

Memo No. 635 /W., Dt. 9.1.26

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

Jee
09.01.2026

EIC-cum-Special Secretary to Government

Memo No. 636 /W., Dt. 9.1.26

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

Jee
09.01.2026

EIC-cum-Special Secretary to Government

Memo No. 637 /W., Dt. 9.1.26

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

Jee
09.01.2026

EIC-cum-Special Secretary to Government

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

Memo No. 638 /W., Dt. 9.1.26

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

Memo No. 639 /W., Dt. 9.1.26

EIC-cum-Special Secretary to Government

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

EIC-cum-Special Secretary to Government

Memo No. 640 /W., Dt. 9.1.26

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

EIC-cum-Special Secretary to Government

Memo No. 641 /W., Dt. 9.1.26

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

EIC-cum-Special Secretary to Government

Memo No. 642 /W., Dt. 9.1.26

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

EIC-cum-Special Secretary to Government

Memo No. 643 /W., Dt. 9.1.26

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

EIC-cum-Special Secretary to Government

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

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

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

24
09.01.2026

EIC-cum-Special Secretary to Government

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

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

24
09.01.2026

EIC-cum-Special Secretary to Government

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

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

24
09.01.2026

EIC-cum-Special Secretary to Government

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

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

24
09.01.2026

EIC-cum-Special Secretary to Government

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

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

24
09.01.2026

EIC-cum-Special Secretary to Government



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

CHECKLIST TO BE ENSURED BY THE BIDDER

Sl. No.	Particulars	Reference to DTCN Clause no.	Whether furnished		Reference to page no.
			Yes	No	
1	Cost of tender paper Rs. 6,000.000 (Online)	No.4			
2	E.M.D for Rs. 17,200/- (Online) (Scanned copy of financial instrument shall be furnished)	No.5			
3	Copy of valid Registration Certificate	No. 8			
4	Copy of valid GSTIN	No.8			
5	Copy of PAN Card	No.8			
5	No Relation Certificate in Schedule-A	No. 37			
6	Information regarding current litigation, debarring / expelling of the tender or abandonment of the work by the tenderer (Schedule-E)	No. 50			
7	Affidavit (Schedule-F)	No.-50			
8	SCHEDULE-J (Electrical license & Affidavit)				
9	Tools & Plants and machineries as per the requirement (bidder has to obtained minimum 80% mark in machineries to qualify in technical verification)	Requirement			
	List of plants and equipments				
(i)	Truck / Tipper	2 No			
(ii)	Water Tanker	1 No			
(iii)	Mixture Machine	1 No			
(iv)	Plate Vibrator	1 No			
(v)	Vibrator with needle	1 No			

CONTRACTOR

SUPERINTENDING ENGINEER

CONTRACT DATA**A. GENERAL INFORMATIONS**

Sl No.	Item	Details
1.	Bid Identification No.	SE-08/2026-27
2.	Name of the work	Repair to 2 Nos D-type quarter Building (G+1) of Vigilance Department at Baripada in the District of Mayurbhanj for the year 2026-27.
3	Officer Inviting Tender	Superintending Engineer , Mayurbhanj (R&B) Division , Baripada
4	Executive Engineer concerned with head quarters authorized as Engineer-in-charge of this work.	Superintending Engineer , Mayurbhanj (R&B) Division , Baripada
5	<u>Estimated Cost (₹ in Lakhs)</u>	Rs. 17,18,200/-

B. BID INFORMATION

6	Intended completion period/Time period assigned for completion	(01) One Calendar Months
7	Last Date & Time of submission of Bid	Date : 17.07.2026 Time : 5.00 P.M.
8	Cost of Bid Documents	
	i. Bank draft amount	₹ 6,000/- -
	ii. In favour of	Superintending Engineer, Mayurbhanj (R&B) Division, Baripada
	iii. Payable at	Baripada
9	Bid validity period	90 days
10.	Currency of Contract	Indian Rupee
11	Language of Contract	English

**PROCEDURE TO PARTICIPAT IN ONLINE
BIDDING
e-procurement**

1. **PARTICIPATING IN THE BID IN THE E-PROCUREMENT PORTAL: Registration of the bidders in CDMS portal is mandatory for participation in e-tender.** The Contractor/Bidder intending to participate in the bid is required to register in the Portal with some information about the firm/Contractor. This is a onetime activity for registering in Portal. During registration, the contractor has to attach a Digital Signature Certificate (DSC) to his / her unique user ID. The DSC used must be of appropriate class (Class II or Class III) issued from a registered Certifying Authority such as n-Code, Sify, TCS, MTNL etc.
 - a. To log on to the portal the Contractor/ Bidder is required to type his/her *username* and password. The system *will again ask to select the DSC and confirm it with the password of DSC.* For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective CAs stored in system database. The system checks the unique ID, password and DSC combination and authenticates the login process for use of portal.
 - b. The tender documents uploaded by the Tender Inviting Officer in the website www.tendersodisha.gov.in will appear in the section of "Upcoming Tender" before the due date of tender sale. Once the due date has arrived, the tender will move to "Active Tender" Section of the *homepage*. Only a small notification will be published in the newspaper specifying the work details along with *mention* of the specific website for details. The publication of the tender will be for specific period of time till the last date of submission of bids as mentioned in the 'Invitation for Bid' after which the same will be removed from the list of Active tenders. Any bidder can view or down load the bid documents from the web site.
 - c. If the *software* application has the provision of payment of cost of tender document through payment gateways of *authorized* bankers by directly debiting the account of the bidders, bidders will be required to avail on-line payment.
 - d. If the *software* application has the provision of payment of cost of tender document through payment gateways of *authorized* bankers by directly debiting the account of the bidders, bidders will be required to avail on-line payment.
- 1.1. 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**.
- 1.2. In the case of any failure, malfunction, or breakdown of the electronic system used during the e-procurement process, the tender inviting officer shall not accept any responsibility for failures or breakdowns other than in those systems strictly within their own control.
- 1.3. Any third party/company/person under a service contract for operation of e-procurement system in the State or his/their subsidiaries or their parent companies shall be ineligible to participate in the procurement processes that are undertaken through the e-procurement system irrespective of who operates the system.
- 1.4. For submission of Bids through the E-Procurement Portal, the bidder shall up load the scanned copy/copies of document in prescribed format wherever warranted in support of eligibility criteria and qualification information. The on line bidder shall have to produce the original documents in support of the scanned copies and statements uploaded in the portal before the specified date as per DTCN.
- 1.5. Each bidder shall submit only one bid for one package. A bid is said to be complete if accompanied by cost of bid document and appropriate bid security. The system shall consider only the last bid submitted through the E- Procurement portal.
- 1.6. The Officer inviting the bid / Engineer-in-Charge will clarify queries on the Contract Data on requisition by the intending Bidder. The bidder may ask question in the e-procurement portal using his DSC; provided the questions are raised before the date mentioned in the home page under critical dates.

- 1.7 The bids uploaded by the Tender Inviting Officer may consist of general arrangements drawings or typical sections of the project. Bidder may download these drawings and take out the print for detail study. Any other drawings and documents pertaining to the works available with the officer inviting the Bid as well as in the office of the concerned Assistant Engineer and will be open for inspection during working hours on all working days by the bidders. The bidder is required to download all the documents including the drawings for preparation of his bid. It is not necessary on the part of the Bidder to upload the drawings other Bid documents (after signing) while uploading his bid. He is required to upload documents related to his qualification information and Bill of Quantities duly filled in. It is assumed that while participating in the bid, the bidder has referred to all the drawings and documents uploaded by the Officer Inviting the Bids. Seeking any revision of rates or backing out of the bid claiming for not having referred to any or all documents provided in the Bid document by the Officer Inviting the Bids will be construed as plea to disrupt the bidding process and in such cases the bid security shall be forfeited.
- 1.8 Any addendum issued shall be part of the bidding documents and shall be notified in the website www.tendersodisha.gov.in / notice board and through paper publication.
- 1.8.1 All the volumes/documents shall be provided in the portal by the Officer inviting the bid. The bidder shall carefully go through the document and prepare the required documents and upload the scanned documents in Portable Document Format to the portal in the designated locations of Technical Bid. He will fill up the rates of items or percentage in the BOQ downloaded for the work in designated Cell and uploads the same in designated locations of Financial Bid. Submission of document shall be effected by using DSC of appropriate class.
2. **BID SECURITY:** The Bidder shall furnish, as part of his Bid, a Bid security for the amount mentioned under NIT/Contract Data. The bidder shall scan all the written pages of the bid security and upload the same to the system in designated place. **Furnishing scanned copy of such documents is mandatory otherwise his/her bid shall be declared as non responsive and liable for rejection.** The on line bidder shall deposit the original copy of the 'bid security' with in the specified period mentioned in the DTCN (after receipt date of bid but before opening date & time of bid) with the "Officer inviting the Bid". The Officer inviting the bid shall not be responsible for any postal delay and/or non-receipt of the original copy of the bid security on or before specified date and time. Non-submission of bid security with in the designated period shall debar the bidder from participating in the on-line bidding system and his portal registration shall be **cancelled**. His name shall also be informed to the registering authority for cancellation of his registration.
- 2.1 The EMD or Bid Security payable along with the bid is 1% of the estimated contract value (ECV) or as mentioned in the bid document. The validity period of the EMD or Bid Security shall be as mentioned in the bid document. Any bid not accompanied by an acceptable Bid Security and not secured as indicated in the bid document shall be rejected as non-responsive. The bid security shall be retained till such time the successful bidder furnishes Initial Security Deposit (ISD) or Performance Security acceptable to the Officer Inviting the Bid. Failure of the successful Bidder to comply with the requirements shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security. The Bid security in the form of FD / BG shall be from a Nationalized Bank valid for a period of 45 days beyond the validity of the bid. Bid security in other form is acceptable if the bid documents provides for it.
- 2.2 The Fixed Deposit / Bank Guarantee or any other form as mentioned in detailed tender call notice in respect of Earnest Money Deposit I Bid Security and the Bank Draft in respect of cost of Bid are to be scanned and uploaded in portable document format (PDF) along with the bid.
- 2.3 The tender accepting authority will verify the originals of all the scanned documents of the successful lowest bidder only within 5 days of opening of the tender. In the eventuality of failure on the part of ,the lowest successful bidder to produce the original documents, he will be debarred in future from participating in tender for 3 years and will be black listed by the competent authority. In such a situation, successful L-2 bidder will be required to produce his original documents for consideration of his tender at the negotiated rate equal to L1 bidder.

- 2.4 Amendment to Para 3.5.14 Note - I of OPWD Code Vol.-I by inclusion
If L1 bidder does not turn up for agreement after finalization of the tender, then he shall be debarred from participation in bidding for three years and action will be taken to blacklist the contractor. In that case, the L2 bidder, if fulfils, other required criteria would be called for drawing agreement for execution of work subject to the condition that L2 bidder negotiates at par with the rate quoted by the L1 bidder otherwise the tender will be cancelled. In case a contractor is black listed, it will be widely publicized and intimated to all departments of Government and also to Govt. of India agencies working in the State.
- 2.5 Contractor exempted from payment of EMD will be able to participate in the tender directly by uploading documentary evidences towards his eligibility for such exemption
- 2.6 Government of Odisha has been actively considering integrating e-payment gateway in to the portal for payment of Cost of Bid and Bid Security¹ Earnest Money Deposit. The process of using e-payment gateway shall be issued separately after it is established.
3. **FORMAT AND SIGNING OF BID:** The bidder can download the tender of his choice and save it in his system and undertake the necessary preparatory work off-line and upload the completed tender at his convenience within the final date and time of submission. The bidder shall only submit single copy of the required documents and Price Bid in the portal. In the Financial bid, the bidder cannot leave any figure blank. He has to only write the figures, the words will be self-generated. The Bidders are advised to upload the completed Bid document well ahead of the last date & time of receipt to avoid any last moment problem of power failures etc.
- 3.1. The Bidder shall go through the Bid carefully and list the documents those are asked for submission. He shall prepare all documents including cost of Bid Document, Bid Security, Declaration form, price bid etc and store in the system.
- 3.2. The bidder shall log on to the portal with his DSC and move to the desired tender for uploading the documents in appropriate place one by one simultaneously checking the documents. Once makes sure that all the documents have been up-loaded in appropriate place he clicks the submit button to submit the bid to the portal.
- 3.2.1. The bids once submitted cannot be retrieved or corrected. Tender cannot be pre-opened and cannot be submitted after due date and time. Therefore only after satisfying that all the documents have been uploaded, the Bidder should activate submit button.
- 3.2.2. In the e-procurement process each processes are time stamped. The system can identify each individual who has entered in to the portal for any bid and the time of entering in to the portal.
- 3.2.3. The Bidder should ensure clarity of the document up loaded by him to the portal especially the scanned documents by taking out sample printing. Non-submission of legible documents may render the bid non- responsive. However, the Officer inviting the Bid if so desires can ask for legible copies or original copies for verification with in a stipulated period provided such document in no way alters the Bidder's price bid. If the Bidder fails to submit the original documents with in the stipulated date, his bid security shall be **forfeited**.
- 3.2.4 **SIGNING OF BID**
The 'online bidder' shall digitally sign on all statements, documents, certificates uploaded by him, owning responsibility for their correctness/authenticity as per IT ACT 2000. If any of the information furnished by the bidder is found to be false/fabricated/bogus, his EMD/Bid Security shall stand forfeited & his registration in the portal shall be blocked and the bidder is liable to be blacklisted.
4. **SECURITY OF BID SUBMISSION:**
- 4.1. All bid data uploaded by the Bidder to the portal will be encrypted by the DSC of the opener(s). The system shall require all the mandatory forms and fields filled up by the contractor during the process of submission of the bid/tender.

- 4.2. The Bid shall be received in encrypted format by the system which can only be decrypted / opened by the authorized openers only on or after the due date and time.

5. DEADLINE FOR SUBMISSION OF THE BIDS:

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

6. LATE BIDS:

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

7. MODIFICATION AND WITHDRAWAL OF BIDS:

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

8. OPENING OF THE BID:

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

- 8.5. The Bid openers; who have been pre-defined shall log on to the portal with their respective DSC. Unless all the Officers who have been declared as Opening officers, log on the portal with their DSC the Tender cannot be opened.
- 8.5.1. The Opening Officers will systematically check the scanned demand draft towards cost of the bid document and the scanned document of Bid security with that of the original submitted. If found in order, they will continue opening of all other documents in the system provided under Technical Bid.
- 8.5.2. Subject to confirmation of the bid security by the issuing institutions, the bids accompanied with appropriate bid cost and valid bid security will be taken up for evaluation with respect to the qualification Information and other information furnished.
- 8.5.3. After receipt of confirmation of the bid security, the bidder may be asked in writing to clarify to the documents in the Technical Bid, if necessary, with respect to any doubts or illegible documents required for Technical Evaluation.
- 8.5.4. 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
- 8.5.5. 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 reevaluation. Upon acceptance evaluation by the Accepting authority in the system, the system shall automatically generate letter to all the responsive bidders and the system shall forward the letter to all the responsive bidder that their technical bid has been evaluated responsive with respect to the data/information furnished by him and the letter shall also intimate him the date & time of opening of financial bid. The system shall also inform the non-responsive bidders in their e-mail ID that their bid has been found non-responsive.
- 8.6. The Technical evaluation of all the bids will be taken up as per the information furnished by the Bidders. But evaluation of the bid does not exonerate the bidders from checking their original documents and if at a later date the bidder is found to have misled the evaluation through wrong information, action as per relevant clause of DTCN shall be taken against the bidder/contractor.
- 8.7. After technical evaluation of the bidders and selection of the qualified bidders, the financial bids of the technically qualified bidders shall be opened on the due date of opening. Members of the bid opening committee log on to the system in sequence and open the financial bids for the technically qualified bidders. The opening of financial bid by the opening officer using their DSC shall decrypt the financial bids.
- 8.7.1. Opening of price bid and evaluation of lowest bidder is subject to satisfaction of other qualification information.
- 8.7.2. The Financial Bid will be opened on the notified date & time in the presence of bidders or their authorized representative who wish to be present.
- 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, 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.

9. CLARIFICATION OF BIDS:

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

10. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT:

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

11. Blocking of Portal Registration.

- 11.1 If the Registration Certificate of the contractor is cancelled / suspended by the registering authority/ blacklisted by the competent authority his portal registration shall be blocked automatically on receipt of information to that effect.
- 11.2 The portal registration blocked in the ground mentioned in the above Para-29.1 shall be unblocked automatically in receipt of revocation order of cancellation/ Suspension/ blacklisting from the concerned authority.
- 11.3 The Officer Inviting Tender shall make due inquiry and issue show cause notice to the concerned contractor who in turn shall furnish his reply, if any, within a fortnight from the date of issue of show cause notice. Thereafter the Officer Inviting Tender is required to issue an intimation to the defaulting bidder about his unsatisfactory reply and recommend to the Chief Manager (Tech) for blocking of portal registration within 10 days of intimation to the defaulting bidder regarding his Unsatisfactory reply with intimation to the Registering Authority and concerned Chief Engineer/ Head Office if any of the following provisions are violated.
- 11.3.1 Fails to furnish original Technical/ Financial (Tender Paper Cost, A.P.S,EMD/Bid Security) instruments before the designated officer within the stipulated date and time.
- 11.3.2 Backs out from the bid on any day after the last date of receipt of tender till expiry of the bid validity period.
- 11.3.3 Fails to execute the agreement within the stipulated date.
- 11.3.4 If any of the information furnished by the bidder is found to be false/ fabricated/ bogus. Accordingly the Officer Inviting Tender shall recommend to the Chief Manager (Tech) State Procurement Cell, Odisha for blocking of portal registration of bidder and simultaneously action shall be initiated by OFFICER INVITING TENDER for blacklisting as per Appendix XXXIV OF OPWD Code Volume-II.

**DETAILED TENDER CALL NOTICE
FOR BUILDING WORKS**

1. Sealed percentage rate bids are invited ONLINE in **Single** cover system from the eligible 'D' & 'C' Class contractors registered with the State Government and contractors of equivalent Grade / class registered with Central Government / MES / Railways having registration for execution of Civil works on production of definite proof from the appropriate authority. But successful bidder other than State/ MES/ Railways/ CPWD in equivalent rank has to register under the State PWD before signing the agreement in prescribed form to be eventually drawn in P.W.D. FORM P-1 for the work "**Repair to 2 Nos D-type quarter Building (G+1) of Vigilance Department at Baripada in the District of Mayurbhanj for the year 2026-27**" at an estimated cost of **₹.17,18,200/-** (Rupees Seventeen lakh eighteen thousand two hundred) only.
2. The Bid documents are available in the official website of Government: <http://www.tendersodisha.gov.in> from **10.00 AM of 08.07.2026 to 5.00 PM of 17.07.2026**.
3. The Bid documents will be opened by the assigned officer in the office of the Superintending Engineer, Mayurbhanj (R&B) Division, Baripada at **11.00 A.M on 18.07.2026** in the presence of the bidders Or their authorized representatives who wish to attend.
4. The bidder shall make 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 Works Department, Odisha O.M. No. 6785 dt.09-05-2017 read with W.D. O.M. No. 17254 dt.05-12-2017 towards cost of Bid documents for **Rs. 6,000/-** as specified in the Contract Data. The electronic payment shall be made on or before the last date of receipt along with the Bid.
5. The bidders shall remit the EMD / Bid Security amount @ 1% (One percent) of the estimated cost put to tender of **₹.17,18,200/-** rounded to thousand rupees i.e. **₹ 17,200/- (Rupees Seventeen thousand two hundred)** only through **Online** as part of the bid. Bidders desirous to hire machineries or equipment's from outside the state or owned but deployed outside the state are required to **remit online** additional one percent (1%) EMD / Bid Security.
6. The bid is to be submitted in single cover containing scanned copy of registration certificate, PAN card, valid GST certificate, certificates duly filled-in and documents required as per the relevant clauses of this DTCN and the price bid duly filled in and signed by the bidder.
7. Additional performance security shall be deposited by the successful bidder before drawl of the agreement **as per Works Department Office Memorandum No. 173 dated 03.01.2026 and Office Memorandum No.632 Dt.09.01.2026 within 7 days of issue of L.O.A. by the Divisional Officer (Through email) otherwise the bid of successful bidder will be cancelled & bid security if any shall be forfeited. The rate as prescribed by State Govt., which may be in shape of TDR/ Bank Guarantee duly pledged in favour of the Superintending Engineer, Mayurbhanj (R&B) Division, Baripada from any Nationalized Bank/ Scheduled Bank of India Counter guaranteed by the local branch in Bhubaneswar within 7 days of issue of L.O.A. by the Tender Accepting Authority.**
8. The intending bidders are required to produce documents viz Original Registration, PAN card, GSTIN 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, preferably within three working days from the date of opening of the tender. 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

9.
 - i) The Contractors are required to furnish scanned copy of evidence of ownership of / affidavit it showing the possession of principal machineries/equipments as per for which contractor shall **have to secure minimum 80% of marks failing which the tender shall be liable for rejection.**
 - iii) The contractor intending to hire/lease equipments/machineries are required to furnish proof of ownership from the company/ person providing equipment's/ machineries on hire/lease along with contracts/ agreements/lease deed and duration of such contract. The contracts/agreements/lease deed should be on long term basis for a minimum period of **18 (Eighteen) months** as mentioned in contract data from the last date of receipt of Bid documents.
10. The work is to be completed in all respects within **01 (One)** calendar months from the date of issue of work order. Bidders whose bid is accepted must submit a work programme at the time of execution of Agreement.
11. The contract will be drawn in P.W.D. P-1 contract form
The contract shall be drawn & signed by Executive Engineer, Mayurbhanj (R&B) Division, Baripada on behalf of the Governor of Odisha.
12. If an individual makes the application, the individual should sign (with DSC) above his full type written name and current address.
13. 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.
14. 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.
15. 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.
16. 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.
17. The work is to be completed in all respects within Three (3) calendar months from the date of issue of work order. Tenderer whose tender is accepted must submit a programme of work including E.I. immediately after issue of work order for approval of Engineer-in-Charge.
18. All tenders received will remain valid for a period of 90 days from the last date prescribed for receipt of tenders and validity of tenders can also be extended if agreed by the tenderers and the Department.
19. The tenderer shall carefully study the tentative drawings and specifications applicable to the contract and all the documents, which will form a part of the agreement to be entered in to, by the accepted tenderer and detailed specifications for Odisha, and other relevant specifications and drawings, which are available. Complaint at a future date that the tenderers have not seen plans and specifications cannot be entertained.
20. The drawings furnished with the tender are tentative and subject to revision or modification as tendered during the execution as per actual necessity and detail test conducted. But the tendered rates quoted by the tenderer will hold good in case of such modification of drawings during the time of execution and shall in no way invalidate the contract and no extra monetary compensation will be entertained. The work shall however be executed as per final approved drawing to be issued by the Engineer-in-Charge as and when required.
21. By admission of a tender for the work, a tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the work, about the quality and availability of the required quantity of material including the wheat/ rice referred to above, medical aid, labour and food stuff etc., and that rates quoted by him in the tender will be adequate to complete the work according to the specifications attached there to and that he had taken in to account all conditions and difficulties that may be encountered during its progress and to have quoted rates including labour and materials with taxes, octroi , other duties, lead, lifts, loading and unloading, freight for all materials and all other charges necessary for the completion of the work, to the entire satisfaction of the Engineer-in Charge of the work and his authorized subordinates. After acceptance of the contract rate Government will not pay any extra charges for any reason in case the contractor claims later on to have misjudged as regard availability of materials, labour and other factors.

22. Submission of more than one tender by a bidder for a particular work will liable for rejection of all such tender papers.
23. **Percentage rate contract (vide Works Department letter no.8310 dt.17.05.2006) In case of Percentage Rate tender:-**
- (i) The contractor has to quote percentage excess or less over the estimated cost in the prescribed format appended to the tender document.
 - (ii) The Contractors participated in the tender for more than one work may offer conditional rebate. Rebate offer submitted in separate sealed envelope shall be opened, declared and recorded first. The rebate so offered shall be considered after opening of all packages called in the same Tender Notice. The Contractors
24. The tender containing extraneous conditions not covered by the tender notice are liable for rejection and quotations should be strictly in accordance with the items mentioned in the Tender Call Notices. Any change in the wording will not be accepted.
25. The department reserves the right of authority to reject any or all tenders received without assigning any reason whatsoever.
26. The earnest money will be retained in the case of successful tenderers and will be dealt with as per terms and condition of O.P.W.D. Code. The earnest money will be refunded to the unsuccessful tenderers on application after intimation is sent to rejection of their tenders. The retention of E.M.D. with the Department will carry no interest.
27. The Engineer-in-charge will notify the bidder / tenderer whose bid has been accepted of the award prior to expiration of the validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the conditions of Contract called the "Letter of Acceptance") will state the sum that the Engineer-in-charge will pay the contractor in consideration of the execution, completion and maintenance of the Works by the contractor as prescribed by the contract (Hereinafter and in the contract called the "Contract Price").

The Notification of award will constitute the formation of the contract, subject only to the furnishing of a performance security (Initial Security Deposit) in form of Deposit receipt of Schedule Bank / Kissan Vikash Patra / Post Office Savings Bank Account/National Savings Certificate / Post Office Time Deposit Account duly pledged in favour of the Executive Engineer, Mayurbhanj (R&B) Division, Baripada & payable at Baripada 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 equipments / machineries from outside the state if any) and sign the agreement in the P.W.D. form No. P-1 (Schedule XLV No. 61) for the fulfilment of the contract in the office of the Executive Engineer, Mayurbhanj (R&B) Division, Baripada and payable at Baripada or as directed. The security deposit together with the initial security and the amount withheld according to the provision of P-1 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. The agreement will incorporate all agreements between the officer inviting the bid/ Engineer-in Charge and the successful bidder within 15 days following the notification of award along with the Letter of Acceptance. The successful bidder will sign the agreement and deliver it to the Engineer-in Charge. Following documents shall form part of the agreement.

- a) The notice-inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming the bid as issued at the time of invitation of bid and acceptance thereof together with any correspondence leading thereto & required amount of performance security including additional performance security.
- b) Standard P.W.D. Form P-1 with latest amendments. Failure to enter in to the required agreement and to make the security deposit as above shall entail forfeiture of the Bid Security (earnest money) .No contract (tender) shall be finally accepted until the required amount of initial security money is deposited. The security will be refunded after 12 (Twelve) months of completion of the work and payment of the final bill and will not carry any interest. As concurred by Law Department & Finance Department In their U.O.R. No 848, dt.21.05.97 J.O.R.No.202 W.F.D. dtd.06.03.98 respectively the E.M.D. will be forfeited in case, where tenderers back out from the offer before acceptance of tender by the competent authority.

28. The contractor should be liable to fully indemnify the Department for payment of compensation under workmen compensation act. VIII of 1923 on account of the workmen employed by the contractor and full amount of compensation paid will be recovered from the contractor.
29. Tenderers are required to liable by fair wages clause as introduced by Govt. of Odisha, Works Department letter No.VII (R&B) 5225, dt.26.2.55 and No.II, M-56/61-28842 (5), dt.27.9.61.
30. The contractor shall bear cost of various incidentals, sundries and contingencies necessitated by work in full within the following or similar category.
 - a) Rent, royalties, cess and other charges of materials, Octroi and all other taxes from time to time. Ferry tolls, conveyance charges and other cost on account of land buildings including temporary building required by the tenderer for collection of materials, storage, housing of staff or other purpose of the work are to be borne by the contractor at his own cost. No rent will be payable to Govt. for temporary occupation of land owned by govt. at the site of the work for bonafide use of the land for work and all such construction of temporary nature by the contractor shall be done after obtaining written permission from the Engineer-in-Charge of Civil portion of the work and all such construction shall have to be demolished and debris removed and ground made good and cleared after completion of the work at no extra cost.
 - b) Royalty will be recovered from each bill as notified by Govt. from time to time unless K Forms are enclosed. Refund of royalty at later date after passing of the bills cannot be entertained as the recovery of royalty is being credited to revenue.
 - c) Labour camps or huts necessary to a suitable scale including conservancy and sanitary arrangements therein to the satisfaction of the local labour laws and health authorities shall have to be provided by the Contractor.
 - d) Arrangement of suitable water supply including pipe water supply where available for the staff and labour as well as for the execution of the work is sole responsibility of the Contractor and no extra cost for carriage of water will be entertained. e) All fees and dues levied by Municipal, Canal or Water Supply Authorities are to be borne by the Contractor.
 - e) Suitable safety equipments and dresses, gloves, life belts etc. for the labour engaged in risky operations are to be supplied by the contractor at his own cost.
 - f) Suitable fencing barriers, signals including paraffin and electric signals where necessary at work and approaches in order in project the public and employees from accident has to be provided by the Contractor at his own cost.
 - g) Compensation including cost of any legal suit for injury to persons or property arising out of execution of the work and also any sum, which may become payable due to operation of the workmen compensation act, shall have to be borne by the contractor.
 - h) The contractor has to arrange adequate lighting arrangements for the work wherever necessary at his own cost.
31. No payment will be made for layout, benchmark, level pillars, profiles and benching and leveling the ground required, which has to be carried out by the contractor at his own cost. The rates to be quoted should be for finished items of work inclusive of carriage of all materials and all incidental items of work.
32. After the work is finished all surplus materials should be removed from the site of work, preliminary work such as vats, mixing platforms, etc. should be dismantled and all materials removed from the site and premises left neat and his should be inclusive in the rates. No extra payment will be made to the Contractor in this account.
33. It should be understood clearly that no claim what-so-ever will be entertained to extra items of works quantity of any item besides estimate amount unless written order is obtained from the competent authority and rate settled before the extra items of work or extra quantity of any items of work is taken up.
34. The tenderers shall have to abide by the C.P.W.D. safety code rules introduced by the Govt. of India, Ministry of Works and Housing & Supply in their standing order No.44150, dt.25.11.57.
35. No part of the contract shall be sublet without written permission to the concerned Executive Engineer or transfer to be made by the power of attorney authorizing others to receive payment on contractor's behalf.
36. 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 under signed during office hours every day except on Sundays and Public Holidays till last date of sale and receipt of tender papers. Interested bidders may obtain further information at the same address. But it must be clearly understood that tenders must be received in order and according to instructions in complete shape. Incomplete tender is liable for rejection.

37. **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**.

38. Price Adjustment

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

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

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

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

The formula (e) for adjustment of prices are:

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

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

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

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

M₀= The all India Wholesale price index (all commodities) on 28 days preceding the date of opening of Bids, as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

M₁= The all India Wholesale Price Index (all commodities) for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

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

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

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

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

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

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

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

P_c= Percentage of Cement, Component of the work.

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

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

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

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

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

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

P_s= Percentage of Steel Component of the work.

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

38(a)(iv): Adjustment for Steel Component

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

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

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

B₀= The official retail price of bulk bitumen at the IOC/BPCL depot at nearest center on the day 28 days prior to date of opening of Bids.

B₁= The official retail price of bulk bitumen at IOC/BPCL depot at nearest center for the 15th day of the month under consideration.

P_b= Percentage of bitumen Component of the work.

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

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

$$V_{pi} = 0.85 \times P_s / 100 \times R_x (P_1 - P_0) / P_0$$

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

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

P₁= All India Wholesale Price Index for Pipe for the period under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

P₀= All India Whole sale price index of pipe on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.

38(b): Adjustment of Labour Component

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

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

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

- Lo= The minimum wages for unskilled labour as Notified by Government of Odisha as prevailed on the last stipulated date of receipt of tender including extension, if any.
- L1= The minimum wages for unskilled labour as Notified by Government of Odisha as prevailed on the last date of the Month previous to the one under consideration.
- P1= Percentage of labour component of the work.

38(c):Adjustment of POL (fuel and lubricant) Component.

- (V) Price adjustment for increase or decrease in cost POL (fuel and lubricant) shall be paid in accordance with the following formula:
- $V_1 = 0.85 \times P1/100 \times R \times (F1 - F0)/F0$
- V_1 = Increase or decrease In the cost of work during the month under consideration due to changes in rates for fuel and lubricants.
- Fo= The official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC /BPCL/HPCL at nearest centre on the day 28 days prior to the date of opening of Bids.
- F₁= The official retail price of HSD at the existing consumer pumps of IOC/BPCL/HPCL at nearest centre for the 15th day of the month under consideration.
- P₁= Percentage of fuel and lubricants component of the work.

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

38(d):Adjustment for Plant and Machinery Spares Component.

- (vi) Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the Contractor shall be paid in accordance with the following formula:
- $V_p = 0.85 \times P_p/100 \times R \times (P_1 - P_0)/P_0$
- V_p = Increase or decrease in the cost of work during the month under consideration due to changes in the rate for plant and machinery spares.
- Po= The all India wholesale price index for manufacture of machinery for mining, quarrying and construction on 28 days preceding the date of opening of Bids as published by the Ministry of Commerce and Industry, Government of India, New Delhi.
- P1= The all India Wholesale Price Index for manufacture of machinery for mining, quarrying and construction for the month under consideration as published by the Ministry of Commerce and Industry, Government of India, New Delhi.
- Pp= Percentage of plant and machinery spares Component of the work.

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

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

Sl. No.	Item in WPI 1993-94 series	Item in WPI 2004-05 series	Item in WPI 2011-12 series
1	Cement	Grey Cement	Ordinary Port land cement
2	Bars & rods	Rebars	Mid steel long

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			products
3	Heavy Machinery & parts	Construction Machinery	Manufacture of Machinery for mining Quarrying & Construction.

38(e): APPLICATION OF ESCALATION CLAUSE:

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

Percentage Table

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

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

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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. 38 of F2/P1 Contracts Sl. No.	Index description	Source of index	Base value*	Base Date*	Weightage of item**
38 (a)(i)	Other Materials	All India Whole sale price index (all commodities) as published by the Economic Advisor to the Govt. Of India, Ministry of Commerce and industry			
38 (a)(ii)	Cement	Whole sale price index for Cement (Ordinary Portland Cement) as published by the Economic Advisor to the Govt. Of India, Ministry of Commerce and industry			
38 (a)(iii)	Steel	Whole sale price index for Steel (Mild Steel-Long Products) as published by the Economic Advisor to the Govt. Of India, Ministry of Commerce and industry			
38 (a)(iv)	Bitumen (VG-30)	Official retail price of bulk bitumen at the nearest IOC/HPCL depot			
38 (a)(v)	Pipes	Whole sale price index for the type of Pipe under consideration, as published by the Economic Advisor to the Govt. Of India, Ministry of Commerce and industry			
38 (b)	Labour	Minimum Wage notified by the Labour and Employee's State Insurance Department of Government.			5%
38 (c)	POL	Official retail price of HSD at nearest IOCL/HPCL/BPCL/ Consumer pump depot			5%
38 (d)	Plant and Machinery	Whole sale price index for Manufacture of Machinery for Mining Quarrying and construction as published by the office the Economic Advisor to the Govt. Of India, Ministry of Commerce and Industry			
			Total		100%

- Values to be filled up at the time of drawl of contract following conditions.
- Values to be filled up in the bid document.

39. If any advance / Secured advance is granted by the Department the same will bear interest at the rate of 18% P.A.
40. All items of work as per schedule of quantities of this tender should confirm to Odisha Detailed Standard Specification. I.R.C. & I.S.I. Codes & Bridge code section I,II,III,IV&VII & latest design criteria for pre-stressed concrete bridge specially for Roads & Bridges issued by MoRT&H., Government of India, Compacting shall have to be carried out with help of mechanical vibrators from the range of I.S.:2505, I.S.:2006, I.S.:2514. I.S.:4656.
41. Centering & Shuttering shall be with suitable steel shutters in side of which shall be lined with suitable sheeting and made leak proof and watertight. All joints in formwork shall be properly sealed preferably with P.V.C. joints sealing tapes & compounds.

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42. Form work including complete false work shall be designed by the Contractor without any extra cost to employer and the Department will have the right to inspect the scaffolding, centering and shuttering made for the work and can reject partly of fully such structures, if found defective in their opinion. Any eventually such as loss of lives or property due to failure of centering and shuttering shall be the responsibility of the Contractor regarding compensation of all claims thereof.
43. Cement shall be used by bags and weight of one bag of Cement should be 50 (fifty) Kg. net & the Engineer-in-Charge or his representative shall have the right to test the weight & quality from time to time.
44. The tenderers shall make all arrangements for proper storage of materials but no cost for raising shed for store and pay of security guard etc. will be borne by the Department. The department is not responsible for any theft or loss of materials at site. It is contractor's risk. Under any such plea, if the tenderer stops the work he shall have to pay the full penalty as per clauses of the contract.
45. Approach road to site of work for transport of materials to site of work is sole responsibility of the Contractor. Statutory traffic restriction in the town area for Transport of construction material to site of work is to be taken in to consideration before tendering and no consideration for extra time or compensation thereof shall be considered.
46. The contractor should at his own cost arrange necessary tools and plants required for efficient Execution of work and the rates quoted should be inclusive of transportation, hire and running charges of such plant and cost of consumables
47. The contractor shall properly co-ordinate with the execution of P.H. and Electrical works and take care of the safety of workers.
48. The machineries if available, with the department may be supplied on hire as per charges noted in the enclosed statement and may be changed from time to time subject to the condition that the contractor will execute in advance an agreement with the Engineer-in-Charge.
49. No claim whatsoever will be entertained for supply of machineries. No extension of time will be granted to the contractor under this ground under any circumstances
50. The tenderer or any of its constituent partners of whose contract for any work has been rescinded or who has abandoned any work in the last five years prior to the date of Bid shall be debarred from qualification. The tenderer is to furnish an affidavit at the time of submission of tender paper about the authentication of tender documents. An affidavit to this effect is to be furnished in **Schedule-F** and information in **Schedule-E**.
51. It should be clearly understood that :
 - a) The joints of the bars are to be provided with lapping, welds or bolts nuts as well be directed by the Engineer-in-charge.
 - b) Concrete test specimens 150mm × 150mm × 150mm in size (whether plain or reinforced concrete) for the testing shall be taken for each structural member by a representative of the contractor in the presence of responsible officer of the rank not lower than that of an Assistant Engineer or sub-Divisional Officer. The contractor shall bear the cost so involved in testing. The test specimen in cube should be carried out in the Departmental Control and Research Laboratory of Cuttack or Bhubaneswar. Test should be carried out in accordance with the stipulation in Bridges code section-III.
 - c) Test specimens shall be formed carefully in accordance with the standard method of taking test specimen and no plea shall be entertained later on the grounds that the casting of the test specimen was faulty and that the result of the specimen did not give a correct indication of the actual quality of concrete.
 - d) Plain concrete and reinforced concrete specimens will be tested in Quality Control and Research Laboratory as per direction of Engineer-in-charge. Cost of testing of all specimens and samples will be borne by the Contractor.
52. The rates quoted should be inclusive of carriage of water required in connection with execution of the work. No claim for carriage of water whatsoever will be entertained.
53. 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 `2,50,000.00. 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.

54. DELETED.
55. 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.
56. For submission of a tender for the work, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the work about the quality and availability of the required quantity of materials, Medical aid, labor and Flood stuff etc. and that the rates quoted by him in the tender will be adequate to complete the work according to the specifications attached thereto and that he had taken in to account all conditions and difficulties that may be encountered during its progress and to have quoted labor rates and materials with taxes, Octroi and other duties lead, lifts, loading and unloading freight for materials and all other charges necessary for the completion of the work to the entire satisfaction of the Engineer-in-charge of the work and his authorized subordinates. After acceptance of the contract rates Government will not pay any extra charges for any reason in case the contractor finds later on to have misjudged the conditions as regards the availability of materials, labor and other factors. The contractor will be responsible for any misuse, loss or damages due to any reasons whatsoever of any departmental material during the execution of work. In case of loss, damage or misuse, recovery at the rate at 5 times the cost of the materials will be deducted from the bills or his other dues.
57. 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 .
58. Prevailing rate of GST (CGST & SGST) on the taxable amount of the bill will be deducted from the contractor's bill, where Agreement Value is 2.50 Lakh & more.
59. It must be clearly understood that under no circumstances any interest is chargeable for the dues or additional dues if any payable for the work executed and final bill pending disposal due to any reason whatsoever.
60. No extra payment will be made for removing spreading and consolidating salvaged metals and materials.
61. Under section 12 of contractors labor (Regulation and Abolition) Act. 1970 the contractor who undertakes execution of work through labor should produce valid license from licensing authorities of labor Department.
62. Sample of all material - The contractor shall supply sample of all materials fully before procurement for the work for testing and acceptance as may be requiring by the concerned Executive Engineer.
63. Super class contractor shall employ under himself two Graduate Engineer and two Diploma holders belonging to the State of Odisha. Special Class contractor shall employ under him one graduate Engineer and two Diploma Holders belonging to the state of Odisha. Likewise 'A' class contractor shall employ under him one Graduate Engineer or two Diploma Holders belonging to state of Odisha. The contractor shall pay to the Engineering personnel monthly emoluments, which shall not be less than the emoluments of the personnel of equivalent qualification employed under the State Govt. of Odisha. The Engineer-in Chief (Civil), Odisha may however assist the contractor with names of such unemployed Graduate engineers and Diploma Holders if such help is sought for by the contractor. The names of such Engineering personnel appointed by the Contractors should be intimated to the tender receiving authority along with the tender as to who would be supervising the work. Each bill of the Super Class, Special Class or 'A' Class Contractor shall be accompanied by an employment Roll of the Engineering personnel together with a Certificate of the Graduate Engineer or Diploma Holder so employed by the contractor to the effect that the work executed as per the bill has been supervised by him. (Vide Works Department No. Codes M-22/91-15384 dated 9.7.91).
64. 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.
65. All reinforced cement work should conform to Odisha Detailed specification and should be of proportion as per Contract Agreement having desired compressive strength (in work test) in 15 Cm cubes at 28days, after mixing and test conducted in accordance with IS 456 and IS 516.
66. Bailing out of water from the foundation, pipeline trenches S. Tanks/ Soak pits/ Sumps/ M.H. etc. either rainwater or sub-soil water if necessary should be borne by the contractor. No payment will be made for

benchmarks. Level pillars, profiles and benching and levelling the ground wherever required. The rates quoted should be for finished items of works inclusive of these incidental items of work. It should be understood clearly that no claims whatsoever would be entertained.

67. The tenderer shall have to abide by the C.P.W.D. safety code rules introduced by the Government of India, Ministry of work Housing and Supply in their standing order No-44150 dtd.25.11.57.
68. The Contractor will have to submit to the Executive Engineer, Mayurbhanj (R&B) Division, Baripada monthly return of labour both skilled and unskilled employed by him on the work.
69. All fittings for doors and windows P.H. & Electrical works as supplied by the Contractor should be of best quality and conform to relevant I.S. specification and should be got approved by the Engineer-in-charge of the respective wing before they are used on the work.
70. After completion of the work the contractor shall arrange at his own cost all requisite equipments for testing buildings, if found necessary and bear the entire cost of such test, including the inspection of Electrical Inspectorate.
71. All reinforced cement concrete works should be finished smooth Extra charges for plastering if required to any R.C.C. structures like roof slab, Columns, Chaja, fins, parapets, shelves etc. shall not be paid.
72. The tenderer may at his option quote reasonable rate for each item of work carefully so that the rate for one item should not be unworkable low and for others too high.
73. The contractor has to arrange the samples of materials required for execution to be got tested and approved by the Department before taking up the work and during course of execution required from time to time. All such samples will be tested at any of the Departmental Control and Research Laboratories, at the cost of the Contractor with no extra cost to the Department.
74. If there is any damage to the work due to natural calamities like flood or cyclone or any other cause during the course of execution of work or up to 6 months after completion of work or if any, imperfection becomes apparent to the work within 6 months from the date of final certificate of completion of work the contractor shall make good of all such damages at his own cost with no extra cost to the Department. No claims, whatsoever, in this regard will be entertained.
75. The Fly Ash Bricks should be of good qualities. The bricks should be approved by the Engineer-in-Charge before use in the work and should confirm to the minimum strength and other criteria as per National Building Code.
76. Under Section 1 of contract labour Regulation and Abolition Act 1970 the contractor who undertakes execution of work through labour should produce valid license from the licensing authority of labour Department.
77. Standard co-efficient for linear measurement will be adopted while calculating consumption of steel and no claim whatsoever regarding difference in co-efficient of steel will be entertained. The rates quoted shall be inclusive of any eventuality of difference for co-efficient for linear measurements.
78. Engineer Contractor desirous to avail the facility of exemption of E.M.D is required to submit an affidavit to the effect that he has not yet availed the facility / participated in the tender for more than two works (Excluding this work) during the current financial year. The name of work for which participated and the authority to whom the tender was submitted must be mentioned in the affidavit, failing which the tender will be rejected.
79. 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.
80. **SPECIAL CONDITIONS (PART OF THE CONTRACT)**
 - (I) All materials before they are being used in the items of works as per this Schedule of quantities and also the finished items of work where tests are applicable shall have to be tested through the Engineer-in-charge of the respective wing at appropriate Laboratories according to the relevant I.S. specifications of the materials and the said items of works and the cost of all such tests shall have to be borne by the Contractor and the rates of the items of works should be inclusive of cost of such tests.
 - (II) The tests have to be planned & carried out such that the progress of work is not hampered

- (II) The tests are mandatory as per the prescribed frequencies and I.S. specifications. However, these are not exhaustive and the Engineer-in-charge has the right to prescribe other required test if any as will be considered from time to time.
81. In case of ambiguity between clauses of this D.T .C.N. and the P-1 contract form, the relevant Clauses of the P-1 contract form shall prevail over the D.T .C.N. The clauses not covered under P-1 contract form shall be governed by the clauses of the D.T .C.N.
82. 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.
82. Schedule of quantities is accompanied in Cover-II (Price Bid). It shall be definitely understood that the Government does not accept any responsibility for the correctness or completeness of this schedule and that this schedule is liable for alternation or omissions, deductions or alternations set forth in the conditions of the contract and such omissions, deductions, additions or alternations shall no way invalidate the contract and no extra monetary compensation, will be entertained.
83. 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 Executive Engineer will have the right to investigate and if the contractor is found to be in default, he may recover such amount due from the contractor and pay such amount to the labour directly under intimation to the local labour office of the Govt. The contractor shall not employ child labour. The decision of the Executive Engineer is final and binding on the contractor.
84. The contractor should arrange the materials like Steel, Cement, paint and bitumen etc. of approved quality and specification at his own cost for completion of the work with the time schedule. No extension of time will be granted on the application of the contractor due to delay in procurement of materials.
85. 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.
86. If the contractor removes Government materials supplied to him from the site of work with a view to dispose of the same dishonestly, he shall be in addition to any other liability civil or criminal arising out of his contract be liable to pay a penalty equivalent to five times of the price of the materials according to the stock issue rate or market rate whichever is higher. The penalty so imposed shall be recovered at any time from any sum that may then or at any time thereafter become due to the contractor or from his security deposit or from the proceeds of sale thereof.
87. The selected contractor may take delivery of departmental supply according to his need for the work issued by the Sub-Divisional Officer in-charge subject to the availability of the materials. The tenderer shall make all arrangement for proper storages of materials but no cost for raising shed for storage, pay of security guard etc. will be borne by the Department. The Department is not responsible for considering the theft of materials at site. It is the contractor's risk. Under any such plea if the tenderer stops the work, he shall have to pay the full penalty as per clause of F2 agreement.
88. 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.
89. All the materials which are to be supplied from P.W.D. store will be as per availability of stock and the contractor will have to bear the charges of straightening, cutting, jointing, welding etc. to required sizes in case of M.S. Rods or TOR Steel / M.S Angles, Tees and Joists etc. After the issue from the P.W.D. store, the materials may be under the custody of the contractor and the contractor will be responsible for its safety and storage. Cut pieces of steel more than one meter in length will be returned by the contractor at the issuing stores without conveyance charges.
90. Though Departmental issue of cement and steel has indicated, it may not be taken as binding. The contractor must have to arrange by themselves cement, steel, bitumen and every sort of materials from approved manufacturer, get it tested in the Departmental Laboratory and approved by the Department before use. No extension of time or escalation of price on such account shall be entertained in future.
91. TOR rods, plates and structural members will be supplied in quantity, length and size available in the stock. For payment of reinforcement, the steel including plates etc. shall be measured in length of different diameter, size and specification as actually used (including hooks and cranks) in the work correct to an inch or cm. And their weight calculated as per sectional weight prescribed by the Indian Standard

Specification or as directed by the Engineer-in-Charge (Wastage of bars and unnecessary lapping will not be considered for measurement and payment).

92. Odisha Bridge & 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 Construction Corporation will 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.
93. The contractor is required to pay royalty to Govt. as fixed from time of time and produce such documents in support of their payment to the concerned Executive Engineer with their bills, falling which the amount towards royalties of different materials as utilized by them in the work will be recovered from their bills and deposited in the revenue of concerned department.
94. 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.
95. Any defects, shrinkage or other faults which may be noticed within 12 (Twelve) months from the completion of the work arising out of defective or improper materials or workmanship timing are upon the direction of the Engineer-in-Charge to be amended and made good by the contractor at his own cost unless the Engineer for reasons to be recorded in writing shall be decided that they ought to be paid for and in case of default Department may recover from the contractor the cost of making good the works. The contractor is also required to maintain the road/ building for 12 (Twelve) months from the date of successful completion of the work.
96. 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.
97. Gradation of ingredients: The coarse and fine aggregate shall meet the grade requirement as per the latest provision of relevant. I.S. Code/ I.R.C. code / MoRT&H specifications. Where it will be found necessary by the Department, the Officer-in-Charge of the work shall issue an order book to the contractor to be kept at the site of the work with pages serially numbered. Orders regarding the work whenever necessary are to be entered in this book by the P.W.D. Officer-in-Charge with their dated signatures and duly noted by the contractor or his authorized agents with their dated signature. Orders entered in this book and noted by the contractor's agent shall be considered to have been duly given to the contractor for following the instructions of the Department. The order Book shall be the property of the P.W.D. and shall not be removed from the site of work without written permission of the Engineer (Executive Engineer) and to be submitted to the Engineer-in charge every month.
98. 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.
99. 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.
100. The rates quoted by the contractor shall cover the latest approved rates of Labours, Materials, P.O.L. and Royalties. Arrangement of borrow areas i.e. Land, Approach Road to the building site etc. are the responsibility of the contractor.
101. The rate for each work of concrete items wherever dewatering is imperatively necessary the term dewatering shall mean the execution or operation of the items due to standing water as well as due to percolation of water. The quoted rates will be inclusive of this.

102. 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 book not maintained from the commencement of the work is liable to be summarily rejected. The claim book is the property of the P.W.D. and shall be surrendered by the contractor to the Engineer-in-charge after completion of the work or before recession of the contract by the Department whichever is earlier for record.
103. Number of tests as specified in I.R.C. / MoRT&H / I.S.I specification required for the construction of roads / bridges / buildings or any other structural works will be conducted in any Govt. Test House /Departmental laboratories/reputed material testing laboratory as to be decided by the Engineer-in-charge. Testing charges including expenditure for collection / transportation of samples /specimens etc. will be borne by the contractor. The collection of samples and testing are to be conducted for both prior to execution and during execution as may be directed by the Engineer-in-charge and on both the accounts the cost shall be borne by the contractor.
104. 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.
105. In case the 1st lowest tenderer or even the next lowest tenderers withdraw in series one by one thereby facilitating a particular tender for award, then they shall be penalized with adequate disincentives with forfeiture of EMD unless adequate justification for such back out is furnished. Appropriate action for black listing the tenderers shall also be taken apart from disincentives against the tenderer.
106. The following documents which are not submitted with the Bid, will be deemed to be part of the Bid:
- | Sl. No | Particulars |
|--------|----------------------------|
| 1 | Notice Inviting tender |
| 2 | Instruction to the Bidders |
| 3 | Conditions of Contract. |
| 4 | Contract data |
| 5 | Specifications |
| 6 | Drawings |
107. 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 Chief 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 in to by the contractor to the effect that these hire charges are recoverable from the bills of the contractor regularly and the final payment for the work including refund of security deposit will not be made until the total amount due to the Government on account of hire of machinery etc. is recoverable in full . Full amount of hire charges due from the contractor at any contract at any time shall be recovered from his next subsequent bill. All transit and incidental charges in connection with the despatch 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 utilised 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 of 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 Chief 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 Chief 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 authorized agent daily. In case of contractor contests the correctness of the entries and / or fails to sign the logbook, the decision of the Engineer-in-charge shall be final and binding on him. Hire charges will be calculated according to the entries in the logbook and will be binding on the contractor.

AGREEMENT FOR LOANS OF GOVERNMENT TOOLS & PLANTS

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

- a) In consideration of agreement that hire charges be recovered from their bill for work executed on which this machinery will be used or any other than standing in the names of contractors in the book of the Department or any other Government Department. The Govt. agrees to let the hirer tools and plants for the period to be computed from the date of delivery of the tools and plant to the hirer at the P.W. Department workshop / store at Baripada
- 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 Baripada in the same good condition in which they were received by him.

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- 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 Chief 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 authorised 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
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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

108. ELIGIBILITY CRITERIA:

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

- a. Scanned copy of demand draft towards cost of tender paper as per **Clause No.4 and 5(i) of DTCN.**
- b. Scanned copy of valid Registration Certificate, Valid GSTIN clearance certificate, PAN card along, NO relationship certificate with the tender.
- c. Evidence of ownerships of machineries / equipments as per **Clause No.7 of DTCN**

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- d. **Joint Ventures are not accepted.**
- e. Affidavit in schedule-E and in schedule-F has to be furnished as per clause 49 of DTCN

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 year (escalation factor) which will taken into account the completed as well as works in progress.

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

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

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

The Statement showing the value of existing commitments and ongoing works a s 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 Executive Engineer.

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

Year before	Multiplying factor
One	1.10
Two	1.21
Three	1.33
Four	1.46
Five	1.61

(Applicant should indicate actual figures of costs and amounts for the works executed by them without accounting for the above mentioned factors) In case the financial figures and value of completed works are in foreign currency the above enhanced multiplying factors will be applied. Instead, current market exchange rate(State Bank of India BC selling rate as on the last date of submission of the bid) will be applied for the purpose of conversion of amount in foreign currency into Indian rupees.

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

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

2016-17 -----	2017-18 -----	2018-19 -----
2019-20 -----	2020-21.....	

109. Time Control:-(Vide Works Department Office Memorandum No.24716 dtd.24.12.2005 and No.8310 dtd.17.05.2006)

a) Progress of work and Re-scheduling programme.

- i) The Executive Engineer / Engineer-in-Charge shall issue the letter of acceptance to the successful contractor. The issue of the letter of acceptance shall be treated as closure of the Bid process and commencement of the contract.
- ii) Within 15 days of issue of the letter of acceptance, the contractor shall submit to the Engineer-in- Charge for approval a Programme showing the general methods, arrangements, and timing for all the activities in the Works along with monthly cash flow forecast.
- iii) To ensure good progress during the execution of the work the contractors shall be bound in all cases in which the time allowed for any work exceeds one month to complete, 1/4th of the whole time allowed under the contract has elapsed, ½ of the whole of the work before ½ of the whole time allowed under the contract has elapsed, 3/4th of the whole of the work before 3/4th of the whole time allowed under the contract has elapsed.
- iv) If at any time it should appear to the Engineer-in-Charge that the actual process of the work does not conform to the programme to which consent has been given the Contractor shall produce, at the request of the Engineer-in-Charge, a revised programme showing the modifications to such programme necessary to ensure completion of the works within the time for completion. If the contractor does not submit

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an updated Programme within this period, the Engineer-in-Charge may withhold the amount of 1% of the contract value from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

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

b) Extension of the Completion Date.

- i) The time allowed for execution of the works as specified in the Contract data shall be the essence of the Contract. The execution of the works shall commence from the 15th day or such time period as mentioned in letter of Award after the date on which the Engineer-in-Charge issues written orders to commence the work or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money & performance guarantee / Security deposit absolutely.
- ii) As soon as possible after the Agreement is executed, 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.
- iii) In case of delay occurred due to any of the reasons mentioned below, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.
 - (1) Force majeure, or
 - (2) Abnormally bad weather, or
 - (3) Serious loss or damage by fire, or
 - (4) Civil commotion, local commotion of workmen, strike or lockout affecting any of the trades employed on the work, or
 - (5) Delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract.
 - (6) In case a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost, or
 - (7) Any other cause, which, in the absolute discretion of the authority mentioned, in Contract data is beyond the Contractors control.
- iv) Request for re schedule 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.
- v) In any such case a fair and reasonable extension of time for completion of work may be given. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. Non-application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the contractor.

c) Compensation for Delay.

If the contractor fails to maintain the required progress in terms of clause-2 of P-1 Contract or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the Chief Engineer (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day / month (as applicable) that

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

d) Bonus for early completion

In case, the contractor completes the work with work value more than Rs. 40.00 lakhs, ahead of scheduled completion time, a bonus @ 1% (one percent) of the tendered value per month computed on per day basis (only after one month) shall be payable to the contractor, subject to a maximum limit of 2% (two percent) of the tendered value. The amount of bonus, if payable shall be paid along with final bill after completion of work.

e) Management Meetings.

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

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

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

111. Building and other Construction Workers Welfare Cess @ 1% of the estimated cost as per tender notification read with latest corrigendum if any will be proportionately deducted from the contractor's bill at the time of making payment of each bill.

112. The tenderers are required to go through each clause of P.W.D. Form P-1 carefully in addition to the clauses mentioned here in before tendering.

113. 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.

114. The safety certificate of the E.I. work will be furnished by the agencies after getting necessary verification from the electrical inspector / equally competent authority responsible for the work prior to Energization of the building.
115. Percentage rate contract (vide Works Department letter no.8310 dt.17.05.2006) In case of percentage rate tender:-
- i) The Contractor has to mention percentage excess or less over the estimated cost (In figures as well as words) in the prescribed format appended to the tender document.
 - ii) Contractors participated in the tender for more than one work may offer conditional rebate. Rebate offer submitted in separate sealed envelope shall be opened, declared and recorded first. The rebate so offered shall be considered after opening of all packages called in the same Tender Notice. The Contractors who wish to tender for two or more works shall submit separate tender for each. Each tender shall have the Bid Identification No., Name & Sl . No. of the work (a s per IFB) to which they refer, written on the envelope.
 - iii) Only percentage quoted shall be considered. Percentage quoted by the Contractor should be accurately filled-in figures and words, so that there is no discrepancy.
 - (1) If any discrepancy is found in the percentage quoted in words and figures, then the Percentage quoted by the Contractor in words shall be taken as correct
 - (2) If any discrepancy is found in the percentage quoted in percentage excess/ less and the total amount quoted by the Contractor, then percentage will be taken as correct.
 - (3) The percentage quoted in the tender without mentioning excess or less and not supported with the corresponding amount will be treated as excess.
 - (4) The percentage quoted in the tender without mentioning excess / less supported with corresponding amount does not tally with either to percentage excess or less then it will be treated as percentage excess.
 - (5) The percentage quoted in the tender without mentioning excess / less supported with corresponding amount if tallied with the percentage then it will be treated as to which side the amount tallies.
 - (6) The Contractor will write percentage excess/ less up to one decimal point only. If he writes the percentage excess / less up to two or more decimal points, the first decimal point shall only be considered without rounding off.
 - (7) The tender shall be written legibly and free from erasures, over writings or corrections of figures. Corrections, over writings & interpolations where unavoidable should be made by making out, initialling, dating and rewriting.
 - iv) In the contract P1 time is the essence. The contractor is required to maintain a certain rate of progress specify in the contract.
 - v) The quantity mentioned can be increased or reduced to the extent of 10% for individual items subject to a maximum of 5% over the estimated cost. If it exceeds the limit stated above prior approval of competent authority is mandatory before making any payment.
 - vi) The period of completion is fixed and cannot be altered except in case of exceptional circumstances with due approval of next higher authority.
 - vii) Bills for percentage rate tenders shall be prepared at the estimated rates for individual items only and the percentage excess or less shall be added or subtracted from the gross amount of the bill .
116. As per Amendment to para-3.4.16(a)(VII) of OPWD Code ,Vol-I by substitution vide WD M.No-12360 dt 08.11.2013.
Note -VII The contractor would however, be responsible for procurement of materials from authorized sources and voluntarily disclosed 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.
117. As per Amendment Appendix-IX Clause 36 of OPWD Code, Voll-II by inclusion vide WD M No-12360 dt.08.11.2013 .

If the rate quoted by the bidder is less than 15% of the tendered amount, than such a bid shall be rejected and the tender shall be finalized basing on merits of rest bids, But if more than one bid is quoted at 14.99% (Decimal up to two numbers will be taken for all practical purpose) less than the estimated cost .The tender accepting authority will finalize the tender through a transparent lottery system. Where all bidders /their authorized representative, the concerned Executive Engineer and DAO will remain present .

118. As per Amendment to para -3.5.18 Note-VIII of OPWD Code,Vol-I vide WD M.No-12360 dt 08.11.2013

Note- VIII Before acceptance of tender, the successful bidder will be required to submit a work programme mile stone basing on the financial achievement so as to complete the work within the stipulated time and in case of failure on the part of the agency to achieve the milestone liquidated damage will be imposed

(Total 118 Clauses)

APPROVED for 46 (Forty six) pages only

Sd/- R.G Ray
Superintending Engineer
Mayurbhanj (R&B) Division

TECHNICAL SPECIFICATION OF CIVIL PORTION OF WORK

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

- | | | |
|-----|-------------------------------------|---|
| 1. | Cement | Will be as per I.S. 269/255 (How ever the grade of cement to be selected by the Engineer-in-Charge of work and compressive cube test before commencement of work in each batch) |
| 2. | Steel | I.S. 432 (Plain) and 17.88 (Tor) |
| 3. | Vibrator | I.S. 7246 |
| 4. | Aggregate | I.S. 383, I.S. 515 |
| 5. | Water for mixing and curing | Shall be clean, free from injurious amount of oil, salt, acid, vegetable materials and other substances and harmful to concrete in conformity to I.S. 456 and I.S. 2025 |
| 6. | Sand/Fine Aggregate | I.S. 2116, 383 |
| 7. | Binding wire | I.S. 280(galvanized minimum 1 mm) |
| 8. | Rain water pipes | 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 & Fixture for Joinery works | Conforming to I.S. 7452/82 strictly conform to I.S. specification and as per direction of Engineer-in-Charge. |

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

ITEM OF WORK

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

TECHNICAL SPECIFICATION OF P.H. PORTION OF WORK**A) WATER SUPPLY & SANITARY INSTALLATIONS:**

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

(a) Sanitary fixtures:

To be of best quality vitreous ware of porcelain.

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

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

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

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

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

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

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

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

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

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

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

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

(B) BUILDING MATERIALS:**(a) Bricks:**

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

b) Cement mortar

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

c) **Cement:**
Cement should confirm to IS-269/IS-455.

(d) **Sand:**
Locally available best river sand medium size.

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

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

TECHNICAL SPECIFICATION FOR SANITARY & PLUMBING WORKS

(A) **Sanitary ware & allied fittings :**

1 **General:**

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

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

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

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

3 **Flushing Cistern:**

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

The 32mm dia Flush Pipe shall be connected to the Water Closet by means of approved type joint. The Flush Pipe shall be fixed to wall by using C.I. Holder Bat Clamps. The bend and the Offset as required in the Flush pipe shall be made cold. The inside of the Cistern shall be painted with two coats of approved black bitumen paint. The Outer face of the Cistern, Brackets Overflow pipe and Flush Pipe etc., shall be painted with two coats of any synthetic enamel paint of approved shade and make, over a coat of priming. The cost of the rate quoted for the flushing cistern. The inlet connection to the Cistern shall be made with 450 mm 1 cmg 15 mm dia P.V.C. Heavy type connection Pipe.

4. Wash Hand Basin:

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

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

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

5. Kitchen Sink:

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

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

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

6. Standing Urinals :

The Urinals shall be flat pattern lipped front basin of required dimension of White Vitreous China and one piece construction with internal flushing box rim of an approved make and brand as specified. It shall be fixed in the position by*using wooden plug embedded in the wall with screws of proper size. Each Urinal shall be connected to a 40mm dia R.V.C. Waste Pipe, which shall discharge into a channel of floor trap. The lip of Urinals shall be kept at 525mm from floor level, while fixing the Urinal on wall. Where no. of Urinals are fixed in a line, the distance between the centres to centre of each Urinal shall be kept 750mm. and each Urinal should be separated from one to other by a partition plate. The centre to centre of partition plates shall be kept 750mm apart. The partition plate shall be of one-piece 25 mm thick marble plates, cut to size and front corners rounded. The partition plates shall be embedded in wall with cement concrete and finished smooth. The bottom of the partition plate should be kept 350mm above floor level and top should be kept at 1250mm above floor level. The plates should project 600mm

from wall surface. The width of the plates to be embedded inside the wall should not be less than 100mm. The thickness of the plates shall be minimum 25mm

For flushing the Urinals each Urinals shall be connected with one 20mm dia G.I. Pipe (Medium Class), One of this pipe shall be inserted into the inlet of the Urinal and jointed with Jute and putty whereas the other end is connected either with a Tee or Bend with the 25mm dia size Water Pipe Line fixed on the wall horizontal above the Urinals. In each 20mm dia flush pipe one 20mm dia cum-metal Gate valve, the water will flow to thermal of Urinal through the inlet pipe and flush the Urinal. After flush the valve can be closed to avoid wastage of water. One 40mm dia P.V.C. Waste Pipe shall be connected to the waste of each Urinal, to discharge the Waste into the Channel of Trap. One end of this Waste pipe shall be made a cup size to fit into the projected waste and tightened with screws.

7. Squatting Urinal Plates:

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

For flushing arrangement, one 25mm dia G.I. Common Water Pipeline (minimum size) shall be fixed on the wall parallel to floor. For each urinal one 20mm dia G.I. Branch Pipe shall be taken down up to ±200mm from floor level just at the centre of each plate, in which one 20mm dia Gate Valves is fixed at 350mm above floor level . At 1200mm height, the 20mm dia flush pipe shall be divided into two branches shall be taken downward and connected to the inlets of the urinals plate at floor level . By operating the valve as above, the water will rush into the rims of the urinal plate and flush it.

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

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

(B) Soil and waste pipes and fittings

1. H.C.I. Pipe Fittings

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

WEIGHT OF HCI PIPES

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

Tolerance 10%

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

4. Requirement of lead and Gasket cement for jointing H.C.I. Pipes (Each Joint)

Dia of pipe in mm.	Lead in kg.	Gasket in kg. (same for lead & cement joint)	Cement kg.
100	1.2kg.	0.13kg.	0.12kg.
50	0.36 kg.	0.06 kg.	0.06 kg.

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

6. Soil pipes for ventilation Is to be connected to the sewer at its floor and without a trap and be carried to such a height, at least above roof level , to prevent damage to health by commission of foul air, The pipe shall terminate as open and protected by a cowl .

7. The waste water pipe shall be connected with the nearest yard gully or a surface drain.

8. The traps should be of hard cast iron and should have a water seal at least 50mm deep.

9. All the soil and waste pipes and fittings, after laid and fixed shall be smoke tested, to the entire, satisfaction of the Engineer-in-charge. The Cost of testing is to be included in the offer. For smoke-test the materials usually burat greases cotton waste, which gives out a clear pungent smoke, which is easily detected by sight and smell. Smoke shall be pumped to the drains from the lower end from a smoke machine, which consists of lower, and burner.

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

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

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

- a) Materials - Un-plasticized Poly Vinyl -Chloride (UPVC).
- b) Color - Grey
- c) Dimensions -
 - i) Diameter - Fittings - 75mm/110mm/63mm & 63mm.
 - Pipes - 75mm, 110mm, on lengths of 3.or 6 mtr.
- d) Wall thickness - Fittings - Minimum 3.2mm at any port.
 - Pipes - As per application
 - For Rainwater - 75mm-1.8. to 2.2.mm, 110mm-2.5. to 3mm
 - Waste & Soil - 75mm -1.8 to 2.2mm, 110mm -2.5 to 3 mm, 63mm -
 - Underground drainage with light/NIL Traffics - 110mm - 2.5 to 3mm
 - Light/Nil in Heavy traffic - 110mm 3.7 to 4.3mm

- e) Standard Confirming to Attributes Confirms to Standard No.
- | | | | |
|-------|-------------------------------------|---|---|
| i) | Fittings & Wall B.S.4514, DIN 10531 | | |
| | Thickness | - | DIN 19534 I.S.7834 - PVC (Rigid) |
| ii) | Pipe Wall thickness | - | IS 4905 |
| iii) | Rubber ring | - | IS 5382 |
| iv) | Fitting dimensions | - | DIN 19531 - P.V.C.,
DIN 19534-S.W.R.
IS - 7834 V.C. (Rigid) |
| v) | Pipe Dimensions | - | IS 4985 |

b) Laying instructions & Jointing Procedure

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

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

2 Fixing of the Pipes and fittings on wall surface.

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

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

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

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

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

5 Anti-syphonage Pipes

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

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

7 Installation of Water Closet

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

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

63mm (O.D.) P.V.C. Pipes to be used for these work either in antisiphonage system or elsewhere, should be of "Quick Fit" Pipes Class 2 (4 kg. F/Cm²), Quick Fit, Pipes have one end socketed. The P.V.C. (Rigid) fittings, such as 63mm elbow, 63mm equal Tees 110mm x 63mm reducer etc. used in the work, should be of injection-molded fittings.

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

10. Measurement

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

11. Before fixing and painting, the pipe shall be tested hydraulically to pressure 0.4Kg/Cm² for pipes under I.S.-1729/1964 and at a pressure 0.7 Kg/Cm² for pipes under I.S. 3989-1970 without showing any sign of leakage, sweating of or her defect of any kind. The pressure should be applied internally and shall be maintained for not less than 15 seconds.

c) Water Supply Pipes and Fittings:

1. Materials.

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

2. Laying of Pipes

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

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

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

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

Thrust or anchor blocks of cement concrete 1:2:4 in hard granite chips shall be constructed on all bends or branches to transmit the hydraulic pressure without impairing the ground and spreading it over a sufficient area. Pipes shall not be laid to pass through manholes, catch pit, drain, where, it is unavoidable the pipes shall be carried in sleeve pipe of M.S./G.I., as approved by the Engineer-in-charge. The rate should include such a situation.

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

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

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

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

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

6. Painting

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

7. Measurement

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

8. Ball Valve

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

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

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

9. Ferrule

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

10. Non-return Valve (Check Valves)

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

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

11. Foot Valve

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

12. Water meters (Domestic types)

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

13. Bibcock & Stopcock

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

14. Full way Valve (Brass)

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

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

15. Gun Metal Full way Valve

This shall be of the Gun-Metal fitted with wheel and shall be of Gate-Valve type opening full way. This shall confirm to I.S, 778-1971. Class I. The Valves should bear ISI Mark.

TECHNICAL SPECIFICATION FOR STONEWARE PIPE ETC.

1. Stoneware Pipes (Materials)

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

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

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

2. Excavation of Trench for laying Sewer Pipes

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

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

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

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

Drain Pipes (S.W. pipe & other pipes used for drain and Sewer) shall be laid in straight lines and to the even gradients as shown in the layout drawings. The socket end of the pipes shall face stream. Adequate care shall be exercised in setting out and determining the level of the pipes and the contractor shall provide suitable instruments, templates, sight rails, boning rods and other equipment's necessary for the purpose. In the case of pipes with joints to be made with loose collars, the collars shall be slipped on before the next pipe is laid. In those joints, a tight ring of twisted tarred jute soaked in cement mortar filling to ensure proper alignment and prevent. Cement entering the pipes, Cement compound joints is to be finished with proportion 1:1 with 45 beveling. The joints are to be kept wet with wet bag until the same are properly set with. The cement mortar joints shall be cured at least for 7 (Seven) days.

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

4. Excavation and refilling.

Excavation for drain and pipe trenches shall be straight and to correct depth and gradient. The trench bottom shall be of required width as per specification to allow working space for pipe jointing. Excavated materials shall be dumped away from the site as directed by Engineer-in-charge. Suitable precautions are to be taken to prevent in flow of water into the excavated area, during construction. The contractor at his own expense shall pump out or otherwise remove any or all water which during the continuance of contract may be found in the excavated trenches to keep the trench clear of water during the work under progress. The pipeline shall not be refilled and covered, until the line therein has been passed and tested.

5. Burried Services

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

6. Trench condition :

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

7. Inspection Chambers/Manholes

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

All manhole and inspection chamber shall have internal dimension as shown in drawing and B.O.Q. The depth of invert shall be fixed to the gradient. The foundation for Manhole shall be 175mm thick & with cement concrete 1.3.6 in hard stone metal / granite metal of 40mm size. The concrete shall project 150mm beyond the external faces of the brickwork.

The brick masonry shall be done in cement mortar in the proportion of 1:4 and thickness of the brick wall should be 250mm thick up to 1200mm depth from Ground Level and beyond that the wall thickness shall be maintained 375mm. The inside surface of the walls of the chamber, shall be finished with cement plaster 1.3 and outside with cement pointing 1.3. In addition to this, the inside surface should also be provided with cement punning.

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

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

8. Gully Trap Chamber

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

9. Kota/ Marble Stone flooring

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

10. Glazed tile dado

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

ADDITIONAL APPENDIX TO BILL OF QUANTITY:

(For P.H. Items of Work)

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

TECHNICAL SPECIFICATION OF INTERNAL ELECTRIFICATION WORKS

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

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

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

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

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

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

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

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

Conduit wiring

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

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

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

Main and Sub distribution Boards:

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

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

Earthing

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

The work shall include earthing of noncurrent 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 jointly by the supplier and the purchaser's authorized representative. The position of light fittings, pipes and board if required, to be changed / shifted due to the change in the building design etc by the purchaser's authorized representative, the same shall be carried out at no extra cost. All the materials supplied to the contractor according to the Contract condition will be subject to inspection and approval of the officer or his representative from time to time. The contractor will provide all facilities of such inspections free of cost. At the time of inspection, the owner or his representative will have full liberty to reject any such materials, which does not conform to the specification / requirement. No claim for any rejected materials will be entertained by the owner. The contractor will remove all rejected materials from site at his own cost. No surplus materials procured by the contractor will be accepted by the owner. The contractor will be responsible to get the Electric installations cleared by the Electrical Inspector of Odisha Government. Only the inspection fee will be reimbursed by Department on production of challan copy.

Installation and Maintenance Tools:

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

Drawings:

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

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

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

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

- (a) The arrangement and support of conduit pipe
- (b) The position of light fittings, switches / plug socket and switch boards
- I 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.

PVC insulated Cables and Wires:

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

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

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

The 'ON' and 'OFF' position of the switch handles shall be distinctly indicated and interlocks shall be provided to ensure that the switch cover cannot be opened unless the switch is in the 'OFF' position. Means shall, however, be provided for releasing the interlock to permit closing of switch with cover open for testing purposes. Designs with normal conventional position of switch handles, i.e. with switch handle up in the 'ON' position and down 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 design, construction of materials should be specified clearly. All the metal parts used in construction of the fittings shall have no effect due to dust / fumes / gase s 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.

C O D E S

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

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

- 28) Low Tension switch use units IS4064-1978
 29) Code of Practice for Automatic FIRE ALARM 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

Annexure-I**(List of Plants & Equipment's to be deployed on contract work)**

Sl. No.	Type of Equipments	No. of machines required	Marks
1	Water Tanker	1 No	10
2	Truck/Tipper	2 No	30
3	Concrete Mixture	1 No	10
4	Vibrator with needle	1 No	15
5	Plate vibrator	1 No	15
6	Shuttering plate	200 Sqm	20
		Total	100

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

SCHEDULE - A**CERTIFICATE OF NO RELATIONSHIP**

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

(*) - Strike out which is not applicable

Signature of the Tenderer

Date:-

SCHEDULE - B**WORKING EXPERIENCE****LIST OF SIMILAR NATURE OF PROJECTS IN PROGRESS**

Name of Employer	Name of location and name of work	Contract price in Indian Rupees/ Agreement No	Major 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

CONTRACTOR

SUPERINTENDING ENGINEER

SCHEDULE - C

CERTIFICATE OF TOOLS AND PLANTS

Sl. No.	Type of Equipments	No. of machines required	No. of machines Owned/ Leased/ Hired

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

SCHEDULE - D

WORK EXPERIENCE

LIST OF SIMILAR NATURE OF PROJECTS EXECUTED

Name of Employer	Name of location and name of work	Contract price in Indian Rupees/ Agreement No	Major items of works	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

CONTRACTOR

SUPERINTENDING ENGINEER

SCHEDULE - E

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

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

Note:

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

Signature of Tenderer

SCHEDULE - F

AFFIDAVIT

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

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

CONTRACTOR

SUPERINTENDING ENGINEER

**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 appointing	Monthly emolument	Whether full Time engagement and continuous	If they are superannuated/ retired/ dismissed or removed personnel from State Govt./ Central Govt./ Public Sector Undertaking/ Private Companies and s or any one ineligible for Government Service
1	2	3	4	5	6	7

Signature of the Tenderer.

Date:-

**SAMPLE FORMATS
UNDER TAKING**

This is to certify that

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

Signature of the Tenderer. Date:-

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

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.

Sl No	Name of the my employee and his designation in the firm	Presently working at	Details of his relatives working in the Department
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Relationship Name:

Designation

Office

Address

Relationship Name:

Designation

Office

Address

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

Yours Sincerely

Signature of the Tenderer.

Date:-

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. licence 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-

For official use only

01. E.M.D. Furnished/Not furnished

Rs. _____

in shape of _____

Pledged/Not Pledged

02. Valid Registration certificate: - copy furnished/Not furnished

03. PAN Card: - copy Furnished/Not furnished

04. Valid VAT clearance certificate: - copy Furnished/Not furnished.

05. Nos. of Tender paper: -

06. Cost of bid documents: