

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

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

COVER - I

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

"Construction of Tea House, Mushroom House Gazebo at Hill top of Prempahad in Rayagada District."

INDEX

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ODISHA TOURISM DEVELOPMENT CORPORATION LIMITED (A GOVT. OF ODISHA UNDERTAKING) PANTHANIVAS (OLD BLOCK): LEWIS ROAD: BHUBANESHWAR-14 **INVITATIONS FOR BIDS (IFB)**

Date: 22.09.2018 Letter No.- 6158

BID IDENTIFICATION NO: BP -III/ 15/2018-19 dt.22.09.2018.

The Executive Engineer, Building Project Division No. III, O.T.D.C. Ltd., Bhubaneshwar, on behalf of Governor of Odisha, invites Item rate bids in single cover system in OFFLINE MODE only, for the following works:

S1 No	Name of Work	Amount of Bid security (1% of quoted Amount)	Cost of bid document + GST @12% (Rs)	Category of Agency	Period of completion
1	2	3	4	5	6
1	Construction of Tea House, Mushroom House Gazebo at Hill top of Prempahad in Rayagada District.	amount as	Rs. 10,000/- + 1200/- (GST)	"C" & "B"	4 (Four) Calendar Months.
2	Development of Deomali at Pottangi Block in Koraput District.	1% of quoted amount as EMD.	Rs. 10,000/- + 1200/- (GST)	Manufacturer/ Authorized Dealer/Vendor /Agency.	4 (Four) Calendar Months.

Bid documents such as DTCN / BOQ etc. can be seen / downloaded from the our Website i.e. www.panthanivas.com during the period on Dt.28.09.2018 to 17.00 Hours of dt.09.10.2018.

- 1. Bids shall be received till 17.00 Hours of dt. 09.10.2018.
- 2. The technical bids will be opened at 11.30 Hours of dt.10.10.2018 in the office of the Executive Engineer, Building Project Division No. III, O.T.D.C. Ltd, Bhubaneshwar.
- 3. The authority reserves the right to reject any or all bids without assigning any reason thereof.
- 4. Any addendum / corrigendum / cancellation of tender can also be seen in the said websites.

Sd/-

Executive Engineer,

Building Project Division No. III, O.T.D.C. Ltd, Bhubaneshwar.

BILL OF QUANTITY

Name of Work: Construction of Tea House, Mushroom House Gazebo at Hill top of Prempahad in Rayagada District.

	Tayagaaa 215t115t.						
Sl. No.	Item of Work	Quantity	Units	Rate	AMOUNT		
1.00	Type -1: Construction of Tea House type Gazebo with 6 nos of R.C.C.M-20 grade column dia of 250mm, height 2.5 mtr Umbrella shaped roof having internal diameter of 3.65 mtr and top diameter 1 mtr with a appropriate foundation concrete base as per site specific structural drawing. Finishing the roof top surface with bamboo / Bullaha /straw / plank design as per the specification and direction of E.I.C. The shed must be provided with sitting arrangement of similar pattern of roof with cement oxide color or other approved material for all the ornamental works. The construction work of the Tea House / Gazebo should be finished in all respect involving all cost, conveyance, royalty and labour cess, T&P required for the work including center, shuttering and scaffolding and to be executed at the	1.00	No.				
2.00	specified location of Prempahad which would include the material handling to the hill top. Type – 2: Construction of Mushroom House type Gazebo with 8 nos of R.C.C.M-20 grade column dia of 250mm, height 2.5 mtr Mushroom shaped roof having internal diameter of 4.50 mtr and top diameter 1 mtr with a appropriate foundation concrete base as per site specific structural drawing. Finishing the roof top surface with bamboo / Bullaha /straw / plank design as per the specification and direction of E.I.C. The shed must be provided with sitting arrangement of similar pattern of roof with cement oxide color or other approved material over all the ornamental works. The construction work of the Mushroom House should be finished in all respect involving all cost, conveyance, royalty and labour cess, T&P required for the work including center, shuttering and scaffolding and to be executed at the specified location of Prempahad which would include the material handling to the hill top.	1.00	No.				

3.00	Providing ornamental cement plaster like bamboo / Bullaha /straw / plank design as per the specification and direction of E.I.C. on existing wall / roof with the plaster is to be made of cement mortar of proportion (1:3) with cement oxide color or any other approved material including cost, conveyance, royalty of all materials , cost of all labour T&P required for the work including labour cess complete in all respect.	13950.00	Sqft.		
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Total 03 (Three) items only.

Goods and service tax (GST) will be paid extra at applicable rate.

Quoted Rate by the Tenderer:-							
1()% Excess over the Estimated value.						
2()% Less over the Estimated value.						
3()% at par with Estimated value.						
No of Correction:-							
No of Overwriting:-							
No of Interpolation:-							

CHECKLIST TO BE ENSURED BY THE BIDDER

S1.	Particulars	Reference to DTCN	Whether furnished		Reference
NO		Clause No.	Yes	No	to Page no.
01.	Cost of tender paper Rs.10,000.00 and GST Rs.1200.00 (Scanned copy of financial instrument shall be furnished)	No.4 & 5(i)			
02.	E.M.D :- 1% of quoted amount as EMD. (Scanned copy of financial instrument shall be furnished)	No.5(i) & 20			
03.	Copy of valid Registration Certificate	No.5 (i) & 21			
04.	Copy of PAN Card	No.5 (i) & 21			
05.	No Relationship Certificate in Schedule – A	No.35			
06.	Information regarding current litigation, debarring / expelling of the tenderer or abandonment of the work by the tenderer (Schedule-D)	No.49			
07.	Affidavit (Schedule-E)	No.49			
08.	Work Experience : List of projects under execution / executed	Schedule-B & Schedule -C			
09.	Valid E.P.F. registration with up to date payment receipt	No. 3.2 (K)			
10.	All the intending contractor to participate must have valid Goods and Service Tax registration with appropriate authority.	No. 3.2 (L)			
11.	E-mail Id & Contact No.				

CONTRACT DATA

A. GENERAL INFORMATIONS

Sl.	Item	Details			
No.					
1	Name of the Work	Construction of Tea House, Mushroom House Gazebo at Hill top of Prempahad in			
		Rayagada District.			
2	Employer	Managing Director,			
		O.T.D.C. Ltd., Bhubaneshwar			
3	Employer's Representative	Executive Engineer,			
		Building Project Division No. III,			
		O.T.D.C. Ltd., Bhubaneshwar			

B. BID INFORMATION

5	Intended completion period/ Time		4 (Four) Calender Months				
	perio	od assigned for Completion					
6	Last Date & time of submission of		Date: 09.10.2018.				
	Bid		Time 17.00 hours				
7	Cost	of Bid Document					
	i	Bank draft amount	Rs. <mark>10,000</mark> /- + Rs. <mark>1200/</mark> -(GST)				
	ii	in favour of	Managing Director, O.T.D.C. Ltd.				
	iii	payable at	Bhubaneshwar				
8	Bid	Security					
Ì	i	Amount	1% of quoted amount as EMD.				
	ii	in favour of	Managing Director, O.T.D.C. Ltd.				
	iii	payable at	Bhubaneshwar				
	iv	Type of instrument	FD (TDA, TDR) / DD.				
9	Peri	od of submission of original Bid	From 10.00 Hours on dated: 28.09.2018. to				
	secu	rity and Demand draft towards	17.00 Hours of dt. 09.10.2018				
	cost	of Bid documents in the office	Bidder(s) claiming exemption on any aspect				
	of th	ne Executive Engineer, Building	need to furnish the hard copy of supporting				
	Proj	ect Division No. III,	documents in this stipulated period.				
	O.T.D.C. Ltd., Bhubaneshwar						
10	Bid	validity period	90 days				
11	Curi	rency of Contract	Indian Rupee				
12	Lang	guage of Contract	English				

Instruction to Bidders (ITB) e-procurement

(Relevant clauses in the DTCN / Bid document shall be superseded)

1. NOTICE INVITING BID AND OBTAINING BID DOCUMENTS:

- 1.1. The authority belonging to the major discipline is competent to invite tender of composite bids. He will also nominate the Executive / Superintending Engineer who will deal with all matters relating to the bids in the invitation of bids.
- 1.2. For composite tender, estimated cost of each component should be clearly indicated in addition to combined estimated cost put to tender. The eligibility of bidders will correspond to the combined estimated cost of different components put to tender.
- 1.3. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules / amendments issued there under from time to time. If he fails to do so, it will be considered a breach of the contract and the Executive / Superintending Engineer may at his discretion without prejudice to any other right or remedy available under law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation of the provisions of the said Act by him.
- 1.4. The contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the tender and of the rates and prices quoted in the Bill of Quantities, all of which shall, except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, plant & services or of contingencies for which there is a Provisional Sum) and all matters and things necessary for the proper execution and completion of the work and the remedying of any defects therein.
- 1.5. The successful bidder shall complete the works by the intended completion date specified in the Contract data.
- 1.6. Throughout the bid document, the terms 'bid and tender' and Bid Security and their derivatives (bidder / tenderer, bidding / tendering, etc.) are synonymous.
- 1.7. In case, the tender for composite work includes in addition to main work / building work all other ancillary works such as sanitary and water supply installations, drainage installation, electrical work, horticulture work, roads and paths and gate works in dams and canals etc., the bidder apart from being a registered civil Contractor of appropriate class must associate himself with agencies of appropriate class those who is eligible to tender for sanitary and water supply drainage, electrical and horticulture works in the composite tender. Intending purchasers are not required to produce any documents viz. copy of Registration, PAN at the time of purchase of tender documents but will be required for verification purpose at later stage.

1.8. PARTICIPATING IN THE BID IN THE E-PROCUREMENT PORTAL:

The Contractor / Bidder intending to participate in the bidding process is required to register in the Portal with some information about the firm / Contractor. This is a onetime activity for registering in Portal. During registration, the contractor has to attach a Digital Signature Certificate (DSC) to his / her unique user Id. The DSC used must be of appropriate class (Class II or Class III) issued from a registered Certifying Authority such

as n-Code, Sify, TCS, MTNL e-Mudra etc.

- 1.8.1. To log on to the portal, the Contractor / Bidder is required to type his / her username and password. The system will again ask to select the DSC and confirm it with the password of DSC. For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective Certifying Authority's stored system database. The system checks the unique Id., password and DSC combination and authenticates the login process for use of portal.
- 1.8.2. The tender documents uploaded by the Tender Inviting Officer in the website www.etenderodisha.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 above web site.
- 1.8.3. Contractor exempted from payment of EMD will be able to participate in the tender directly by uploading documentary evidences towards his eligibility for such exemption. However, hard copy of such document(s) needs to be furnished as per Sl.9 of Contract Data.
- 1.9. The bidder intending to participate in the bid on-line shall furnish the bid security and demand draft towards cost of bid document as per IFB (except for exempted contractors) and up load the scanned copy of the same in the portal against the bid and the original shall be deposited to the tender inviting officer within the period specified in the "contract data". If the Bidder fails to deposit the original bid security and demand draft towards cost of bid document within the stipulated time, his bid shall be rejected and action as per prevailing rule shall be taken. The bidder claiming exemption for cost of bid document need to furnish hard copy of such of relevant documents as per Sl. 9 of Contract Data.
- 1.10. The Contract will be governed by Circular(s) of Works Department, Government of Odisha.
- 1.11. In the case of any failure, malfunction, or breakdown of the electronic system used during the e-procurement process, the tender inviting officer shall not accept any responsibility for failures or breakdowns other than in those systems strictly within their own control.
- 1.12. Any third party / company / person under a service contract for operation of e-procurement system in the State or his / their subsidiaries or their parent companies shall be ineligible to participate in the procurement processes that are undertaken through the e-procurement system irrespective of who operates the system.

2. ELIGIBLE BIDDERS:

2.1. This Bid is open to all Contractors of the class mentioned in the *Invitation for Bids* registered with the State Government and Contractors of Equivalent Grade / Class Registered with Central Government / MES / Railways for execution of civil works. The

Bidders are required to enclose the proof of registration from the registering authority along with the Bid subject only to the registration in the portal using his / her DSC for on-line bids.

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

- 2.2. All bidders shall provide a statement that the bidder is neither associated, nor has been associated, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Engineer-in-Charge to provide consulting services for the preparation or supervision of the works, and any of its affiliates shall not be eligible to bid.
- 2.3. If the bidder has a relative employed as an Officer in the rank of an Assistant Engineer / Under Secretary and above in the Government of Odisha in the concerned Department, he shall inform the same in Schedule-G of the bid document mentioning the exact details in a covering letter along with the tender, failing which his bid will not be considered. Also, if the fact of relationship subsequently comes to light, his contract will be rescinded. The bid security or the performance security will be forfeited and he shall be liable to make good any loss or damage resulting from such cancellation. In case the bidder has no relationship with any of the officers mentioned above he shall have to furnish with his bid an undertaking to that effect.
- 2.4. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the concerned Department. Any breach of this condition by the contractor would render him liable for penal action for suppression of facts.
- 2.5. No Engineer of gazetted rank or other gazetted officer employed in Engineering or Administrative duties in an Engineering Department of the Government of Odisha is allowed to work for contractor for a period of two years after his retirement from Government service, without prior permission of the Government of Odisha in writing. Such a contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of Odisha as aforesaid before submission of the tender for engagement in the contractor's service.

3. QUALIFICATION CRITERIA:

- 3.1. For submission of Bids through the E-Procurement Portal, the bidder shall up-load the scanned copy / copies of documents listed under Clause 3.2 in prescribed format wherever warranted in support of eligibility criteria and qualification information. The L₁ bidder shall have to produce the original documents in support of the scanned copies and statements uploaded in the portal within 5 days of opening of price bid. Bids from Joint ventures are not acceptable.
- 3.2. The bid shall include following information and documents:
 - (a) Copy of valid contractor's registration certificate, PAN card, should accompany the technical bid.

- (b) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory.
- (c) Major construction equipment to be deployed to carry out the Contract. The contractors are required to furnish evidence of ownership of principal machineries / equipments for only those machineries / equipments asked for in the tender documents.
- (d) In case, if contractor executing several works, he is required to furnish a time schedule for movement of equipment / machinery from different site to this work site when work is to be executed.
- (e) The contractor shall furnish ownership documents for those machineries which he is planning to deploy for the tendered work.
- (f) In case, the contractor proposes to engage machineries and equipments as asked for in the tender document, owned or hired but deployed outside the state, he / she is required to furnish additional 1% as EMD / Bid security.
- (g) The contractor intending to use / lease equipments / machineries are required to furnish proof of ownership from the company / persons providing equipment / lease deed and duration of such contract.
- (h) Copy of sub-contract agreement with eligible Registered Electrical Contractors having valid L.T. / H.T. license (Associated with the sub-contractor).
- (i) Details of work under progress as per tender documents.
- (j) Details of works executed during the last five years and works in hand (list of ongoing works as per bid documents.
- (k) The contractor should produce valid E.P.F. registration with up to date payment receipt.
- (l) All the intending contractor to participate must have valid service tax registration with appropriate authority.

3.3. **DELETED**

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

4 ONE BID PER BIDDER:

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

5. COST OF BIDDING:

- 5.1 The bidder shall bear all costs associated with the preparation and submission of his bid, and the Engineer-in-Charge will in no case be responsible and liable for those costs.
- 5.2 All the rates and prices in the bid shall cover all cost, conveyance, any other local charges / duties, ferry, tollage charges and royalties etc.
- 5.3 The rate of royalties and taxes prevailing on the date of measurement shall be considered while making deductions in the bills.
- 5.4 The successful bidder shall make his own arrangement for all materials unless otherwise specified in the conditions of contract.
- 5.5 Good and Service Tax (GST) will be paid extra at applicable rate.

6. SITE VISIT:

- 6.3 Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A Bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The Bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done, local conditions and other factors having a bearing on the execution of work.
- 6.4 The bidder, in preparing the bid, shall rely on site Investigation Reports referred to in the Contract Data, supplemented by any information available to the bidder.
- 6.5 The Officer inviting the bid / Engineer-in-Charge will clarify queries on the Contract Data on requisition by the intending Bidder. The bidder may ask question in the e-procurement portal using his DSC; provided the questions are raised before the date mentioned in the home page under critical dates.

B. BIDDING DOCUMENTS

7. GENERAL INSTRUCTIONS:

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

8. CLARIFICATION OF BIDDING DOCUMENTS:

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

9. AMENDMENT OF BIDDING DOCUMENTS:

- 9.4. Before the deadline for submission of bids, the officer inviting the Bid may modify the bidding documents by issuing corrigendum / addenda.
- 9.5. Any corrigendum / addendum thus issued shall be part of the bidding documents and shall be notified in the website www.tenders Odisha.gov.in / www.panthanivas.com / notice board of the officer inviting tender and through paper publication.
- 9.6. To give prospective bidders reasonable time in which to take the corrigendum / addendum into account in preparing their bids, the Officer inviting the Bid if also happens to be the Engineer-in-Charge with the permission of the higher authority may, at his discretion, extend as necessary the dead line for submission of bids.

C. PREPARATION OF BIDS

10. LANGUAGE OF THE BID:

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

11. **DOCUMENTS COMPRISING** THE BID:

- 11.4. Following documents will be deemed to be part of the bid even if not submitted with the bid.
 - (i) Invitation for Bids (IFB)
 - (ii) Instructions to bidders (ITB)
 - (iii) Conditions of Contract
 - (iv) Contract Data
 - (v) Specifications
 - (vi) Drawings
- 11.5. All the volumes / documents shall be provided in the portal by the Officer inviting the bid. The bidder shall carefully go through the document and prepare the required documents and up load the scanned documents in Portable Document Format to the portal in the designated locations of Technical Bid. He will fill up the percentage rate in the BOQ down loaded for the work in designated Cell and up-load the same in designated locations of Financial Bid. Submission of document shall be effected by using DSC of appropriate class.
- A. Cost of "Bid document" & "Bid Security" shall comprise
 - (i) Cost of Bid Document in shape of Demand Draft
 - (ii) Bid Security in prescribed shape.
- B. "Technical Bid" shall comprise.
 - (i) Declaration under the Official Secret Act, 1923
 - (ii) Qualification Information and supporting documents,
 - (iii) Certificates, undertakings, affidavits,

- C. "Financial Bid "shall comprise.
 - (i) Priced Bill of Quantities
 - (ii) Additional Performance Security for unbalanced bid

12. **PROPOSAL BY THE BIDDER:**

- 12.4. In the E-Procurement Portal, an intelligent Bill of Quantity in Microsoft Excel format shall be made available to the bidder.
- 12.5. For Item rate tenders, the bidder shall fill in rates in figures and should not leave any cell blank. The line item total in words and the total amount shall be calculated by the system and shall be visible to the bidder.
- 12.6. In case of percentage rate tender, the bidder will only fill in the designated cell and activate "less" or "excess" to indicate how much his price offer is excess or less (Up to two decimal Place) than the estimated amount.
- 12.7. The bidder shall bid for the whole works as described in the Bill of Quantities.
- 12.8. Bidders shall submit offers that fully comply with the requirements of the bidding documents, Including the Conditions of Contract basic technical design as indicated in the drawing and specification. Conditional offer or alternative offers will not be considered in the process of bid evaluation.
- 12.9. The rates / bid shall include all taxes, duties, royalties, cess (workers welfare cess presently @ 1%) but exclude GST.
- 12.10. In the case of any bid where unit rate of any item / items appear unrealistic, such bid will be considered as unbalanced and in case the bidder is unable to provide satisfactory explanation such a tender is liable to be disqualified and rejected.
- 12.11. Bidders while quoting their offers shall consider the following as regards price adjustment towards Cement, Steel & Bitumen and escalation of all components of work as per Sub-Clause 31 of Condition of P₁ Contract.
- 12.12. Deleted.
- 12.13. Deleted.
- 12.14. Deleted.
- 12.15. Deleted
- 12.16. The contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the tender and of the rates and prices stated in the Bill of Quantities, all of which shall, except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, plant & services or of contingencies for which there is a Provisional Sum) and all matters and things necessary for the proper execution and completion of the work and the remedying of any defects therein.
- 12.17. The contractor shall conform in all respects, by giving all notices and paying all fees, with the provisions of:
 - i) Any national or State Statue, Ordinance, or other Law, or any regulation, or byelaw of any local or other duly constituted authority in relation to the execution and completion of the works and remedying of any defects therein, and
 - ii) The rules and regulations of all public bodies and companies whose property rights are affected or may be affected in any way by the works.

13. CURRENCIES OF BID AND PAYMENT:

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

14. **VALIDITY**:

- 14.4. Bids shall remain valid for a period not less than 90 days or the period mentioned in the Contract Data, after the deadline date for submission of bid as specified in the notice inviting the Bids. A Bid valid for a shorter period shall be rejected by the Engineer-incharge as non-responsive.
- 14.5. In exceptional circumstances, prior to expiry of the original time limit, the Officer inviting the Bid may request the bidders to extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable or by e-mail.
- 14.6. **DELETED.**

15. BID SECURITY:

15.1 The Bidder shall furnish, as part of his Bid, a Bid security for the amount mentioned under Contract Data. The bidder shall scan all the written pages of the bid security and up load the same to the system in designated place.

The successful lowest bidder will produce the original of all scanned documents for verification within 5 days of opening of the tender (Price Bid). In the eventuality of failure on the part of the lowest successful bidder to produce the original documents, he will be debarred in future from participating in tender for three years and will be blacklisted by the competent authority. In such a situation, successful L_2 bidder will be required to produce his original documents for consideration of his / her tender at the negotiated rate equal to L_1 bidder.

- 15.1.1 DELETED
- 15.1.2 Fixed deposit receipt of any scheduled bank approved by the Reserve bank of India / Indian Post Office Time deposit/ National Savings Certificate / Kisan Vikas Patra duly pledged in favour of Managing Director, Odisha Tourism Development Corporation Ltd., Bhubaneshwar as per notice inviting bid.
- 15.1.3 DELETED.
- 15.1.4 DELETED
- 15.2 The Bid shall be declared non-responsive and shall be rejected if submitted without an acceptable Bid Security and not secured as indicated in Sub-Clauses 15.1.
- 15.3 Combined bid security for more than one work is not acceptable.
- 15.4 In the case of Government Undertakings, Co-operatives Societies, Diploma or Degree holders in Engineering who are registered with the Government of Odisha, the rules framed by Government from time to time about Cost of Bid documents, Bid security, performance security will apply.
 - 15.4.1 Exemption to Engineering Contractors in respect of deposit of EMD / ISD will be extended for three works in a year.
 - 15.4.2 Price preference will be extended to S.C. / S.T. Contractors for one work in a span of two years

- 15.5 The bid Security of unsuccessful bidders will be returned within 28 days of the end of the validity period specified in Sub-Clause 14.1.
- 15.6 The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security and Additional Performance security, if any.
- 15.7 The Bid Security may be forfeited-
 - 15.7.1 If the bidder withdraws the bid after opening of the bid but within the period of validity.
 - 15.7.2 If the Bidder seeks any revision of rates or backs out of the bid claiming for not having referred to any or all documents provided in the Bid by the Officer Inviting the Bids.
 - 15.7.3 DELETED.
 - 15.7.4 In the case of a successful bidder, if the bidder fails within the specified time limit to-
 - 15.7.4.1 Sign the Agreement; or
 - 15.7.4.2 Furnish the required Performance Security including additional performance security, if any.

16 FORMAT AND SIGNING OF BID:

- 16.1 The bidder can download the tender of his choice and save it in his system and undertake the necessary preparatory work off-line and upload the completed tender at his convenience within the final date and time of submission. The bidder shall only submit single copy of the required documents and Price Bid in the portal. In the Financial bid, the bidder cannot leave any figure blank. He has to only write the figures, the words will be self-generated. The Bidders are advised to up-load the completed Bid document well ahead of the last date & time of receipt to avoid any last moment problem of power failures etc.
- 16.2 The Bidder shall go through the Bid carefully and list the documents those are asked for submission. He shall prepare all documents including cost of Bid Document, Bid Security, Declaration form, price bid etc and store in the system.
- 16.3 The bidder shall log on to the portal with his DSC and move to the desired tender for up-loading the documents in appropriate place one by one simultaneously checking the documents. Once the Bidder makes sure that all the documents have been up-loaded in appropriate place, he clicks the submit button to submit the bid to the portal.
 - 16.3.1 Tender cannot be pre-opened and cannot be submitted after due date and time. Therefore, only after satisfying that all the documents have been uploaded, the Bidder should activate submit button.
 - 16.3.2 In the e-procurement process, each process is time stamped. The system can identify each individual who has entered into the portal for any bid and the time of entering into the portal.
 - 16.3.3 The Bidder should ensure clarity of the document up-loaded by him to the portal, especially the scanned documents by taking out sample printing. Non-submission of legible documents may render the bid non-responsive. However, the Officer inviting the Bids if so desires, can ask for legible copies for

clarification within a stipulated period of 7 days, provided such document in no way alters the Bidder's price bid. If the Bidder fails to submit such documents within the stipulated date, his bid shall be evaluated on its own merit.

D. SUBMISSION OF BIDS

17 SECURITY OF BID SUBMISSION:

- 17.1 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.
- 17.2 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.

18 DEADLINE FOR SUBMISSION OF THE BIDS:

- 18.1 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 a holiday for the Officer inviting the Bid.
- 18.2 The officer inviting the bid may extend the deadline for submission of bids by issuing an amendment in accordance with Sub-Clause 9.3, in which case, all rights and obligations of the officer inviting the bid & Engineer-in-Charge and the bidders previously subject to the original deadline will then be subject to the new deadline.

19 LATE BIDS:

19.1 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.

20 MODIFICATION AND WITHDRAWAL OF BIDS:

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

E. OPENING AND EVALUATION

21 OPENING OF THE BID:

- 21.1 Bid opening dates are specified during tender creation or can be extended through issuance of corrigendum. These dates are available in IFB, tender document as well as the home page of portal. Bid opening can be done by the authorized users which are defined during the tender publication / approval stage. The bids are encrypted using their public keys and can be decrypted only on or after the Bid Opening due date. The bid openers private key will be required to open the bids and all the openers have to log on to the portal during that time.
 - 21.1.1 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.
 - 21.1.2 Each activity is date and time stamped with user details. For time stamping, server time is taken as the reference.
- 21.2 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.
- 21.3 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".
- During bid opening, the covers containing original demand draft towards Cost of bid in the form specified in the Invitation for Bid, received after last date of receipt of bid and before opening of the bids shall be opened and declared. The original copy of the Bid Security in the form, amount and period of validity in conformity with Clause-15 shall be checked and announced. The list of bidders who have submitted the original copy of the cost of Bid and Bid Security shall be prepared and announced.
 - 21.4.1 Combined bid security for more than one work is not acceptable. If the bid security furnished does not conform to the amount and validity period as specified in Clause-15 and has not been furnished in the form specified in Clause-15, the bid will be declared non-responsive and rejected.
- 21.5 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.
 - 21.5.1 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.
 - 21.5.2 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 in Part I pursuant to Clause-3.
 - 21.5.3 After receipt of confirmation of the bid security, the bidder will be asked in writing to clarify his technical bid, if necessary.
 - 21.5.4 The bidders will respond in not more than 7 days of issue of the clarification letter, which will also indicate the date, time and venue of opening of the Financial Bid.
 - 21.5.5 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 re-evaluation. Upon acceptance of technical evaluation by the Accepting authority in the system, the system shall automatically generate letter to all the responsive bidders and the system shall forward the letter to all the responsive bidder that their technical bid has been evaluated responsive with respect to the data / information furnished by him and the letter shall also intimate him the date & time of opening of financial bid. The system shall also inform the non-responsive bidders in their email Id that their bid has been found non-responsive.

- 21.6 The Technical evaluation of all the bids will be taken up as per the information furnished by the Bidders. If any of the information / statements / documents / certificates furnished by the bidder is found to be false / fabricated / bogus, his EMD / Bid Security shall stand forfeited and his registration in the portal shall be blocked and the bidder is liable to be blacklisted.
- 21.7 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.
 - 21.7.1 Opening of price bid and evaluation of lowest bidder is subject to satisfaction of other qualification information asked for in the bid pursuant to Clause-3.
 - 21.7.2 The Officer inviting Bid shall ensure that all the Bidders are individually intimated about the date, time & venue of opening of the financial bid along with the responsiveness of the Technical Bid.
 - 21.7.3 The Financial Bid will be opened on the notified date & time in the presence of bidders or their authorized representative who wish to be present.
 - 21.7.4 At the time of opening of "Financial Bid", the names of the bidders whose bids were found responsive in accordance with Sub-Clause 24.1 will be announced. The bids of only those bidders will be opened. The remaining bids will be rejected.
 - 21.7.5 The responsive bidders' names, the bid prices, the item wise rates the total amount of each item, any discounts and withdrawals, and such other details as the officer inviting the tender may consider appropriate, will be announced by him or his authorized representatives at the opening.
 - 21.7.6 Special conditions and / or rebate / discount offer if any uploaded to the system shall be declared and recorded first.
 - 21.7.7 The Financial bid of the bidders shall be opened one by one by the designated officers. The system shall auto-generate the Comparative statement.
 - 21.7.8 The Bidder can witness the principal activities and view the documents / summary reports for that particular work by logging on to the portal with his DSC from anywhere.

22 PROCESS TO BE CONFIDENTIAL:

22.1 Information relating to the examination, clarification, evaluation, and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process until the award to the successful bidder has been announced. Any effort by a bidder to influence the officer inviting the bid, processing of bids or award decisions may result in the rejection of his bid.

23 CLARIFICATION OF BIDS:

- 23.1 To assist in the examination, evaluation, and comparison of bids, the officer inviting the bid may, at his discretion, ask any bidder for clarification of his rates including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable or by e-mail, but no change in the bid price or substance of the bid shall be sought, offered.
- 23.2 Subject to Sub-Clause 23.1, no bidder shall contact the officer inviting the bid on any matter relating to his bid from the time of the opening to the time the contract is awarded. If the bidder wishes to bring additional information to the notice of the officer inviting the bid, it should do so in writing.

24 EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS:

- 24.1 During the detailed evaluation of "Technical Bids", the officer inviting the bid will determine whether each bid:-
 - 24.1.1 Whether the Bid security is confirmed by issuing institution / bank.
 - 24.1.2 Has submitted legible documents for evaluation
 - 24.1.3 Meets the eligibility criteria defined in Clause-3 and;
 - 24.1.4 Is substantially responsive to the requirements of the bidding documents.
- 24.2 During the detailed evaluation of the "Financial Bid", the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e. priced bill of quantities, technical specifications and drawings.
- 24.3 A substantially responsive "Financial Bids" is one, which conforms to all the terms, conditions, and specifications of the bidding documents, without material deviation or reservation. A material deviation or reservation is one
 - 24.3.1 Which affects in any substantial way the scope, quality, or performance of the works.
 - 24.3.2 Which limits in any substantial way, inconsistent with the bidding documents, the right of the officer inviting the bid or the bidder's obligations under the contract or
 - 24.3.3 Whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.
- 24.4 If a "Financial Bid" is not substantially responsive, it will be rejected by the officer inviting the bid, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.
- 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.

25 EVALUATION OF BIDS: DELETED

- 25.1 If the officer inviting the Bid in his opinion judges that the price quoted by the lowest qualified bidder is high or a special condition imposed by the bidder is to be withdrawn, the bidder shall be invited for negotiation by the officer inviting the Bid or by an officer authorised by him in writing. Negotiations of financial bid with only the lowest bidder shall be carried out, if necessary. Negotiation of bid will be carried out by manual way.
- 25.2 DELETED.
- 25.3 DELETED
- 25.4 DELETED.
- 25.5 DELETED.

F. AWARD OF CONTRACT

26 AWARD CRITERIA:

- 26.1 The officer inviting the bid will award the contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents and who has offered the lowest evaluated price.
- 26.2 On acceptance of the tender, the Contractor shall name in writing his accredited representative(s) who would be responsible for taking instructions from the Engineer-in-Charge.
- 26.3 Competent Authority on behalf of Governor of Odisha reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
- 26.4 The successful bidder registered under other State Government / MES / Railways / CPWD in equivalent rank has to register under State PWD before signing of the agreement.

27 OPTIONS IF THE BIDDER BACKS OUT FROM BIDDING PROCESS:

- 27.1 In case, the 1st lowest Bidder or even the next lowest Bidder withdraw in series one by one, thereby facilitating a particular Bidder for award, then they shall be penalized with adequate disincentives with forfeiture of EMD / Bid Security unless adequate justification for such back out is furnished. Appropriate action for blacklisting the bidder shall also be taken apart from dis-incentivising the bidder.
- 27.2 The bidding process shall be deemed to be complete till the date of issue of letter of acceptance. If the bidder fails to sign the agreement within the stipulated period mentioned under Clause-29.2, his bid security shall stand forfeited.

28 RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS:

- 28.1 The competent authority on behalf of the Governor of Odisha does not bind him to accept the lowest or any other tender and reserves to him the authority to reject any or all the tenders received without assigning any reason.
- 28.2 All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.

29 NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT:

- 29.1 Before acceptance of the tender, the successful bidder will be required to submit a work programme and milestone basing on the financial achievement so as to complete the work within the stipulated time and in case of failure on the part of the agency to achieve the milestone liquidated damages will be imposed.
- 29.2 In the E-Procurement Portal, the system shall generate the template of award letter and the Officer Inviting the Bid shall mention the amount of Performance Security and additional security required to be furnished in the letter and intimate the bidders in his e-mail Id. The issue of the letter of acceptance shall be treated as closure of the Bid process and commencement of the contract.
- 29.3 The bidder shall within 15 days of issue of letter of acceptance, furnish the Performance security & additional Performance security (if any) in the prescribed form

& shall sign the agreement in prescribed format, failing which the Engineer-in-Charge shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the Bid Security absolutely. The agreement will incorporate all agreements between the officer inviting the bid and the successful bidder.

If L_1 bidder does not turn up for agreement after finalization of the tender, then he shall be debarred form participation in bidding for three years and action will be taken to blacklist the Contractor. In that case, the L_2 bidder, if fulfils, other required criteria would be called for drawing agreement for execution of work subject to the condition that L_2 bidder negotiates at par with the rate quoted by the L_1 bidder otherwise the tender will be cancelled. In case a contractor is black listed, it will be widely published and intimated to all departments of Government and also to Govt. of India agencies working in the state.

- 29.3.1 Following documents shall form part of the agreement.
 - 29.3.1.1 The notice inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming the bid as issued at the time of invitation of bid and acceptance thereof together with any correspondence & documents leading thereto & required amount of performance security including additional performance security as per Sub-Clause 29.2 hereof.

29.3.1.2 Standard Bid Document P.W.D. Form P₁

- 29.4 The letter to proceed with the work shall be issued by Engineer-in-charge only after signing of the agreement. The notification of award will constitute the formation of the contract subject only to the furnishing of performance security and additional performance security in accordance with the provisions of the agreement.
- 29.5 On acceptance of the composite bids by the competent authority the letter of award will be issued by the Engineer-in-Charge of the major component of the work on behalf of the Governor of Odisha.
- 29.6 Upon signing of the agreement by the successful bidder, the Engineer-in-Charge will promptly notify the other bidders that their bids have been unsuccessful.

30 CORRUPT OR FRAUDULENT PRACTICES:

- 30.1 The Engineer-in-Charge will reject a proposal for award if he determines that the bidder recommended for award has been engaged in corrupt or fraudulent practices in competing for the contract in question. He will report to the Officer Inviting Bid / next higher authority.
- 30.2 Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.

DETAILED TENDER CALL NOTICE

- 1. Sealed percentage rate bids are invited in double cover system from the Class of eligible contractors registered with the State Government and contractors of equivalent Grade / class registered with Central Government / MES / Railways having registration for Civil, Electrical and P.H. works for execution of Civil / E.I. / P.H. works on production of definite proof from the appropriate authority in prescribed form to be eventually drawn in P.W.D. Form P₁ for the work: "Construction of Tea House, Mushroom House Gazebo at Hill top of Prempahad in Rayagada District.". Contractors not registered with Govt. of Odisha can participate in the e-procurement after necessary enrolment in the portal but have to subsequently register themselves with the appropriate registering authority of the State Govt. before award of the work as per prevalent registration norms of the state.
 - a) This tender is of composite nature and consisting of Civil, Electrical and PH works.
 - b) This detailed Tender Call Notice along with the clauses mentioned herein shall form a part of the contract and agreement.
- 2. The Bid documents are available on official website of Government: https://www.tendersorissa.gov.in from 28.09.2018 to 17.00 Hours of dt. 09.10.2018. The last date and time of submission of Bid is as per contract data.
- 3. The Technical Bid documents (Cover–I) will be opened by the assigned officer in the office of Executive / Superintending Engineer at 11.30 Hours on 10.10.2018 in the presence of the bidders or their authorized representatives who wish to attend. After evaluation of the documents contained in Cover-I, the Cover-II containing price bids of the technically responsive bidders will be opened. The date, time and place of opening the price bid will be intimated to the eligible qualified bidders through system generated E-mails.
- 4. The cost of Bid documents in shape of demand draft issued from any Nationalized / Scheduled bank may be prepared in the name of the Managing Director, Odisha Tourism Development Corporation Ltd. and payable at Bhubaneshwar for Rs.10,000/- & Rs.1200/- towards tender paper cost. The online bid must be accompanied with scanned copies of demand draft towards cost of tender paper.
- **5.** The bid is to be submitted in two covers.
 - i) Cover-I is to contain scanned copy of EMD, cost of bid document, registration certificate, PAN, profit-loss statement, Joint Venture agreement, list of similar nature of works, work in hand, affidavit, turn over certificate and all other documents required as per the relevant clauses of this DTCN. The contractor belonging to outside of state of Odisha and not started business should submit an undertaking in the form of an affidavit indicating therein that they are not registered under Odisha as they have not started any business in the state of Odisha and they have no liability in Odisha. But before award of final contract, such bidders will have to produce the relevant authentic document.
 - ii) Cover-II is to contain the PRICE BID duly filled in and signed by the bidder.
- 6. Furnishing scanned legible copy of original registration certificate, PAN card along with the Technical Bid is mandatory otherwise his / her bid shall be declared as non responsive and thus liable for rejection.
- **7.** Deleted.

- 8. The civil contractor in order to take part in the composite tender should enter in to an M.O.U. (Memorandum of Understanding) duly notarized with eligible registered electrical contractor having valid H.T. / L.T. license; for execution of electrical installation and other electrical works and a copy of such M.O.U. should be attached with the tender as per the proforma at Schedule-H which shall form a part of tender. A copy of electrical license should also be enclosed with the tender papers, the original of which need to be furnished during verification. The above M.O.U. is not required in case of the civil contractor having valid registration in H.T. / L.T. electrical license with the same name & style.
- **9.** (i) The contract will be drawn in P.W.D. P₁ contract form and will constitute 3 parts as follows:

a. Part – I : For Civil items of works

b. Part – II : For Electrical items of works

c. Part – III : For PH items of works

The contract shall be drawn & signed by Executive / Superintending Engineer on behalf of the Governor of Odisha.

- (ii) The Civil items of works as per Part-I of Schedule of quantities, Electrical items of works (both internal & external) as per part-II of Schedules of quantities and P.H. items of works (both internal & external) as per Part-III of the Scheduled of quantities of the Agreement shall be supervised measured and check measured by the Executive / Superintending Engineer or / and his sub-ordinate officials.
- 10. If an individual makes the application, the individual should sign (with DSC) above his full type written name and current address.
- 11. If the application is made by proprietary firm, it shall be signed (with DSC) by the proprietor & furnish full type written name and the full name of his firm with its current address in a forwarding letter.
- 12. If the application is made by a firm in partnership, it shall be signed (with DSC) by a partner holding power of attorney for the firm in which case a certified copy of the power of attorney shall accompany the application. A certified copy of the partnership deed and current address of all partners of the firm shall also accompany the application.
- 13. If the application is made by a limited company or a corporation, it shall be signed (with DSC) by a duly authorized person holding power of attorney for signing the application in which case a certified copy of the power of attorney shall accompany the application. Such limited company or corporation will be required to furnish satisfactory evidence of its existence along with the technical bid.
- 14. The tender should be strictly in accordance with the provisions as mentioned in the tender schedule. Any change in the wordings will not be accepted.
- 15. The work is to be completed in all respects within Four (4) calendar months from the date of issue of work order. Before acceptance of tender, the successful bidder will be required to submit a work programme and milestone basing on the financial achievement so as to complete the work within the stipulated time and in case of failure on the part of the agency to achieve the milestone liquidated damages will be imposed.

- 16. All tenders received during the scheduled period will remain valid for a period of 90 (ninety) 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 tender inviting officer.
- 17. The tenderer shall carefully study the tentative drawings and specifications applicable to the contract and all the documents, which will form a part of the agreement to be entered in to, by the accepted tenderer and detailed specifications for Odisha, and other relevant specifications and drawings, which are available. Complaint at a future date that the tenderers have not seen the relevant drawings / plans and specifications cannot be entertained.
- 18. The drawings basing on which the tender was invited are tentative and subject to revision or modification 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.
- 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, leads, 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, Odisha Tourism Development Corporation Ltd. / Government of Odisha 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.

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

- 20. The bid must be accompanied by bid security / EMD of the amount @ 1% (One percent) of the estimated cost put to tender. along with tender in the form of Fixed Deposit Receipt of Nationalized / Scheduled Bank / Kissan Vikash Patra / Post Office Savings Bank Account / National Savings Certificate / Postal Office Time Deposit Account duly pledged in favour of the Managing Director, Odisha Tourism Development Corporation Ltd., Bhubaneshwar and payable at Bhubaneshwar as per the terms and conditions laid down in OGFR and in no other form. Tenders not accompanied with E.M.D. as specified above will not be considered. No adjustment of E.M.D. from one work, to another will be entertained. Tenders not accompanied with scanned copy of E.M.D. as specified above shall be declared as non-responsive and thus liable for rejection. The bid security should remain valid minimum of 45(Forty-five) days beyond the bid validity period.
- 21. The tender should be accompanied with the scanned copies of the valid registration certificate, and PAN card which are mandatory, otherwise his / her bid shall be declared as non-responsive

and thus liable for rejection. The contractor belonging to outside state of Odisha and not started business should submit an undertaking in the form of an affidavit indicating therein that they are not registered under Odisha as they have not started any business in the state of Odisha and they have no liability in the state of Odisha. But before award of final contract, such bidders will have to produce the relevant authentic document.

- 22. The tender containing extraneous conditions not covered by the tender notice are liable for rejection and quotations should be strictly in accordance with the items mentioned in the Tender Call Notice. Any change in the wording will not be accepted.
- 23. The department reserves the right of authority to reject any or all tenders received without assigning any reason whatsoever.
- 24. The earnest money of the L₁ bidder will be retained and will be dealt with as per terms and condition of O.P.W.D. Code. The retention of E.M.D. with the Odisha Tourism Development Corporation Ltd. will carry no interest.
- 25. The Engineer-in-charge will notify the bidder / tenderer whose bid has been accepted for 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 Managing Director, Odisha Tourism Development Corporation Ltd., Bhubaneshwar & payable at Bhubaneshwar 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 of P₁ (Schedule XLV No. 61) for the fulfillment of the contract in the office of the Executive / Superintending Engineer and payable at Bhubaneshwar or as directed. The security deposit together with the earnest money and the amount withheld according to the provision of P₁ agreement shall be retained as security for the due fulfillment of this contract and additional performance security in accordance with the provisions of the agreement.

The agreement will incorporate all agreements between the officer inviting the bid / Engineer-in-Charge and the successful bidder within 15 days following the notification of award along with the Letter of Acceptance. The successful bidder will sign the agreement and deliver it to the Engineer-in-Charge. Following documents shall form part of the agreement:

- a) The notice inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming the bid as issued at the time of invitation of bid and acceptance thereof together with any correspondence leading thereto & required amount of performance security including additional performance security.
- b) Standard P.W.D. Form P₁ with latest amendments. Failure to enter in to the required agreement and to make the security deposit as above shall entail forfeiture of the Bid Security (earnest money). No contract (tender) shall be finally accepted until the

required amount of initial security money is deposited. The security will be refunded after 12 (Twelve) months of completion of the work and payment of the final bill and will not carry any interest. As concurred by Law Department & Finance Department In their U.O.R. No 848, dt.21.05.97 J.O.R.No.202 W.F.D. dtd.06.03.98 respectively the E.M.D. will be forfeited in case, where tenderers back out from the offer before acceptance of tender by the competent authority.

- 26. The contractor should be liable to fully indemnify the Odisha Tourism Development Corporation Ltd., Bhubaneshwar for payment of compensation under workmen compensation act. VIII of 1923 on account of the workmen employed by the contractor and full amount of compensation paid will be recovered from the contractor.
- 27. Tenderers are required to liable by fair wages clause as introduced by Govt. of Odisha, Works Department letter No.VII (R&B) 5225, dt.26.2.55 and No.II, M-56/61-28842 (5), dt.27.9.61.
- 28. The contractor shall bear cost of various incidentals, sundries and contingencies necessitated by work in full within the following or similar category:
 - a) Rent, royalties, cess and other charges of materials, and all other duties 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. Temporary work shed / labourer shed / stores shed etc. constructed by the contractor at work site 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 at his own cost.
 - d) Arrangement of suitable water supply including pipe water supply where available for the staff and labour as well as for the execution of the work is sole responsibility of the Contractor and no extra cost for carriage of water will be entertained.
 - e) All fees and dues levied by Municipal, Canal or Water Supply Authorities are to be borne by the Contractor.
 - f) Suitable safety equipments and dresses, gloves, life belts etc. for the labourers engaged in risky operations are to be supplied by the contractor at his own cost.
 - g) Suitable fencing barriers, signals including paraffin and electric signals where necessary at work and approaches in order to protect the public, labourers and employees from accident has to be provided by the Contractor at his own cost.
 - h) Compensation including cost of any legal suit for injury to persons or property arising out of execution of the work and also any sum, which may become payable due to operation of the Workmen Compensation Act, shall have to be borne by the contractor.
 - i) The contractor has to arrange adequate lighting arrangements for the work wherever necessary at his own cost.

- 29. No payment will be made for layout, benchmark, level pillars, profiles and benching and leveling the ground required, which has to be carried out by the contractor at his own cost. The rates to be quoted should be for finished items of work inclusive of carriage of all materials and all incidental items of work.
- **30.** After the work is finished all surplus materials should be removed from the site of work. Preliminary work such as vats, mixing platforms, etc. should be dismantled and all materials removed from the site and premises left neat and this should be included in the rates. No extra payment will be made to the Contractor on this account.
- 31. It should be understood clearly that no claim whatsoever 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.
- 32. The tenderers shall have to abide by the C.P.W.D. safety code rules introduced by the Govt.of India, Ministry of Works and Housing & Supply in their standing order No.44150, dt.25.11.57.
- 33. No part of the contract shall be sublet without written permission of the concerned Executive / Superintending Engineer. Also, no part of the contract shall be transferred to others by any power of attorney authorizing them to receive payment on contractor's behalf.
- 34. Bid documents consisting of plans / drawings, specifications, schedule of quantities and the set of terms and conditions of contract and other necessary documents can be seen in all the offices issuing the documents and office of the undersigned during office hours, every day except on Second Saturdays, Sundays and Public Holidays till last date of sale and receipt of tender papers. Interested bidders may obtain further information at the same address. But it must be clearly understood that tenders must be received in order and according to instructions in complete shape. Incomplete tender is liable for rejection.

35. No Relation certificate.

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

36. Payment for variation in price

Contract price shall be adjusted for increase or decrease in rates and price of Labour, Cement, Steel, Bitumen, Pipes, POL & other material component in accordance with the following principles and procedures as per formula Vide Works Department Memorandum No-12606/W dt.24.12.2012 as given below:

36.(a)(i) Reimbursement / Recovery due to variation in price of materials other than (steel, cement, bitumen, pipes & P.O.L.).

If during the progress of the work the price of any materials (Excluding the cost of steel, cement, bitumen & P.O.L.) incorporated in the work (not being materials supplied from the Engineer-in-Charge's store) in accordance with clause thereof increases or decreases as a result of increase or decrease in the average wholesale price Index (all commodities), and the contractor there upon necessarily and properly pays in respect of that materials incorporated in

the work such increased or decreased price, then he shall be entitled to reimbursement or liable to refund, quarterly as the case may be, such an amount, as shall be equivalent to the plus or minus difference of 85% in between the Average Wholesale price Index (all commodities) which is operating for the quarter under consideration and that operated for the quarter in which the bid was received (last date of receipt) as per the formula indicated below provided that the work has been carried out within the stipulated time or extension thereof as are not attributable to him. If penalty is levied for delayed completion of the work, the contactor shall not be eligible to get price escalation on the above materials on the value of works executed during the extended period.

This clause will be applicable to the contracts where original stipulated period of completion is more than 18 months.

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

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

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

- Vm = 0.85 x Pm / 100 x R x (Mi Mo) / Mo
- Vm = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates of materials other than cement, steel, bitumen, pipes and POL.
- R = Value of work done during the quarter under consideration excluding the work executed under extra items if any at prevailing schedule of rate / derived rates.
- Mo = The all India wholesale price index (all commodities) prevailed during the quarter of last date of receipt of bids (as published by the Economic Adviser to Govt. of India, Ministry of Industry and Commerce, New Delhi).
- Mi = The all India wholesale price index (all commodities) for the quarter under consideration as published by Economic Adviser, Govt. of India Ministry of Industry and Commerce, New Delhi. In respect of the justified period extended for completion of the work, the index prevailing at the time of stipulated date of completion or the prevailing index of the period under consideration, whichever is less, shall be considered.
- Pm = Percentage of material component (other than cement, steel, bitumen, pipes and POL) of the work, as indicated in clause-31 (d) below.

36. (a)(ii) Reimbursement / Recovery of differental cost due to variation in prices of Principal materials (steel, cement, bitumen, pipes) Not issued by department, after submission of tender:

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

eligible to get price variation on the above materials on the value of works executed during the extended period.

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

- 1) Contractors have to submit the vouchers showing procurement of different materials from authorized dealers for the said work.
- 2) Differential cost will be allowed only for the works which are progressed as per the approved work programme / revised work programme duly approved by the Engineer in charge.
 - Recovery in case of decrease in prices of cement, steel, bitumen and pipes shall be made by the Superintending Engineer from the Contractor immediately.
 - The increase / decrease in prices of cement, steel, Bitumen and Pipes for reimbursement / recovery shall be determined as follows:

a) Adjustment towards differential cost of cement

- Vc = (Ci Co)/Co x Actual quantity of cement utilized in the work during the quarter under consideration x base price of cement as prevailing on the last stipulated date of receipt of tender including extension, if any.
- Vc = Differential cost of cement i.e. amount of increase or decrease in rupees to be paid or recovered.
- Ci = All India wholesale price index for cement for the quarter under consideration as published by Economic Adviser, Govt. of India, Ministry of Industry and Commerce, New Delhi.
- Co = All India wholesale price index (as published by Economic Adviser, Govt. of India, Ministry of Industry and Commerce, New Delhi) for cement as prevailing on the last stipulated date of receipt of tender.

b) Adjustment towards differential cost of Steel

- Vs = (Si So) x Actual quantity of steel utilized in the work during the quarter under consideration.
- Vs = Differential cost of steel i.e. amount of increase or decrease in rupees to be paid or recovered.
- Si = Cost of the steel as prevailed during the period under consideration as fixed by Steel Authority of India.
- So = Base price of Steel prevailing as on the last date of submission of tender including extension, if any.

c) Adjustment towards differential cost of Bitumen

- Vb = (Bi − Bo) x Actual quantity of bitumen utilized in the work during the quarter under consideration.
- Vb = Different cost of Bitumen i.e. amount of increase or decrease in rupees to be paid or recovered.
- Bi = Average cost of Bitumen prevailed during the period under consideration as fixed by IOCL / BPCL / HPCL.
- Bo = Base price of bitumen as prevailing on the last stipulated date of receipt of tender including extension, if any.

d) Adjustment towards differential cost of Pipes.

- V = 0.85 x Pp / 100 x R x (Pi Po) / Po
- Vp = Differential cost of pipe i.e. amount of increase or decrease in rupees to be paid or recovered during the quarter under consideration.
- Pp = Percentage of pipe component of the work as indicated in the clause-31(d).
- R = Value of work done during the quarter under consideration excluding the value of work executed under extra items, if any, at prevailing schedule of rates or derived rate.
- Pi = All India Whole sale price index for the period under consideration as published by Economic Advisor, Govt. of India, Ministry of Industry and Commerce, New Delhi, for the type of pipe under consideration.
- Po = All India Wholesale price index (as published by Economic Advisor, Govt. of India, Ministry of Industry and Commerce, New Delhi) as on the last stipulated date of receipt of tender including extension, if any for the type of pipe under consideration.

36. (b) Reimbursement / Refund due to statutory rise in cost of minimum wages by government:

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

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

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

- V1 = 0.85 x Pl / 100 x R x (Li Lo) / Lo
- VI = increase or decrease in the cost of work during the quarter under consideration due to changes in rates of minimum wages.
- R = Value of work done during the quarter under consideration excluding the work executed under extra items if any at prevailing schedule of rate / derived rates.
- Lo = The minimum wages for labour as notified by State Government, as prevailing on the last stipulated date of receipt of tender including extension, if any.
- Li = The minimum wages for labour as notified by the State Government & as prevailed on the last date of the quarter previous to the one under consideration. In respect of the justified period

extended, the minimum wage prevailing on the last date of quarter previous to the quarter pertaining to stipulated date of Completion or the minimum wage prevailing on the last date of the quarter previous to the one under consideration, whichever is less, shall be considered.)

Pl = Percentage of labour component of the work, as indicated in the clause 31 (d)

36.(c) Reimbursement / refund due to variation in prices of P.O.L.:

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

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

- $Vf = 0.85 \times Pf / 100 \times R \times (Fi Fo) / Fo$
- Vf = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for P.O.L.
- Pf = Percentage of P.O.L. component of the work, as indicated in the clause 31 (d) below.
- R = Value of work done during the quarter under consideration excluding the work executed under extra items if any at prevailing schedule of rate / derived rates.
- Fi = All India Wholesale price index for Fuel, Oil and Lubricant (High Speed Diesel) for the quarter under consideration as published by Economic Adviser, Govt. of India, Ministry of Industry And Commerce, New Delhi. In respect of the justified period extended, the rates prevailing at the time of stipulated date of completion or the prevailing rates of the period under consideration, whichever is less, shall be considered.
- Fo = All India Whole sale price index for Fuel, Oil and Lubricant (High Speed Diesel) as prevailing on the last stipulated date of receipt of tender including extension, if any.
 - **36.(d)** The following percentages will govern the price adjustment for the entire contract for different types of works as applicable given in the following table :

Percentage Table

			% Component (cost wise)			
Sl. No.	Са	tegory of works	Labour (P ₁)	POL (P _f)	Steel + Cement + Bitumen + Other Materials *	
1.	R&B works	Road works	5	5	90	
	(% of	Koau works				
	component)	Bridge works	25	5	70	
		Building works	25	-	75	

2.	Irrigation	Structural work	20	5	75
	works (% of component)	Earth, Canal & Embankment work	25	10	65
3.	P.H. Work				
		Structural work	25	5	70
		Pipeline works	5	-	Pipe – 70% *Other material – 25%
		Sewer Line	10	-	Pipe – 70% *Other material – 20%

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

36.(e) Application of escalation clause:

- i) The contractor shall for the purpose of availing reimbursement / refund of differential cost of steel, bitumen, cement, pipe, POL and wages, keep such books of account and other documents as are necessary to show that the amount of increase claimed or reduction available and shall allow inspection of the same by a duly authorized representative of Government and further, shall at the request of the Engineer-in-charge, furnish documents to be verified in such a manner as the Engineer-in-charge may require any document and information kept. The contactor shall within a reasonable time of 15 days of his becoming aware of any alteration in the price of such material, wages of labour and / or price of P.O.L. give notice thereof to the Engineer-in-charge stating that the same is given pursuant to this condition along with information relating thereto which he may be in a position to supply.
- ii) The compensation for escalation shall be worked out at quarterly intervals and shall be with respect to the cost of work done as per bills during the three calendar months on the said quarter. The first payment shall be made at the end of three months after the month (excluding the month in which tender was accepted) and thereafter at three months interval. At the time of completion of the work, the last period for payment might become less than 3 months, depending on the actual date of completion.
- 37. If any advance / Secured advance is granted by the Odisha Tourism Development Corporation Ltd., Bhubaneshwar, the same will bear interest at the rate of 18% P.A.
- 38. All items of work as per schedule of quantities of this tender should confirm to Odisha Detailed Standard Specification. I.R.C. & B.I.S. Codes & Bridge code section I,II,III,IV&VII & latest design criteria for pre-stressed concrete bridge specially for Roads & Bridges issued by MoRT&H., Government of India, Compacting shall have to be carried out with help of mechanical vibrators from the range of I.S.:2505, I.S.:2006, I.S.:2514. I.S.:4656.
- 39. Centering & Shuttering shall be with suitable steel shutters in side of which shall be lined with suitable sheeting and made leak proof and watertight. All joints in formwork shall be properly sealed preferably with P.V.C. joints sealing tapes & compounds.
- **40.** Form work including complete false work shall be designed by the Contractor without any extra cost to employer and the Engineer-in-Charge and his sub-ordinates 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 properly due to failure of centering and shuttering shall be the responsibility of the Contractor regarding compensation of all claims thereof.

- 41. Cement shall be used by bags and weight of one bag of Cement should be 50 (fifty) Kg. net & the Engineer-in-Charge or his representative shall have the right to test the weight & quality from time to time.
- 42. The tenderers shall make all arrangements for proper storage of materials but no cost for raising shed for store and pay of security guard etc. will be borne by the Odisha Tourism Development Corporation Ltd., Bhubaneshwar. The Odisha Tourism Development Corporation Ltd., Bhubaneshwar is not responsible for any theft or loss of materials at site. It is contractor's risk. Under any such plea, if the tenderer stops the work he shall have to pay the full penalty as per clauses of the contract.
- 43. Approach road to site of work for transport of materials to site of work is sole responsibility of the Contractor. Statutory traffic restriction in the town area for transport of construction material to site of work is to be taken in to consideration before tendering and no consideration for extra time or compensation thereof shall be considered.
- 44. The contractor should at his own cost arrange necessary tools and plants required for efficient execution of work and the rates quoted should be inclusive of transportation, hire and running charges of such plant and cost of consumables.
- **45.** The contractor shall properly co-ordinate with the execution of P.H. and Electrical works and take care of the safety of workers.

46. DELETED

- 47. No claim whatsoever will be entertained for supply of machineries. No extension of time will be granted to the contractor under this ground under any circumstances.
- 48. The tenderer should furnish along with their tender a list of works executed during the last five years duly certified by the concerned Engineer-in-charge indicating the satisfactory completion for Civil, P.H. & Electrical works as per the proforma enclosed in a separate sheet of Schedule-C.
- 49. The tenderer or any of its constituent partners of whose contract for any work has been rescinded or who has abandoned any work in the last five years prior to the date of Bid shall be debarred from qualification. The tenderer is to furnish an affidavit at the time of submission of tender paper about the authentication of tender documents. An affidavit to this effect is to be furnished in Schedule-E and information in Schedule-D.

50. It should be clearly understood that :

- a) The joints of the bars are to be provided with lapping, welds or nuts & bolts as well as directed by the Engineer-in-charge.
- b) Concrete test specimens 150 mm × 150 mm × 150 mm 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 Junior Engineer. The contractor shall bear the cost so involved in testing. The tests of specimen in cube should be carried out in

- the Government Laboratory at Cuttack or Bhubaneshwar or any other Government approved material testing laboratory.
- 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.
- 51. The rates quoted should be inclusive of carriage of water required in connection with execution of the work. No claim for carriage of water whatsoever will be entertained.
- 52. The contractor shall employ one or more Engineering Graduate or Diploma holders as apprentice at his cost if the work as shown in the tender exceeds Rs. 2,50,000.00. The apprentices may be selected by the Managing Director, Odisha Tourism Development Corporation Ltd., Bhubaneshwar. 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 Superintending Engineer in the manner so that the total expenditure does not exceed one percent of the tendered cost of the work.
- 53. List of tool & plants in running condition in possession of contractor is to be furnished in a separate sheet.
- 54. It is the responsibility of the contractor to procure and store explosive required for blasting operation. Odisha Tourism Development Corporation Ltd., Bhubaneshwar may render necessary possible help for procuring license.
- 55. For submission of a tender for the work, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the work about the quality and availability of the required quantity of materials, medical aid, labour and food stuff etc. and that the rates quoted by him in the tender will be adequate to complete the work according to the specifications attached thereto and that he had taken in to account all conditions and difficulties that may be encountered during its progress and to have quoted labour rates and materials with taxes, octoroi and other duties leads, 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, Odisha Tourism Development Corporation Ltd., Bhubaneshwar / Government of Odisha will not pay any extra charges for any reason in case the contractor finds later on to have misjudged the conditions as regards the availability of materials, labour and other factors. The contractor will be responsible for any misuse, loss or damages due to any reasons whatsoever of any departmental material during the execution of work. In case of loss, damage or misuse, recovery at the rate at 5 times the cost of the materials will be deducted from the bills or his other dues.
- **56.** The prevailing percentage of I.T. Department of the gross amount of the bill towards Income Tax will be deducted from the contractor's bill.
- **57.** DELETED

- 58. 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.
- **59.** No extra payment will be made for removing, spreading and consolidating salvaged metals and materials.
- **60.** Under section 12 of contractors labour (Regulation and Abolition) Act. 1970 the contractor who undertakes execution of work through labour should produce valid license from licensing authorities of Labour Department of Government of Odisha.

61. Performance Security:

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

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

61.2 Additional performance security shall be obtained from the bidder when the bid amount is less than the estimated cost put to tender. In such an event, the bidders who have quoted less bid price / rates than the estimated cost put to tender shall have to furnish the exact amount of differential cost i.e. estimated cost put to tender minus the quoted amount as Additional Performance Security in shape of Demand draft / Term Deposit Receipt of Schedule Bank / Nationalized Bank pledged in favour of the Managing Director, Odisha Tourism Development Corporation Ltd., Bhubaneshwar and payable at Bhubaneshwar in the sealed envelope along with the price bid at the time of submission of bids. The additional performance security in any other from will not be accepted. If the Contractor fails to complete the work, the amount so furnished as additional performance security will be forfeited in addition to the other penal clauses, if any, to be imposed.

The bid of the technically qualified bidders will be opened for evaluation of the price bid. In case of the bidders quoting less bid price / rate than the estimated cost put to tender and have not furnished the exact amount of differential cost (i.e. estimated cost put to tender minus the quoted amount) as additional Performance Security in shape of Demand draft / term deposit receipt, their price bid will not be taken in to consideration for evaluation even if they have qualified in the technical bid evaluation.

(Amendment to Para-3.5.5 (V) Note-II of OPWD Code Vol.-I by modification).

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 / Superintending 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 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. The required certificate is to be furnished in the tender documents vide Schedule-F.

- **64.** 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 Executive / Superintending Engineer / Managing Director and above.
- 65. All reinforced cement work should confirm to Odisha Detailed Standard Specification and should be of proportion as per Contract having desired compressive strength (in work test) in 15 Cm. cubes at 28 days, after mixing and test conducted in accordance with IS 456 and IS 516.
- Bailing out of water from the foundation, pipeline trenches, Septic Tanks / Soak pits / Sumps / Man Holes etc. either rainwater or sub-soil water if necessary should be borne by the contractor. No payment will be made for benchmarks, level pillars, profiles and benching and leveling the ground wherever required. The rates quoted should be for finished items of works inclusive of these incidental items of work. It should be understood clearly that no claims whatsoever would be entertained.
- 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 dated 25.11.57.
- 68. The Contractor will have to submit to the Executive / Superintending Engineer 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 B.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 Inspector.
- 71. The tenderer should furnish along with their tender
 - a) A list of works, which are at present in their hand (Schedule-B)
 - b) List of work executed (Schedule-C) in the prescribed proforma(s) enclosed herewith in appropriate place of bid document.
- 72. 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, Chajjas, fins, parapets, shelves etc. shall not be paid.
- 73. 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.

- 74. The contractor has to arrange the samples of materials required for execution to be got tested and approved by the Engineer-in-Charge 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 Government Quality Control and Research Laboratories / Government approved material testing laboratories at the cost of the Contractor with no extra cost to the Odisha Tourism Development Corporation Ltd., Bhubaneshwar.
- 75. 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 12 (twelve) months after completion of work or if any imperfection becomes apparent to the work within 12 (twelve) 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 Odisha Tourism Development Corporation Ltd., Bhubaneshwar. No claims, whatsoever, in this regard will be entertained.
- 76. The K. B. Bricks should be well burnt and of good qualities. Similarly, Fly Ash Bricks should also be of good qualities. These 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.
- 77. 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 of Government of Odisha.
- 78. 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.
- 79. 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 which the tender was submitted must be mentioned in the affidavit, failing which the tender will be rejected.
- 80. 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.

81. 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 B.I.S. specifications of the materials and the said items of works and the cost of all such tests shall have to be borne by the Contractor and the rates of the items of works should be inclusive of cost of such tests.
- (II) The tests have to be planned & carried out such that the progress of work is not hampered.

- (III) The tests are mandatory as per the prescribed frequencies and B.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.
- 82. 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.
- 83. It must be definitely understood that the Odisha Tourism Development Corporation Ltd., Bhubaneshwar does not accept any responsibility for the correctness and completeness of the trial borings shown in the Cross Section.
- 84. 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.
- 85. In case of any complaint by the labourer working, about the non-payment or less payment of his wages as per latest minimum Wages Act, the Executive / Superintending Engineer will have the right to investigate and if the contractor is found to be in default, he may recover such amount due from the contractor and pay such amount to the labourer directly under intimation to the local labour office of the Govt. of Odisha. The contractor shall not employ child labour. The decision of the Executive / Superintending Engineer is final and binding on the contractor.
- **86.** 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.
- 87. 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 whatsoever and the cost of such materials will be recovered from the bills at market rates.
- **88.** DELETED
- 89. 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 Odisha Tourism Development Corporation Ltd., Bhubaneshwar. The Odisha Tourism Development Corporation Ltd., Bhubaneshwar is not responsible for considering the theft of materials at site. It is the contractor's risk. under any such plea if the tenderer stops the work, he shall have to pay the full penalty as per clause of P₁ agreement.
- **90.** DELETED
- **91.** DELETED
- **92.** DELETED
- **93.** DELETED
- 94. 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.

95. 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 / Superintending Engineer with their bills, falling which the amount towards royalties of different materials as utilized by them in the work will be recovered from their bills and deposited in the revenue of concerned department.

96. Trial Boring

The foundation level as indicated in the body of the departmental drawing is purely tentative and for the general guidance only. The Odisha Tourism Development Corporation Ltd., Bhubaneshwar 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 and shall take in to account of the above aspects.

- 97. 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-in-Charge for reasons to be recorded in writing shall be decided that they ought to be paid for and in case of default Odisha Tourism Development Corporation Ltd., Bhubaneshwar 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.
- 98. 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 Odisha Tourism Development Corporation Ltd., Bhubaneshwar / 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.
- 99. Gradation of ingredients: The coarse and fine aggregate shall meet the grade requirement as per the latest provision of relevant B.I.S. Code / I.R.C. Code / MoRT&H specifications.
- 100. Where it will be found necessary by the Odisha Tourism Development Corporation Ltd., Bhubaneshwar, the Officer-in-Charge of the work shall issue a Site Order Book to the contractor to be kept at the site of the work with pages serially numbered. Orders regarding the work whenever necessary are to be entered in this book by the Odisha Tourism Development Corporation Ltd., Bhubaneshwar 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 Odisha Tourism Development Corporation Ltd., Bhubaneshwar and shall not be removed from the site of work without

- written permission of the Executive / Superintending Engineer and to be submitted to the Engineer-in-Charge every month.
- 101. The contractor should attach the certificate in token of payment deposit with the registration authority as per recent circular of the Government relating to his registration.
- 102. 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.
- 103. 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.
- **104.** 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.
- 105. The contractor shall make requisition of claim book from the date of commencement of the work from the Odisha Tourism Development Corporation Ltd., Bhubaneshwar and shall maintain in proper P.W.D. form with pages serially numbered in order to record items of works are not covered by his contract and claimable as extra. Claims shall be entered regularly in this book under the dated signature of the contractor or his duly authorized agents at the end of each month. A certificate should be furnished along with the claim to the effect that he has no other claim beyond this claim up-to-date. If in any month there are no claims to record, a certificate to that effect should be furnished by the contractor in the claim book. Each claim must be defined and should be given as for as possible regarding the quantities as well as the total amount claimed. The claim book must be submitted by the contractor regularly by 10th and 16th days of each month for orders of the Engineer-in-Charge or competent authority. Claims not made in this manner or the claim book not maintained from the commencement of the work is liable to be summarily rejected. The claim book is the property of the Odisha Tourism Development Corporation Ltd., Bhubaneshwar 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 Odisha Tourism Development Corporation Ltd., Bhubaneshwar whichever is earlier for record.
- 106. Number of tests as specified in I.R.C. / MoRT&H / B.I.S. specification required for the construction of roads / bridges / buildings or any other structural works will be conducted in any Govt. Test House /Departmental laboratories/reputed Govt. approved material testing laboratory as to be decided by the Engineer-in-charge. Testing charges including expenditure for collection / transportation of samples / specimens etc. will be borne by the contractor. The collection of samples and testing are to be conducted for both prior to execution and during execution as may be directed by the Engineer-in-charge and on both the accounts the cost shall be borne by the contractor.
- **107.** Even qualified criteria are met, the bidders can be disqualified for the following reasons, if enquired by the Odisha Tourism Development Corporation Ltd., Bhubaneshwar:
 - (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.

- 108. 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.
- **109.** 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

110. DELETED

111. ELIGIBILITY CRITERIA:

To be eligible for qualification, bidders / tenderers shall furnish the followings particulars and non-furnishing of which shall be treated as ineligible:

- a. Scanned copy of required E.M.D as per the Clause No. 5 (i) and Clause No. 20 of DTCN.
- b. Scanned copy of demand draft towards cost of tender paper as per Clause No.4 and 5(i) of DTCN.
- c. After the due date & time of receipt of bid is over, the original Bid security and Demand draft towards cost of Bid documents shall be submitted in the office of the Executive Engineer, Building Project Division No. III, Odisha Tourism Development Corporation Ltd., Bhubaneshwar during office hours on working days on or before date & time of opening of Bid as specified at Column 04 & 05 above, and as per date mentioned in Contract Data failing which the bid will be rejected.
- d. Scanned copy of valid Registration Certificate, PAN card along with the tender documents and the originals of all scanned documents & GST clearance certificate of the successful lowest bidder only are to be produced within 5(five) days after opening of 'Price Bid' (Cover-II) of the tender in the office of the Executive / Superintending Engineer otherwise his / her bid shall be declared as non-responsive and he / she will be debarred in future from participating in tender for 3(three) years and will be blacklisted by the competent authority. In such a situation, successful L₂ bidder will be required to produce his original documents for consideration of his / her tender at the negotiated rate equal to L₁ bidder. The contractor belonging to outside State of Odisha and not started business should submit an undertaking in the form of an affidavit indicating therein that they are not registered under Odisha as they have not started any business in the state. But before award of final contract, such bidders will have to produce the relevant authentic document.
- e. License criteria as per Clause No.8 of DTCN and Schedule-H need to be furnished.
- f. Joint Ventures are not accepted.
- g. Bidder / Firm should furnish list of similar works executed during last five years stating the Agreement No., date of commencement, stipulated date of completion and actual date of completion duly certified by the respective employer. The applicant should have completed at least one work of similar nature of worth 40% of the value of work put to tender in last five years. The certificate to that effect has to be obtained from an officer not below the rank of Executive Engineer concerned with the work under report.
- h. Bidder / Firm should have annual financial turnover of not less than 40% of the value of work put to tender in any one year in civil construction works during last five years and the turn over need to be certified by a registered Chartered Accountant.
- i. Scanned copy for information regarding current litigation, debarring / expelling of the applicant or abandonment of work by the applicant in schedule "D" and scanned copy of affidavit to that effect including authentication of tender documents in schedule "E" & furnish the original affidavit in Schedule-E within 5 (five) working days of opening of Cover-II as per clause 49.
- j. No Relationship Certificate in Schedule A
- k. List of projects under execution as per Schedule-B
- L. List of projects executed that are similar in nature to the work as per Schedule-C

112. Time Control

- a) Progress of work and Re-scheduling programme:
 - i) Before acceptance of the tender, the successful bidder will be required to submit a work programme and milestone basing on the financial achievement so as to complete the work within the stipulated time and in case of failure on the part of the agency to achieve the milestone liquidated damages will be imposed.
 - ii) The Superintending Engineer / Engineer-in-Charge shall issue the letter of acceptance to the successful contractor. The issue of the letter of acceptance shall be treated as closure of the Bid process and commencement of the contract.
 - iii)To ensure good progress during the execution of the work, the contractor shall be bound in all cases in which the time allowed for any work exceeds one month to complete, $1/4^{th}$ of the whole of the work before $1/4^{th}$ of the whole time allowed under the contract has elapsed, $\frac{1}{2}$ of the whole of the work before $\frac{1}{2}$ of the whole time allowed under the contract has elapsed, $\frac{3}{4^{th}}$ of the whole of the work before $\frac{3}{4^{th}}$ of the whole time allowed under the contract has elapsed.
 - iv) If at any point of time during contract period, it would 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 work programme showing the modifications to such programme necessary to ensure completion of the works within the time for completion. If the contractor does not submit an updated Programme within this period, the Engineer-in-Charge may withhold the amount of 1% of the contract value from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
 - v) An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
 - vi) The Engineer-in-Charge's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer-in-Charge again at any time. A revised Programme is to show the effect of Variations and Compensation Events.

b) Extension of the Completion Date

- i) The time allowed for execution of the works as specified in the Contract data shall be the essence of the Contract. The execution of the works shall commence from the 15th day or such time period as mentioned in Letter of Award after the date on which the Engineer-in-Charge issues written orders to commence the work or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Engineer-in-Charge shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money & performance guarantee / Security deposit absolutely.
- ii) The Contractor shall submit the Time & Progress Chart for each milestone Quarter wise indicating each month and get it approved by the Engineer-in-Charge. The Chart shall be

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

- iii) In case of delay occurred due to any of the reasons mentioned below, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.
 - (1) Force majeure, or
 - (2) Abnormally bad weather, or
 - (3) Serious loss or damage by fire, or
 - (4) Civil commotion, local commotion of workmen, strike or lockout affecting any of the trades employed on the work, or.
 - (5) Delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract.
 - (6) In case a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost, or
 - (7) Any other cause, which, in the absolute discretion of the authority mentioned, in Contract data is beyond the Contractors control.
- iv)Request for reschedule and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen (14) days of the happening of the event causing delay. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- v) In any such case, a fair and reasonable extension of time for completion of work may be given. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. Non-application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the contractor.

c) Compensation for Delay.

If the contractor fails to maintain the required progress in terms of Clause-2 of P₁ 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 Odisha Tourism Development Corporatio Ltd. on account of such breach, pay as agreed compensation the amount calculated at the rates

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

d) Bonus for early completion

For availing incentive clause in any project which is completed before the stipulated date of completion, subject to other stipulations, it is mandatory on the part of the concerned Executive / Superintending Engineer to report the actual date of completion of the project as soon as possible through fax or e-mail so that the report is received within 7 days of such completion by the Superintending Engineer / Managing Director, Odisha Tourism Development Corporation Ltd. & the Tourism Department, Government of Odisha. The incentive for timely completion should be on a graduated scale of one percent to 5 (Five) percent of the contract value. Assessment of incentives may be worked out of earlier completion of work in all respect in the following scale:

Before 30 % of contract period = 5 % of Contract Value Before 20 to 30 % of contract period = 4 % of Contract Value Before 10 to 20 % of contract period = 3 % of Contract Value Before 5 to 10 % of contract period = 2 % of Contract Value Before 5% of contract period = 1 % of Contract Value

e) Management Meetings

i) Either the Engineer-in-Charge 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-in-Charge shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Managing Director, Odisha Tourism Development Corporation Ltd. The responsibility of the parties for actions to be taken to be decided by the Engineer-in-Charge either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

f) Rescission of Contract

To rescind the contract (of which rescission notice in writing to the contractor under the hand of the Executive / Superintending Engineer shall be conclusive evidence), 20% of the value of left over work will be realized from the contractor as penalty.

- 113. 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.
- **114.** The tenderers are required to go through each clause of P.W.D. Form P₁ carefully in addition to the clauses mentioned here in before tendering.
- 115. 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, Government of Odisha.

As per said amendment a Contractor may be blacklisted for-

- a) Misbehavior / threatening of inspecting & supervisory engineers / officers of Odisha Tourism Development Corporation Ltd. 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.
- 116. The safety certificate of the E.I. work will be furnished by the agencies after getting necessary verification from the Electrical Inspector / equally Competent Authority responsible for the work prior to energisation of the building.

117. Percentage rate contract

In case of percentage rate tender:-

- i) The Contractor has to mention percentage excess or less over the estimated cost (In figures as well as words) in the prescribed format appended to the tender document.
- ii) Contractors participated in the tender for more than one work may offer conditional rebate. Rebate offer submitted in separate sealed envelope shall be opened, declared and recorded first. The rebate so offered shall be considered after opening of all packages called in the same Tender Notice. The Contractors who wish to tender for two or more works shall submit separate tender for each. Each tender shall have the Bid

- Identification No., Name & Sl. No. of the work (as per IFB) to which they refer, written on the envelope.
- iii) Only percentage quoted shall be considered. Percentage quoted by the Contractor should be accurately filled-in figures and words, so that there is no discrepancy.
 - (1) If any discrepancy is found in the percentage quoted in words and figures, then the percentage quoted by the Contractor in words shall be taken as correct.
 - (2) If any discrepancy is found in the percentage quoted in percentage excess / less and the total amount quoted by the Contractor, then percentage will be taken as correct.
 - (3) The percentage quoted in the tender without mentioning excess or less and not supported with the corresponding amount will be treated as excess.
 - (4) The percentage quoted in the tender without mentioning excess / less supported with corresponding amount does not tally with either to percentage excess or less then it will be treated as percentage excess.
 - (5) The percentage quoted in the tender without mentioning excess / less supported with corresponding amount if tallied with the percentage then it will be treated as to which side the amount tallies.
 - (6) The Contractor will write percentage excess / less up to two decimal points only.
 - (7) The tender shall be written legibly and free from erasures, over writings or corrections of figures. Corrections, over writings & interpolations where unavoidable should be made by making out, initialing, dating and rewriting.
- iv) In the P₁ contract time is the essence. The contractor is required to maintain a certain rate of progress specified in the contract.
- v) The quantity mentioned can be increased or reduced to the extent of 10% for individual 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 mount of the bill.

118. Special clauses to SC / ST Contractors.

- i) The Contractor / agency having ST / SC licence who has already availed price preference once in last two years will not be eligible for availing such facility in this tender.
- ii) The Contractor / agency having ST / SC licence who is willing to avail price preference, need to furnish an undertaking that he / she / they has / have not availed such facility in last two years. In case of supression of fact, the bid security / EMD will be forefieted.
- iii) The Contractor / Agency who has applied for availing price preference and subsequently decline to come down to execute the work on the price of lowest bidder as per prevailing codal provision, shall not be eligible to get back his / her / their bid security / EMD as it will be forfeited and Competent Authority will be moved to block the DSC.

(Total 118 Clauses)

APPROVED

Superintending Engineer,

Odisha Tourism Development Corporation Ltd., Bhubaneshwar.

TECHNICAL SPECIFICATION OF CIVIL PORTION OF WORK

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

1.	Cement	Will be as per I.S. 269/255 (However the grade of cement to be selected by the Engineer-in-Charge of work and compressive cube test before commencement of work in each batch).
2.	Steel	Will be as per I.S. 1786 (HYSD) from SAIL / RINL / TATA / JINDAL STEEL / SHYAM STEEL
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 (galvanised minimum 1 mm)
8.	Rain water pipe	I.S. 2527
9.	Construction joints	I.S. 3414
10.	Steel Window Frame	I.S. 1038/83
11.	Steel Door Frame	I.S. 4351/75
12	UPVC Window Frame	
12.	Fitting & Fixtures for joinery works	Conforming to I.S. 7452/82 strictly conform to I.S. specification and as per direction of Engineer-in-Charge.

Note: For road work (Approach Road) specification as per road and bridges (latest edition) published by I.R.C & M.O.R.T.&H. shall be followed. In case of any doubt and absence of provision, regarding specification B.I.S. specifications 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. Cement Concrete 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. Vitrified Tile 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 SPECIFICATIONS OF P.H. PORTION OF WORK

A) WATER SUPPLY & SANITARY INSTALLATIONS:

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

(a) Sanitary fixtures:

To be of best quality vitreous ware of porcelain.

Sl. No.	Description of item	Make
(i)	Indian water closet	
(ii)	Foot Rests	
(iii)	Wash Hand Basin	
(iv)	Kitchen Sink	 Hindware/Parry Ware / <mark>Jaquar/</mark>
(v)	Urinals	ISI marked
(vi)	Drain Board	
(vii)	Odisha Closet	
(viii)	European Water Closet	
(ix)	Low Level Flushing Cistern	

(b) C.I. High Level Flushing Cisterns: Sushila Industries Prabhat Iron Foundry/

East India Steel / I.S.I. marked.

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

I.S.I.Mark.

(d) C.P. Bath Room Fittings: Plaza / Jaquar I.S.I. marked &

confirming to-latest ISI

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

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

(j) Cast Iron Manhole cover frame: Sushila Industries / Prabhat Iron Foundry /

East India Steel make confirming to IS 7.26

(k) Stone Ware Pipes & Fittings: Manufactured by Odisha Ceramic Industries

/ Odisha industries / Keshab Ceramic confirming to I.S.S. Specification No.651 /

1980 (Grade A)

(l) P.V.C. (S.W.R.) & P.V.C (Rigid.)

Pipe/Fittings:

Manufactured by the Supreme Industries

Ltd., Bombay / Oriplast, Baleshwar / Duroplast

confirming to I.S. Specification No. 4985/81

(Class IV)

(B) BUILDING MATERIALS:

(a) Bricks:

Fly Ash Bricks shall be of locally available of best quality. It shall be free from cracks and flows, 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.

(e) Coarse Aggregates:

The course aggregate shall be of black, hard, crusher broken, granite stone and shall generally confirm to I.S. 389. Porous course aggregates 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:

All Reinforcement Steel and structural steel shall be procured and used as per specifications mentioned in BIS's documents- IS:1786 and IS:2062 respectively. Independent tests shall be conducted, wherever required, to ensure that the materials procured conform to the specifications.

These steel shall be procured only from those firms, which are established, reliable, Indigenous & primary producers of steel, having Integrated Steel Plants (ISP), using iron ore as the basic raw material as per Ministry of Steel's guidelines. No re-rolled steel shall be permitted in works. All other specifications and guidelines of MORTH shall be complied.

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

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

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

The 32mm dia Flush Pipe shall be connected to the Water Closet by means of approved type joint. The Flush Pipe shall be fixed to wall by using C.I. Holder Bat Clamps. The bend and the Offset as required in the Flush pipe shall be made cold. The inside of the Cistern shall be painted with two coats of approved black bitumen paint. The Outer face of the Cistern, Brackets Overflow pipe and Flush Pipe etc., shall be painted with two coats of any synthetic enamel paint of approved shade and make, over a coat of priming. The cost of the rate quoted for the flushing cistern. The inlet connection to the Cistern shall be made with 450 mm 1 cm 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 Bottle trap 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 of proportion (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 32 mm 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 450 mm Long 15 mm 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 of approved quality, make and brand, confirming to B.I.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 15 mm dia C.P. brass, long body Bib Cock, 40 mm 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 of proportion (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 40 mm dia P.V.C. pipe jointed to the waste of the Sink with a Brass union nut.

6. Standing Urinals:

The Standing 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 Standing Urinal shall be connected to a 40 mm dia P.V.C. Waste Pipe, which shall discharge into a channel of floor trap. The lip of Standing Urinals shall be kept at 525 mm from floor level, while fixing the same on wall.

Where number of Standing Urinals are fixed in a line, the distance between the centre to centre of each Standing Urinal shall be kept 750 mm. and each Urinal should be separated from one to other by a partition plate. The centre to centre of partition plates shall be kept 750 mm 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 350 mm above floor level and top should be kept at 1250 mm above floor level. The plates should project 600 mm from wall surface. The width of the plates to be embedded inside the wall should not be less than 100 mm. The thickness of the plates shall be minimum 25 mm.

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

pipe one 20 mm dia gun-metal Gate valve, the water will flow to therminal of Standing 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 Squatting Urinal Plates shall be of White Glazed Vitreous China with integral flushing rim of size 450 mm X 350 mm 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. of proportion (1:2:4) at 75 mm to 100 mm above floor level.

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

Where there are number of Squatting 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 750 mm.

The partition plates shall be of one-piece marble plate of 25 mm 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 Squatting urinal top level and the top level of partition plate shall be kept at 1200 mm from the Squatting urinal plate top and the projection from the wall shall be 600 mm. The width of the plate to be embedded inside the wall should not be less than 100 mm.

(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 B.I.S. 3989-1970 and ISI marked with approved clamps are to be used. The pipes and fittings shall be free from cracks, laps, pinholes, and other imperfection and carefully cited. The access door fittings shall be designed and made so as to avoid dead space in which filth may accumulate and door shall be provided with 3mm thick rubber insertion packing when closed and bolted.

WEIGHT OF HCI PIPES

2.	Dia of Pipe in mm	Thickness in mm	Length of pipe & width piece		
			1.8mtr. D/s	1.8mtr.	
	50 mm	5 mm	16.00 Kg.	15.00 Kg.	
	75 mm	5 mm.	13.83 Kg.	16.52 Kg.	
	100 mm	8 mm	24.00 Kg.	22.00 Kg.	
	150 mm	8 mm Tolerance 10%	26.70 Kg.	31.82 Kg.	

- 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):

(same for lead & cement joint)

Dia of pipe in mm.	Gasket in Kg.	Lead in Kg.	Cement in Kg.
100	1.20 Kg.	0.13 Kg.	0.12 Kg.
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 small. Smoke shall be pumped to the drains from the lower end from a smoke machine, which consists of lower, and burner.

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

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

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

a) Materials – Un-plasticized Poly Vinyl-Chloride (UPVC).

b) Colour - Grey

c) Dimensions -

(i) Diameter of pipes fittings - 63mm / 75mm / 110mm

(ii) Pipes - 75mm, 110mm, on lengths of 3.or 6 mtr.

d) Wall thickness - Fittings - Minimum 3.2 mm at any port.

Pipes - As per application

For Rainwater - 75mm-1.8. to 2.2.mm, 110 mm-2.5. to 3 mm

Waste & Soil - 75mm -1.8 to 2.2mm, 110 mm -2.5 to 3 mm,

Underground drainage with

light / NIL Traffics - 110 mm - 2.5 to 3 mm Light / Nil in Heavy traffic - 110 mm - 3.7 to 4.3 mm

e) Standard Confirming to Attributes Confirms to Standard No.

i) Fittings & Wall Thickness - B.S.4514, DIN 10531

- DIN 19534 I.S.7834 - PVC (Rigid)

ii) Pipe Wall thickness - IS 4905iii) 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 approx. 10 mm 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 pines. In vertical lines the clips are to be spaced at intervals of one meter to a maximum of two meters according to pipe diameter.

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

Clean the Outside of the pipes and inside of the socket of a fitting of the inside of the couplers (where 2 plain ended pipes are jointed) of. Apply solvent cement solution, evenly and smoothly on the outer surface of the pipe end and inside surface of either the coupler of the socket and pass the

pipe end into the socket of the fittings. Up to full depth of socket. In case of jointing 2 plain-ended pipes 1st. push the coupler up to half depth on the end of one pipe and the outer half of the coupler should be pushed to the end of other pipe and thus, both pipes are jointed.

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

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

5. Anti-syphonage Pipes

All the anti-syphonage pipes and fittings to be used are of 63 mm. If these are not available under the items or P.V.C. (S.W.R.) materials, 63 mm 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 50 mm as per I.S. 5329 and IS 2556 (Part XIII). Where antisyphonage connection is required, the traps to be supplied and used should have a 50 mm antisyphonage gent horn on the outlet side. All the Traps used with the closets, should be of the size 125 mm X 110 mm i.e. Inlet (Socket end) of 125 mm & outlet (spirit end) of 110 mm 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 125rnm socket of the trap.

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

63 mm (O.D.) P.V.C. Pipes to be used for these work either in antisyphonage 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 63 mm elbow, 63 mm equal Tees 110 mm x 63 mm 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.

Before fixing and painting, the pipe shall be tested hydraulically to pressure Q.4 Kg/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 B.I.S. and bearing ISI Marks manufactured by reputed Firms and approved brands as specified. The pipes shall confirm to LS.1239 (Part-1) -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 450 mm 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
15 mm to 50 mm	300 mm	600 mm
65 mm to 100mm	450 mm	750 mm

The pipes shall be laid on a layer of 75 mm 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 of proportion (1:2:4) in black, hard, crusher broken 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	2 m	2.50 m	2.50 m	2.50 m	3 m	3 m
Vertical line	2.5 m	3 m	3 m	3 m	3.5 m	3.5 m

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 of proportion (1:2:4) and properly finished with Cement Plaster of proportion (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.l. 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/Cm^2 . The test pressure should maintain without loss of for at least half an hour.

6. Painting

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

7. Measurement

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

8. Ball Valve

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

Every high pressure ball valve when assemble in working condition, with the float immersed to not more than half its volume shall remain closed against a test pressure of $10.5~\text{Kg/Cm}^2$ and a low pressure ball valve against a test pressure of $5.3~\text{Kg/Cm}^2$.

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

13. Bibcock & Stopcock

These shall confirm to I.S.781-1967 and bear ISI Mark. The bibcock is a draw off tap with a horizontal inlet and free outlet and stopcock is a valve with a suitable means of connection for Insertion in a pipeline for controlling or stopping the flow. This shall be of screw down type. 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 600 mm 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 0.75 mm elsewhere. The width of the trench shall be the nominal diameter of the pipe plus 350 m. 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 200 mm 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 label shall be done after dewatering the trenches.

After the excavation of the trench is completed, foundation of cement concrete of proportion (1:4:8) in hard granite metal (size 40 mm) 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 and of the pipes shall face stream. Adequate care shall be exercised in setting out and determining the level of the pipes and the contractor shall provide suitable instruments, templates, sight rails, boning rods and other equipments necessary for the purpose. In the case of pipes with joints to be made with loose collars, the collars shall be slipped on before the next pipe is laid. In those joints, a tight ring of twisted tarred jute soaked in cement mortar filling to ensure proper alignment and prevent. Cement entering the pipes, Cement compound joints is to be finished with proportion (1:1) with 45* beveling. The joints are to be kept wet with wet bag until the same are properly set with. The cement mortar joints shall be cured at least for 7 (Seven) days.

In the case of S.W. Pipe joints (socket & spigot), they should be caulked first with tarred jute (Spun) of required diameter, almost quarter depth of the socket, after which cement mortar of proportion (1:1) is pushed in with wooden chisel and finishing beveled at outside at 45 degree. Instead of jute of hump rubber gasket of proper size may also be used. The whole joint must be cured for not less than three days. In case of pipes less than 250 m 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 of proportion (1:3:6) with washed gravel where the pipes are crossing the drain or all round concrete of proportion (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 and of the line. Maximum head of 5 (five) fact (1.5m) must be maintained.

4. Excavation and refilling.

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

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

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

5. Buried Services

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

6. Trench condition:

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

7. Inspection Chambers/Manholes

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

All manhole and inspection chamber shall have internal dimension as shown in drawing and BoQ. The depth of invert shall be fixed to the gradient. The foundation for Manhole shall be 175 mm thick & with cement concrete of proportion (1:3:6) in granite metal of 40 mm size. The concrete shall project 150 mm 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 250 mm thick up to 1200 mm depth from Ground Level and beyond that the wall thickness shall be maintained 375 mm. The inside surface of the walls of the chamber, shall be finished with cement plaster of proportion (1:3) and outside with cement pointing of proportion (1:3). In addition to this, the inside surface should also be provided with cement punning.

On the top of base concrete channeling on C.C. of proportion (1:2:4) using 12 mm size black, hard, crusher broken granite chips and to be done keeping the diameter equal to the diameter of drain pipe and depth equal to half of the diameter of pipe. The channel, should be done longitudinally at the centre, connecting both the ends of the pipe. The channel is to be hunched up with concrete of proportion (1:2:4) using 12 mm size black, hard, crusher broken granite chips 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 100 mm to 150 mm according to the requirement at site. One C.I. Manhole cover of diameter and weight as stipulated in the tender schedule shall be fixed, on the cover slab. Unless otherwise mentioned the C.I. Cover and Frames and shall confirm to I.S. 1726/1960. Heavy duty covers etc., under heavy vehicular traffic condition and capable of bearing wheel loads up to 11.25 MT, 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. Manhole covers of 50 cm diameter and 100 mm thickness shall be fitted in line of C.I. Manhole cover if stipulated in the bill of quantity of the tender schedule.

8. Gully Trap Chamber

The size of chamber for 100 mm HCI yard gully shall be of 250 mm X 250 mm (Inside). Foundation with 100 mm thick cement concrete of proportion (1:3:6) with hard granite metal of size 40 mm from outer surface of wall and Brick work in cement mortar of proportion (1:4), 125 mm thick, depth up to 600 mm maximum. The finishing of masonry wall both inside and outside should be done in cement mortar of proportion (1:4) with neat cement punning should be provided on the inner surface the trap should be buried in cement concrete of proportion (1:2:4) using 12 mm size black, hard, crusher broken granite chips up to the mouth and one hinged C.I. Grating of size 300 mm x 300 mm are to be fixed on the top of mouth of Gully trap to arrest rubbishes shall be provided. The foundation should project 75 mm from outer.

9. Kota / Marble Stone flooring

The Kota / Marble stones shall be of thickness specified but not less than 20 mm and of uniform with edges absolutely square & straight. They shall be laid in Cement Mortar of proportion (1:4) over masonry or concrete base. The sides of the stones shall be arranged to butt against each other truly so as to came the joints practically invisible and certainly not more than 0.8 mm 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 5 mm to 6 mm with edges absolutely straight & surface accurately plain. They shall be fixed in 6 mm. thick cement mortar of proportion (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 granted 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.
- 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 Competent Authorities of Odisha Tourism Development Corporation Ltd., Bhubaneshwar 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. In case the materials as per make specified are not available, the materials of equivalent make and as per B.I.S. Specifications or of best quality when not covered by B.I.S. Specifications can be utilized on prior approval of Engineer-in-charge or the officers duly authorized.

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 n these drawings are only for the guidance of the supplier and the actual position of these shall be mutually decided between the supplier and the purchaser. The supplier shall submit the purchaser of his consideration and approval all runs of wiring and the exact position of all the points and the switch boxes first marked on the points buildings.

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

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

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

- a) Switch and ceiling rose are required
- b) In case of wall brackets, bulk head fittings, cables as required up to the lamp holders]
- c) Bushed conduit for porcelain tubing where cables pass through walls.
- d) All wood or metal blocks, boards and boxes, R.J. Boxes sunks or surface type including those required for fan regulator but excluding those under the distribution board and main control switch.
- e) Earth wire from 3 pin socket point to the common earth including connection to the earth dolley.
- f) Earth wire of 16 SWG / 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 I case of surface wiring system. For recessed wiring system, these boxes shall be made flush with the conduit of each conduit or section shall be completed before conductors are drawn in. The entire system of conduit after installation shall be tested or mechanical strength and electrical continuity throughout the earthing of the entire installation shall be carried out in accordance with I.E. Rules and standards. The number of wires drawn in the conduits shall not exceed the numbers those specified in Indian standard specification No.732.

Main and Sub distribution Boards:

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

installation. The scope of this specification includes installation of the panel boards and distribution boards and making necessary connections. The installation of the boards shall be done strictly in accordance with the details supplied with the specifications; the instructions supplied by the switchgear manufacturer, Indian standard specifications and H.E. rules. The supplier shall submit the details of installations to the purchaser for his consideration and approval, prior to installation.

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

Earthing

Earthing shall generally be carried out in accordance with the requirements of Indian Eletricity 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 o non-current carrying metallic parts of all the equipment, light fittings, conduit pipes, cable and cable supports and earth strips (the design to be approved by the purchaser) and all the inter connection between the earthing system to a value mutually agreed upon\beta 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 he 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 he directive of the Government Electrical Inspector / Local Authorities, he same will have to be carried out by the supplier, at his own expense.

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

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

Installation and Maintenance Tools:

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

Drawings:

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

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

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

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

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

On completion of work, the successful tenderer shall supply one set of tracing in transparent linen and five sets of prints of all drawings incorporating all the changes / modifications affected

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

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

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

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

Exception to Specifications:

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

PVC insulated Cables and Wires:

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

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

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

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

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

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

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

Two bolted type earthing terminals shall be provided on the switch boards. All individual switches shall be connected with suitable size earth wire to the main earthing terminals of the switchboard. Hanger Board and shock treatment / charts shall be supplied wherever required. At the incoming side of each pen phase, 3-neon type indicating lamps should be provided at the main board.

Switches and Plug Sockets

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

Ceiling Fans and Exhaust Fans:

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

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

Fluorescent Fittings:

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

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

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

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

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

Incandescent Fittings:

The incandescent fittings shall be supplied strictly as per the details given in the enclosed annexure and bill of quantities, deviation if any regarding design, construction of materials should be specified clearly. All the metal parts used in construction of the fittings shall have no effect due to dust / fumes / gases likely to exist in the atmosphere. All the bolts, clamps, nuts and guard wire etc shall be galvanized. The wall fittings shall be provided with necessary hooks / clamps / supports etc for fixing the light fittings on wall / ceiling etc as detailed in the bill of quantities and the working drawings. Light fittings shall be suitable for connection with 19mm dia. Conduit pipe as required. If fittings are to be connected through PVC cables, glands of adequate size and capacity shall be provided. The lamp holders provided in the fittings shall confirm to IS:1528.

CODES

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

- a) Indian Boiler Act, 1923 and Rules and Regulations made their 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
- 1) A.S.M.E. Test Codes
- m) AIRE Test, Codes
- n) American Society of Materials Testing Codes
- o) Other internationally approved standards and / or Rules and Regulations touching the subject matter of the contract

p) Standards of the Bureau of Indian Standards

1	Low Tension Circuit Breakers	:	IS 2516-1955 Part I Sec.1
2	Switchgear Bus Bars	:	IS 375-1963
3	HRC fuse links	:	IS 2208-1962
4	Distribution fuse boards	:	IS 2675-1966
5	Enclosure for Low Voltage switchgear	:	IS 214701962
6	PVC Cables	:	IS 1554-1975
7	Tabular fluorescent lamps for Cameral lighting service	:	IS 2418-1963
8	Tungsten Filament Lamps for cameral service	:	IS 415-1963
9	Ceiling Fans	:	IS274-1966
10	Flood lights	:	IS1947-1961
11	Wall Glass flame-proof electric light fittings	:	IS 2206-1962 (Part 1)
12	Water Tight Electric Light Fittings	:	IS 3553-1956
13	Steel Boxes for Enclosure of Electrical Accessories	:	IS 5133-1969
14	Fittings for Rigid Steel conduit	:	IS 2667-1979
15	Rigid steel circuits for electrical wiring	:	IS 3837-1966
16	Accessories for Rigid Steel Conduits for Electrical Wiring	:	IS 3837-1966
17	Switch Socket Outlets	:	IS 3837-1966
18	PVC Wiring	:	IS 694-1977
19	Switches for domestic and similar purpose	:	IS3854-1966
20	PVC wiring	:	IS694-1977
21	Call Bell and Buzzers	:	IS2268-1966
22	Straight through joint boxes and leads sleeves or paper insulated cables	:	EID-0032-1964
23	Earthing	:	IS3043-1966
24	Electrical Wiring installations	:	IS732-1963
25	Switchgear	:	IS3072-1965 (Part I)
26	Lighting protection	:	IS2309 –1969
27	Public Address system	:	IS1882-1962
28	Low Tension switch use units	:	IS4064-1978
29	Code of Practice for Automatic FIRE ALAM system	:	IS2189-1970
30	Specification for Heat Sensitive Fire Detectors	:	IS2175-1977
31	Guide for Safety procedure in Electric work	:	IS5216-1969
32	Rubber Mats for Electric works	:	IS5424-1969
		_	

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 Tourism Department of Government of Odisha of the rank of Under Secretary and above / Odisha Tourism Development Corporation Ltd., Bhubaneshwar of the rank of Assistant Engineer & above. I/We* am/are* aware that, if the facts subsequently proved to be false, my/our* contract will be rescinded with forfeiture of E.M.D and security deposit and I/We* shall be liable to make good the loss or damage resulting from such cancellation.

(*) - Strike out which is not applicable	
	Signature of the Tenderer Date:-

SCHEDULE - B

EXISTING COMMITMENTS AND ON-GOING WORKS:

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

*	The above	information	is to be c	ertified by	the En	gineer in	Charge /	Employer r	not below	the rank
o	of Executive	e Engineer or	r equivale	nt.						

Signature	0	t '	th	ıe	Ľ	eı	10	d	e	r	e	r
Date			٠.									

WORK EXPERIENCE LIST OF SIMILAR NATURE OF PROJECTS EXECUTED

Name of	Name of	Contract	Major	Date of	Stipulated	Actual	Reasons
Employer	location	price in	Items	starting the	date of	date of	for delay in
	and	Indian	of	work as per	completion	completi	starting/
	name of	Rupees/	works	Agreement	of the work	on of the	completion
	work	Agreement			as per	work	if any
		no.			Agreement		
1	2	3	4	5	6	7	8

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

Signature of the Tenderer Date.

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

- 1. a) Is the tenderer currently involved ${\rm Yes\,/\,No}$ in any litigation relating to the works.
 - 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.
 - 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 - E

AFFIDAVIT

- The undersigned do hereby certify that all the statements made in the required attachments are true and correct.
 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:

CERTIFICATE OF EMPLOYMENT OF UNEMPLOYED GRADUATE $\underline{ \text{ENGINEER} \, / \, \text{DIPLOMA HOLDERS} }$

(For Super Class / Special Class / 'A' Class Contractors only)

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

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

Signature of the Tenderer. Date:-

RELATIONSHIP DECLARATION

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	To,	The Tender Inviting Officer,
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	Subject	:: (Name of the Work)
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	Referen	nce : (Bid reference number)
(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	Sir,	Pursuant to clause 2 of the ITB, it is to inform that I have relative(s) employed as an Officer
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	in the	rank of an Assistant Engineer/Under Secretary under the Department. His
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	(Their)	details are as follows.
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		Relationship:
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		Name:
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		Designation
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		Office
working under my firm having near relatives to any gazetted officer in the rank of an Assistant		Address
		Pursuant to clause 2 of the ITB, I am to submit herewith the names of persons who are
Engineer/Under Secretary in the Department.	workin	g under my firm having near relatives to any gazetted officer in the rank of an Assistant
	Engine	er/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
			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

AND Second Party I Sri/Smt, Aged years,	S/O-
Second Party I Sri/Smt Aged years	
having H.T. / L.T. license registration No valid upto	iu rart)
AND Whereas the First Party of 1st part is the managing partner of	
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 instruEngineer-in-Charge.3) That, the First Party shall receive payment, signing the bill the document for the co	
work. 4) That, the Second Party shall abide the rules, regulations and specification of E.I. w	
above said matter. In witness where of Both the party have signed in presence of	
Witness W1 -	
W2 -	