

### West Bengal State Electricity Distribution Company Limited

### (A Government of West Bengal Enterprise)

### **Bhangar Division**

Ghatakpukur, Bhangar, 24 Parganas(S),

Registered Office: "Vidyut Bhavan", Block – DJ, Sector – II, Bidhannagar, Kolkata – 700 091 Telephones: 033 2359 1930 to 1940; Fax: 033 2359 1954; Website: www.wbsedcl.in

Corporate Identity Number (CIN): U40109WB2007SGC113473

### NOTICE INVITING e-TENDER

NIT No.: BHND/E-TENDER/2025-26/607 Dated: 28.07.2025

The SE & Divisional Manager, Bhangar Divisional Office, WBSEDCL invites e-tender for the works detailed below (Submission of Bid through online).

S1. No.	Name of Work	Name of Work Estimated Amount		Completion Time
		Rs. 5,66,974.89		
1	Augmentation of 01 NO. 6.3 MVA PTR to 10 MVA PTR installed at KLC-II 33/11KV substation under Bhangar Division.	(Rupees Five Lakhs	Rs. 11339.00	
		sixty six thousand	(Rupees eleven	60 (Sixty)
		nine hundred and	Thousand three	days
		seventy four rupees	hundred and thirty	uays
		and eighty nine paisa	nine only)	
		only)	•	

- 1. Intending bidders desirous of participating in the tender are to log on to the website https://wbtenders.gov.in for the tender. The tender can be searched by typing WBSEDCL in the search engine provided in the website. Further details of the Tender Notice may be had from the following office: Office of the Divisional Manager,BHANGAR DIVISION, Ghatakpukur, Bhangar, 24 Parganas(S), P.O.: B.Gobindapur, Pin: 743502.
- 1. Bidders willing to take part in the process of e-tendering are required to obtain Digital Signature Certificate (DSC) in the name of person who will sign the tender, from any authorized Certifying Authority (CA) under CCA, Govt of India (viz. nCode Solution, Safescrypt, e-Mudhra). DSC is given as a USB e-Token. After obtaining the Digital Signature Certificate (DSC) from the approved Certifying Authority they are required to register the fact of possessing the Digital Signature Certificates through the registration system available in the website.
- 2. Tender cost/Tender Fee is abolished as per O.O. No.- 1994 dated 19.05.2021 of the Director(HR), WBSEDCL. All participating bidders are therefore exempted from payment of Tender Fee.
- 3. Earnest Money Deposit as tabulated above for respective work shall be submitted through online mode through e-Tender portal (https://wbtenders.gov.in). All offline instruments like Bank draft, Pay Order etc. will be stopped for e-tender procurement. In case of unsuccessful/rejected bids, the EMD shall be refunded directly from the e-Tendering portal. However, for successful bids, the EMD will be refunded by WBSEDCL as per norms. Further details in respect of online payment as well as refund of EMD are provided within the EMD clause. This is in accordance to the O.O. No.- 1994 Dated: 19.05.2021 and O.O. No.- 1997 Dated: 14.06.2021 of the Director (HR), WBSEDCL. The bidder shall submit along with the offer necessary documents in support of credential (related to the tender) to WBSEDCL/Other Power Utilities/Other Govt. Departments in earlier occasions towards financial capabilities to the extent of the estimated financial capacity of the tenderer. All bids in the range of -20% to -80% of the estimated rate shall furnish an additional performance security in the format given in the annexure which shall be equal to 10% of the tendered amount before the issuance of the work order in the form of a Bank Guarantee from any scheduled bank.
- 4. Both **Technical Bid** and **Financial Bid** are to be submitted concurrently duly digitally signed by the Bidder through the website <a href="https://wbtenders.gov.in">https://wbtenders.gov.in</a>. (Details of which has been narrated in Instruction to Bidders') as per Schedule stated in Sl. No. 10.



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### 5. Eligibility criteria for participation in tender:

1. i) 2.1. TECHNICAL ELIGIBILITY CRITERIA OF THE BIDDER:

Part I: Electrical Work:

All categories of intending Bidders must have experience for the electrical work related to 33 KV/11 KV voltage class or higher voltage class Sub-Station in last 3(Three) years under the authority of State/Central Government, State/Central Government undertaking, Electricity power Utility Statutory Bodies constituted under the statute of Central/State Government.

AND

Part II: Civil Work:

All categories of intending Bidders must have experience for the civil work related to 33 KV/11 KV voltage class or higher voltage class Sub-Station in last 3(Three) years under the authority of State/Central Government, State/Central Government undertaking, Electricity power Utility Statutory Bodies constituted under the statute of Central/State Government.

### 2.2. FINANCIAL ELIGIBILITY CRITERIA OF THE BIDDER:

One similar completed works (Combined Electrical and Civil works / Individual Electrical or Civil works) not less than the amount equal to 50 % of the estimated cost in a single order under the authority of State/Central Government, State/Central Government undertaking, Electricity power Utility Statutory Bodies constituted under the statute of Central/State Government in last 3(Three) years.

Completion Certificate indicating Estimated Amount, Value of work-done, and Date of completion of the work and detail communicational address along with contact number of the Client should be submitted by the Bidder. Completion Certificate from the concerned Executive Engineer/District Engineer/Divisional Engineer or equivalent rank and above will be treated as valid credential. [Non-statutory Documents].

- ii) All categories of prospective Bidders shall have to furnish the following documents: -
- (a) EPF registration with current challan
  - (b) I.T Return for last three financial years & PAN Card.
  - (c) GST registration Certificate/current return & challan.
  - (d) Professional Tax Paid Certificate or current challan valid trade license (Civil Electrical).
  - (e) ESI Registration along with current return & challan.
  - (f) Valid Electrical Contractor's License.
  - (g) Valid Electrical Supervisory License.
  - (h) Performance as prime contractor for execution of similar nature of work for last seven years and details of works in hand
  - (i) Information regarding any past and current litigation with WBSEDCL/WBSETCL/Govt/PSU in which the bidder is involved the party's concerned and disputed amount.
- iii) Neither prospective Bidder nor any of the constituent partners had been debarred to participate in any Tender by any Government Department/Semi-Govt./Govt. Undertakings/ Enterprise/ Electricity power Utility Statutory Bodies etc. during the last 5 (five) years prior to the date of this NIT. Such debarring will be considered as disqualification towards eligibility. (A declaration in this respect has to be furnished by the prospective bidders). [Non-statutory Documents]
- iv)The prospective Bidders or any of their constituent partner shall neither have abandoned any work nor any of their contract have been rescinded during the last 5 (five) years. Such abandonment or rescission will be considered as disqualification towards eligibility. (A declaration in this respect has to be furnished by the prospective bidders). [Non-statutory Documents]
- 6. The **FINANCIAL OFFER** of the prospective bidder will be considered only if the **TECHNICAL BID** of the Bidder is found qualified by the WBSEDCL. The decision of the WBSEDCL will be final and absolute in this respect. The list of Qualified Bidders of Technical Bid will be displayed in the website.
- 7. No mobilization advance and secured advance will be allowed.
- 8. A prospective Bidder shall be allowed to participate in the tender either in the capacity of individual or as a partner of firm. If found to have applied severally in a single job, all his offers will be rejected for that job.



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9. Bid shall remain valid for a period not less than 180 (one hundred eighty) days from the last date of submission of Financial Bid / Sealed Bid. If the bidder modifies/withdraws the bid during the validity period of bid, the bid will be cancelled with forfeiture of earnest money deposit (EMD).

10. Date and Time Schedule:

Sl.No.	Particulars	Date & Time
1.	Date of uploading of N.I.T. & other Documents (online) (Publishing Date)	05.08.2025 at 11.00 hrs
2.	Documents download/sell start date (Online)	05.08.2025 from 12.00 hrs
3.	Bid submission start date (On line)	05.08.2025 from 14.00 hrs
4.	Documents download End Date(Online)	19.08.2025 upto 14:00 hrs
5.	Bid Submission closing date (Online)	19.08.2025 at 14:00 hrs
6.	Technical Bid opening date (Online)	22.08.2025 after 14:00 hrs
7.	Date of uploading list for Technically Qualified Bidder(Online)	To be intimated later
8.	Financial Bid opening Date (Online)	To be intimated later

- 9. The Bidder at the Bidders own responsibility and risk is encouraged to visit and examine the site of works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the work as mentioned in the Notice Inviting Tender. The costs of visiting the site shall be at the Bidders own expense.
- 10. The WBSEDCL reserves the right to accept or reject any offer without assigning any reason whatsoever and is not liable for any cost that might have been incurred by any Bidder at any stage of Bidding.
- 11. Prospective applicants are advised to note carefully the minimum qualification criteria as mentioned in "Instructions to Bidders" stated in Section "A" before tendering the bids.
- 12. Exemption from deposition of earnest money deposit (EMD) shall not be allowed under any circumstances.
- 13. Conditional / Incomplete tender will not be accepted under any circumstances.
- 14. The intending Bidders are required to quote the rate online.
- 15. During scrutiny, if it comes to the notice of the tender inviting authority that the credential or any other paper found incorrect / manufactured / fabricated, that bidder would not be allowed to participate in the tender and that application will be rejected without any prejudice.
- 16. Canvassing in connection with the tender is strictly prohibited in the Tender submitted by the Contractor.
- 17. The eligibility of a Bidder will be ascertained on the basis of the documents submitted by a Bidder in support of eligibility criteria. If any document submitted by a Bidder is either Incorrect / manufactured / fabricated or false at any stage, his Tender will be out rightly rejected and legal action will be taken against him.
- 18. The participating bidders may please note that the successful bidder shall have to submit an Indemnity Bond in the prescribed format before commencement of the work
- 19. The WBSEDCL does not bind itself to accept the lowest bidder and reserves the right to reject any or all tender(s) or to split the whole work to more than one contractor without assigning any reason whatsoever
- 20. The WBSEDCL reserves the right to cancel the N.I.T. due to unavoidable circumstances and no claim in this respect will be entertained.

Divisional Manager
Bhangar Division
WBSEDCL

## West Bengal State Electricity Distribution Company Limited INSTRUCTION TO BIDDERS

**SECTION - A** 

### 1. General guidance for e-Tendering:

Instructions/Guidelines for electronic submission of the tenders online have been annexed for assisting the contractors to participate in e-Tendering.

### 2. Registration of Contractor:

Any contractor willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement System of West Bengal, through logging onto <a href="http://www.wbtenders.gov.in">http://www.wbtenders.gov.in</a> (the web portal) the contractor is to click on the link for e-Tendering site as given on the web portal.

### 3. Digital Signature certificate (DSC):

Each contractor is required to obtain a Class-III or Class-III Digital Signature Certificate (DSC) for submission of tenders from the approved service provider of the National Informatics Centre (NIC) on payment of requisite amount. Details are available at the Web Site stated in Clause 2 above. DSC is given as a USB e-Token.

### 4. Downloading of Tender documents:

The contractor can search & download N.I.T. & Tender Document(s) electronically from computer once he logs on to the website mentioned in clause 2 using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

### 5. Participation in more than one work:

A prospective bidder shall be allowed to participate in the job either in the capacity of individual or as a partner of a firm. If found to have applied severally in a single job all his applications will be rejected for that job.

### 6. Submission of Tenders:

General process of submission: Tenders are to be submitted online to the website stated in Cl. 2 above, in two folders at a time, one in Technical Proposal & the other is Financial Proposal before the prescribed date & time using Digital Signature Certificate (DSC). The documents are to be uploaded in the form of virus scanned copy duly Digitally Signed. The uploaded Documents will get encrypted (transformed into non readable formats).

### A. Technical proposal

The Technical proposal should contain scanned copies of the following in three covers (folders).

- A-1. Statutory Cover Containing two covers (folders)-(a) NIT (b) Draft & (c) Annexures/forms.
- (a) NIT folder containing Downloaded and uploaded copies (Digitally Signed) of the following:
  - i NIT
  - ii. General conditions of contract and specification for works
  - iii. Additional Terms &condition if any

### (b) Annexures/Forms Folder containing

- i. Undertaking by the bidder (Annexure-I)
- ii. Letter of Bid for the work (Annexure-II)
- iii. Declaration by the bidder (Annexure-III).

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- (a) EPF registration with current challan
- (b) I.T Return for last three financial years & PAN Card
- (c) GST registration Certificate/current return & challan.
- (d) Professional Tax Paid Certificate or current challan & valid trade license (Civil & Electrical).
- (e) ESI Registration along with current return & challan.
- (f) Valid Electrical Contractor's License.
- (g) Valid Electrical Supervisory License.
- (h) Performance as prime contractor for execution of similar nature of work for last seven years and details of works in hand
- (i) Information regarding any past and current litigation with WBSEDCL/WBSETCL/Govt/PSU in which the bidder is involved the party's concerned and disputed amount.
- (j) Credential of Part I: Electrical Work: All categories of intending Bidders must have experience for the electrical work related to 33 KV/11 KV voltage class or higher voltage class Sub-Station in last 3(Three) years under the authority of State/Central Government, State/Central Government undertaking, Electricity power Utility Statutory Bodies constituted under the statute of Central/State Government.

  AND

Part II: Civil Work:

All categories of intending Bidders must have experience for the civil work related to 33 KV/11 KV voltage class or higher voltage class Sub-Station in last 3(Three) years under the authority of State/Central Government, State/Central Government undertaking, Electricity power Utility Statutory Bodies constituted under the statute of Central/State Government Scanned copy of work order and completion certificate, as stated in 5(i) of e-NIT.

FINANCIAL ELIGIBILITY CRITERIA OF THE BIDDER:

One similar completed works (Combined Electrical and Civil works / Individual Electrical or Civil works) not less than the amount equal to 50 % of the estimated cost in a single order under the authority of State/Central Government, State/Central Government undertaking, Electricity power Utility Statutory Bodies constituted under the statute of Central/State Government in last 3(Three) years.

**B. Financial Proposal (in one cover/folder):**It contains Bill of Quantities (BOQ). The rate to be quoted in the BOQ on "**percentage basis**" in the space marked for quoting rate (either excess, less or at par i.e, 0.00%). Quoted rate will be encrypted in the B.O.Q. under Financial Bid.

**Note:** -Failure of submission of any of the abovementioned documents (as stated in A1 and A2) will render the tender liable to summarily rejected for both statutory & non statutory cover.

## THE ABOVE STATED NON-STATUTORY/TECHNICAL DOCUMENTS SHOULD BE ARRANGE IN THE FOLLOWING MANNER

"Click" the check boxes beside the necessary documents in the My Document" list and then "click" the tab "Submit Non-Statutory Documents" to send the selected documents to Non-Statutory folder. Next Click the tab "Click to Encrypt and upload" and then click the "Technical" Folder to upload the Technical Documents (Statutory documents).

	1	Technical Total to apload the Technical Bodaments (Statutory documents).			
Category	Sub-Category	Details			
0 .					
Maine	Description				
Certificates	Certificates	(a) EPF registration with current challan			
		(b) I.T Return for last three financial years & PAN Card			
		(c) GST registration Certificate/current return & challan (GSTR-1 & 3B).			
		(d) Professional Tax Paid Certificate or current challan & valid trade license (Civil			
		& Electrical).			
		e) ESI Registration along with current return & challan.			
		f) Valid Electrical Contractor's License.			
		(g) Valid Electrical Supervisory License.			
		n) Performance as prime contractor for execution of similar nature of work for last			
		seven years and details of works in hand			
		(i) Information regarding any past and current litigation with			
		WBSEDCL/WBSETCL/Govt/PSU in which the bidder is involved the party's			
		concerned and disputed amount.			
	Category Name Certificates	Name Description			

B.	Credential	Credential 1	Part I: Electrical Work: All categories of intending Bidders must have experience
			for the electrical work related to 33 KV/11 KV voltage class or higher voltage class
			Sub-Station in last 3(Three) years under the authority of State/Central
			Government, State/Central Government undertaking, Electricity power Utility
			Statutory Bodies constituted under the statute of Central/State Government.
			AND
			Part II: Civil Work:
			All categories of intending Bidders must have experience for the civil work related
			to 33 KV/11 KV voltage class or higher voltage class Sub-Station in last 3(Three)
			years under the authority of State/Central Government, State/Central Government
			undertaking, Electricity power Utility Statutory Bodies constituted under the
			statute of Central/State Government Scanned copy of work order and completion
			certificate, as stated in 5(i) of e-NIT.
			FINANCIAL ELIGIBILITY CRITERIA OF THE BIDDER:
			One similar completed works (Combined Electrical and Civil works / Individual
			Electrical or Civil works) not less than the amount equal to 50 % of the estimated
			cost in a single order under the authority of State/Central Government,
			State/Central Government undertaking, Electricity power Utility Statutory Bodies
			constituted under the statute of Central/State Government in last 3(Three) years
			Scanned copy of work order and completion certificate, as stated in 5(i) of e-NIT.

### A.Technical Proposal:

- i) Opening of Technical proposal: Technical proposals will be opened by authorized Representatives of WBSEDCL from the web site stated using their Digital Signature Certificate.
- ii) Intending tenderers may remain present if they so desire.
- iii) Cover (folder) statutory documents will be opened first & if found in order, cover (Folder) for non-statutory documents will be opened. If there is any deficiency in the statutory documents the tender will be summarily rejected
- iv) Decrypted (transformed in to readable formats) documents of the non-statutory cover will be downloaded & handed over to the authorized representatives of WBSEDCL
- v) Uploading of summary list of technically qualified tenderers:
- a. Pursuant to scrutiny & decision of the authorized representatives of WBSEDCL the summary list of eligible tenderers & the serial number of work for which their proposal will be considered will be uploaded in the web portals.
- b. While evaluation the authorized representatives of WBSEDCL may summon any of the tenderer & seek clarification / information or tenderer/s may be asked for producing original hard copy/s of any of the documents already submitted & if these are not produced within the stipulated time frame, their proposals will be liable for rejection.

### B. Financial proposal

- i. The financial proposal should be one cover (folder) containing bill of quantities (BOQ) the contractor is to quote the rate (Percentage Excess/ Less/ At par (0.00%)) online in the space marked for quoting rate in the BOQ.
- ii) Only downloaded copies of the above documents are to be uploaded virus scanned & Digitally Signed by the contractor.

### 7. RESPONSIBILITY OF BIDDERS:

- a. WBSEDCL will not assume any responsibility regarding information gathered, interpretations or conclusions made by the bidder or regarding information, interruption or deductions the bidder may derive from the data furnished by the WBSEDCL. Verbal agreement or conversation with any officer, employee of WBSEDCL either before or after the execution of the contracts, shall not affect or modify any of the terms or obligations contained in the contract.
- b. It shall be the responsibility of the bidders to determine and to satisfy themselves by such means as they consider necessary or desirable as to all matters pertaining to this contract including in particular all factors that may affect the

cost, duration and execution of the works. It must be understood and agreed that such factors have properly been investigated and considered while submitting the bid.

- c. Claim, whatsoever, including those for financial adjustment to the contractawarded under these specifications and documents will not be entertained by the purchaser. Neither any change in time schedule of contract nor any financial adjustments arising thereof shall be permitted by the purchaser, which are based on the back of such clear information of its effect on the cost of the contract to the bidder.
- d. The bidder is expected to examine carefully all instructions, conditions, forms, schedules terms, annexure, specifications and drawings in the bidding document. Failure to comply with the requirements of bid submission will be at the bidder's own risk. Bids, which are determined to be not substantially responsive to the requirement of the bidding document, will be rejected.

### 8.COST OF BIDDING

Tender cost/Tender Fee is abolished as per O.O. No.- 1994 dated 19.05.2021 of the Director (HR), WBSEDCL. All participating bidders are therefore exempted from payment of Tender Fee.

### 9. CLARIFICATION OF BIDDING DOCUMENT

Should there be any discrepancy or obscurity in the meaning of any clauses of the bid document or if there be any query of the intending bidder, the bidder shall set forth in writing such discrepancies, doubt, obscurity or queries and submit the same to WBSEDCL, marked to **the Divisional Manager**, **BHANGAR DIVISION**, **Ghatakpukur**, **Bhangar**, **24 Parganas(S)**, **P.O.**: **B. Gobindapur**, **Pin**: **743502**within the date specified for this purpose. The clarification given in the pre-bid discussion shall be final and binding on the bidder.

### 10. BID PRICES

- a. The bidder shall quote their price in the appropriate format in percentage excess/at par/ less the estimated price.
- **b.** The quoted price should be firm. There will be no price variation during the pendency of the contract period or thereafter. Bidders are in no way allowed to get any escalation of price against this contract.
- c. Prices indicated in the schedule of prices deemed to exclude of Construction Labour Welfare Cess (1%)&'Goods and Services Tax' but include all the levies/duties/taxes/cess & all other incidentals payable as per statute. Goods and Services Tax shall be paid extra as per statute.

### 11. EARNEST MONEY

- (a) Earnest Money Deposit amounting to Rs. 16,600.00.00 (Rupees Sixteen Thousand Six Hundred only)shall be submitted through online mode through e-Tender portal (https://wbtenders.gov.in). All offline instruments like Bank draft, Pay Order etc. will be stopped for e-tender procurement. In case of unsuccessful/rejected bids, the EMD shall be refunded directly from the e-Tendering portal. However, for successful bids, the EMD will be refunded by WBSEDCL as per norms. Further details in respect of online payment as well as refund of EMD are provided within the EMD clause. This is in accordance to the O.O. No.- 1994 Dated: 19.05.2021 and O.O. No.- 1997 Dated: 14.06.2021 of the Director (HR), WBSEDCL. The bidder shall submit along with the offer necessary documents in support of credential (related to the tender) to WBSEDCL/Other Power Utilities/Other Govt. Departments in earlier occasions towards financial capabilities to the extent of the estimated financial capacity of the tenderer. Exemption from deposition of earnest money deposit (EMD) shall not be allowed under any circumstances.
- (b) Furthermore, the successful bidder has to submit an Additional Performance Security @ 10% of the tendered amount as Bank Guarantee from any nationalized Bank, if the quoted rate is between 20% to 80% below the estimated amount. This has reference to the order vide memo no. 82(5)-POW-13099/3/2018-SECTION(POWER) dated 05.07.2021 of the Department of Power, Govt. of West Bengal. The Additional Performance Security will be refunded after successful completion of the Defect Liability Period.

### 12. PROCESS TO BE CONFIDENTIAL

- 12.1 After the opening of bids, information relating to the examination, clarification, evaluation and comparison of bids, and recommendations concerning the award of contract shall not be disclosed to bidders or other persons not officially concerned with such process.
- 12.2 Any effort by a bidder to influence WBSEDCL or other connected in the process of examination, clarification, evaluation and comparison of bids, and in decisions concerning the award of contract, may result in the rejection of his/their bid.

### 13. TIME SCHEDULE

The basic consideration and the essence of the contract shall be the strict adherence to the time schedule specified in the NIT

### 14. EVALUATION AND COMPARISON OF BIDS

- 14.1 On examination of document submitted under different covers WBSEDCL will evaluate and compare the bid, determined to be substantially responsive at each step.
- 14.2 Evaluation of bid will include and will take into account:
- 14.2.1 Cost of construction/erection including taxes & duties etc.
- 14.2.2 The owner shall evaluate and compare only the bids determined to be substantially responsive.
- 14.2.3 The bids shall be evaluated on the basis of total price for the entire scopeof work covered under this bid document.
- 14.2.4 Evaluated bid price of all bidders shall be compared among themselves to determine the lowest evaluated bid and as a result of this comparison, the lowest bid will be selected for award of contract.
- 14.2.5 Conditional rebate, if any, offered by any bidder shall not be considered in Bid evaluation.

### 15. TAXES, DUTIES AND OTHER LEVIES

- a. The contractor shall be solely responsible for the taxes that may be levied on the contractor's persons or on earnings of any office employee and shall hold the purchaser indemnified and harmless against any claims that may be made against the purchaser. The purchaser does not take any responsibility what- so-ever regarding taxes under Indian Income Tax Act, for the contractor or his personnel. If it is obligatory under the provisions of Indian Income Tax Act, deduction of Income Tax at source shall be made by the purchaser.
- b. All other taxes/duties/levies/cess payable by the bidder shall be included in the bid price and no claim on this behalf will be entertained by the owner.

### 16. LAWS GOVERNING CONTRACT

The contract shall be construed according to acts/laws in force in the country and shall be under the jurisdiction of Calcutta High Court.

### 17. LANGUAGE AND MEASURES

All documents pertain to the contract including specifications, schedule, notice, correspondences, operating and maintenance instructions, drawings or any other writings be written in English language. The metric system of measurement shall be used exclusively in this contract.

### 18. CORRUPT OR FRAUDULENT PRACTISE

WBSEDCL expects that bidders/contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the owner defines for the purpose of this provision, the terms set forth below as follows:

- 18.1 "Corrupt practice" means the offering giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution, and
- 18.2 **"Fraudulent Practice"** means misrepresentation of facts in order to influence procurement process of the execution of a contract to the detriment of the owner, and includes collusive practice among bidders (Prior to or after bid submission) designed to establish bid prices at artificial no-competitive levels and to deprive the owner of the benefits of free and open competition.
- 18.3 WBSEDCL Will reject a proposal for award if the owner determines that the bidderrecommended for award has engaged in corrupt or fraudulent practice in competing for the contract in question.
- Will declare a Firm ineligible either indefinitely or for a stated period of timeif owner any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

### 19.INSURANCE

The successful bidder on awarding of contract shall arrange, secure and maintain all insurance as may be pertinent to the work and obligatory in terms of law to protect the interests of WBSEDCL against all perils. The form & the limit of such insurance together with underwriting in each case shall be acceptable to WBSEDCL. However, irrespective of such acceptance the responsibility to maintain adequate insurance coverage at all times during the period of contract shall be bidder's alone.

### 20. CORRECTNESS AND SUFFICIENCY OF RATES OUOTED IN THE TENDER

The bidder shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for work and the rates and prices stated in the schedule of works. The rates and price quoted shall cover all obligation of the bidder under the contract and all materials, labour etc. necessary for proper completion and maintenance of the work.

### 21. PENALTY FOR SUPPRESSION / DISTORTON OF FACTS

If any Bidder fails to produce the original hard copies of the documents (especially Completion Certificates and audited balance sheets), or any other documents on demand of the Tender Committee within a specified time frame or if any deviation is detected in the hard copies from the uploaded soft copies or if there is any suppression, the tender committee will take actions deem fit against such defaulting Bidder.

The Employer reserves the right to accept or reject any Bid and to cancel the Bidding processes and reject all Bids at any time the prior to the award of Contract without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the ground for Employer's action.

### 22. AWARD OF CONTRACT

The Bidder who's Bid would be accepted will be notified by the authorized official through acceptance letter/Letter of award. The notification of award will constitute the formation of the Contract. The Agreement as per enclosed format in G.C.C. will incorporate all agreements between the Tender Accepting Authority and the successful bidder. All the tender documents including N.I.T. & B.O.Q. will be the part of the contract documents.

### 23. AMENDMENT OF BIDDING DOCUMENTS

- **a.** At any time prior to the deadline for submission of bids, WBSEDCL may, for any reason whether at his own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by issuing amendments. Any such amendment shall be part of the bidding document.
- b. Such amendment(s) will be published on the same website mentioned above. Owner will bear no responsibility or liability arising out of non- pursuance of the same in time or otherwise by the bidder. In order to afford prospective bidders reasonable time in which to take the amendment in to account in preparing their bids, the owner may, at its discretion, extend the deadline for submission of bids. Such amendments, clarification etc. shall be binding on bidders and will be given due consideration by the bidders while they submit their bids and invariably enclose such documents as a part of the bids.

### ANNEXURE -I

PROFORMA FOR UNDERTAKING TO BE SUBN furnished on-line and authenticity of the documents			
his eligibility)	•		**
I	Partner/Legal	Attorney/Accredited, solemnly declare to	representative of that:
We are submitting Tender for the Work  Tender Notice No		Dated	<del></del>
<ul><li>2. None of the Partners of our firm is relative of empl</li><li>3. All information furnished by us in respect of fulf</li><li>Tender is complete, correct and true.</li><li>4. All documents/credentials submitted along with the</li></ul>	ilment of eligibilit	y criteria and qualification	
5. If any information and document submitted is for Tender and action as deemed fit may be taken again including Earnest Money and banning/delisting of our	st us, including ter	mination of the contract,	
		Signature of th	ne Tenderer
		Dated	

### **ANNEXURE-II**

Format of Letter of Bid

LETTER HEAD OF BIDDER (AS ENROLLED ONLINE ON e-tendering PORTAL OF NIC)

To. The Tender Committee	
Sub: Letter of Bid for the work	
Ref: 1. NIT No	
2. Tender Id No	
Dear Sir,	
	of quantity in accordance with the conditions of the NIT the EMD being submitted by us has been furnished on
This Bid and your subsequent Letter of Acceptance/vus.	Work Order shall constitute a binding contract between
We hereby confirm our acceptance of all the terms an	nd conditions of the NIT document unconditionally.
	Signature of the Tenderer
	Dated

### ANNEXURE-III

Dated:
<b>DECLARATION BY THE TENDERER</b>
I/We have inspected the site of work and have made myself/ourselves fully acquainted with local conditions in and around the site of work. I /We have carefully gone through the Notice Inviting Tender and other tender documents mentioned therein. I/We have also carefully gone through the 'Bill of Quantities'.
My/Our tender is offered taking due consideration of all factors regarding the local site conditions stated in this Detailed Notice Inviting Tender to complete the proposed construction in all respects.
I/We promise to abide by all the stipulations of the contract documents and carry out and complete the work to the satisfaction of the department.
I/We also agree to procure tools and plants, at my/our cost required for the work.
Signature of Tenderer
Postal address of the Tenderer





### **GENERAL CONDITIONS OF CONTRACT AND** SPECIFICATION FOR CIVIL & ELECTRICAL WORKS

### GENERAL CONDITIONS OF CONTRACT AND SPECIFICATION FOR CIVIL WORKS

### 1. **DEFINITION OF TERMS:**

In writing these General Conditions of Contract, Specification and Bill of quantity/bidding schedule (schedule of work) the following words shall have normally the meanings here-in- after indicated unless there is something in the subject matter of content inconsistent with such construction.

The Company/purchaser/Owner/Department shall mean the WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LTD, having its Office at VidyutBhavan, Block-DJ, Sector-II, Kolkata-700091. The Engineer-in-Charge/Controlling Officer shall mean the Engineer designated by the Company for the purpose of this contract.

Company's representative shall mean any person or persons of consulting firm appointed and remunerated by the Company to supervise, inspect, test and examine workmanship and materials of the work under this scope.

The Contractor shall mean the Bidder who will be awarded with the contract by the Company and shall include the contractor's executor's administrators, successors and permitted assignees.

The "Sub-Contractor" shall mean the person named in the Contract for any part of the works or any person to whom any part of the contract has been sublet by the contractor with the consent in writing of the Engineer-in-charge and will include the legal representatives, successors and permitted assigns of such persons.

Equipment/materials shall mean and include all type of construction equipment & materials etc. required for true and satisfactory completion of the work under this contract.

Workmanship shall mean the method/manner in which the jobs of the different items, whether included in the schedule or not but are required for true & satisfactory completion of the work under this contract, are executed.

General conditions shall mean all the clauses of General conditions of the proposed contract stated hereinafter. The specification shall mean the specification annexed to or issued with the General Conditions and shall include the schedule and drawings attached thereto. The terms **Services** shall mean all works to be undertaken by the contractor as laid down under the head "scope of contract" or elsewhere in the specification enclosed. When the words "approved", "subject to Approval", "As directed", "Accepted", "Permitted" etc. are used, the approval, judgment, direction etc. are understood to be a function of Company.

Month shall mean calendar month.

"Writing" shall include any manuscript, type written, printed or other statement reproduced in any visible form.

The work "Site" shall mean the site of proposed work as detailed in the specification or any other place where the work is to be executed under the contract.

"Date of Contract" shall mean the date on which notification of award of contract/letter of award has been issued.

"Zero Date" will be reckoned as the date of handing over the site.

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### 2. SCOPE OF WORK:

Scope of work includes, Civil & Electrical works related to the work of "Augmentation of 01 NO. 6.3 MVA PTR to 10 MVA PTR and allied work, installed at KLC-II 33/11KV substation under Bhangar Division.". The proposed contract comprises of construction, completion and maintenance of the work during the contract period including defect liability period, as required. It includes provision of all labour, material, constructional plant, temporary work and everything whether temporary or permanent nature required for such construction, completion and maintenance so far as the necessity of providing the same is specified in or responsible to be inferred from the contract. The different items of work have been elaborated in the schedule of work.

### 3. Submission of Tender:

Please refer to Sl. no 6 of Instruction to Bidders.

### 4. Performance Bond/Security Deposit:

In respect of successful Bidder, the Earnest Money deposit on acceptance of Tender shall be converted as a part of the Security Deposit. The successful bidder shall have to submit balance Earnest money, if required, to make the initial Security money amounting to 2% of the contract price after placement of Letter of acceptance/Letter of award within specified period. Balance of Security Deposit equivalent to 10% (Ten percent) of contract amount shall be realized by recovering from the progressive bill @ 8% (Eight percent) of the amount of each such bill. In all cases the amount of recovery of the Final Bill will be so adjusted as to make the total amount of Security Deposit equivalent to 10% (Ten percent) to the value of work so executed.

The WBSEDCL reserves the right to ask for Performance Guarantee upto 10% of the tendered amount from the successful bidder.

### 5. Refund of Security Deposit:

Refund of Security deposit shall be subject to Company's right to deduct/appropriate its dues against the contractor or under this contract or any other contract. The performance Bond/Security Deposit for all type of Bids shall be released only after satisfactory expiry of the guarantee period and certified as such by the controlling officer of the work upon written request by the contractor under following conditions:

- 5.1 In case of building works or other similar nature of works the defect liability period shall be considered 06 (six) month or expiry of one full monsoon period, i.e. June to September whichever is later and any defects such as leakages in roof, effloresces in walls, dampness, defects in drainage etc should be rectified to the satisfaction of the engineer.
- 5.2 All types of Manufacturers' guarantee/warranty wherever applicable are to be issued/revalidated in the name of owner by the contractual agency. In case of building works or similar nature of works the defect liability period shall be considered six months or expiry of one full monsoon period, i.e. from June to September whichever is later.

### 6. Refund of Earnest Money:

In case of unsuccessful/rejected bids, the EMD shall be refunded directly from the e-Tendering portal. However, for successful bids, the EMD will be refunded by WBSEDCL as per norms. Further details in respect of online payment as well as refund of EMD are provided within the EMD clause.

### 7. FORFEITURE OF EARNEST MONEY/ BID GURANTEE:

Earnest money/Bid guarantee shall be forfeited in case of following:

- If during the period of validity, the bidder withdraws/modifies its bid as a whole or in part. 7.1
- 7.2 If the bidder deviates from any clarification/confirmation given by him subsequent to submission of his bid.
- 7.3 In case of successful bidder, if the Bidder fails:
  - 7.3.1 To accept LOI/Order unconditionally and sign contract
  - 7.3.2 To furnish the contract performance bond wherever applicable.

### 8. DEFECT LIABILTY PERIOD

- The term "defect liability period" shall mean the period of Six (6) months from the Date of completion of the 8.1 work. If any defect is found within the defect liability period the contractor shall be liable to rectify/replace the materials at their own cost and responsibility.
- In case any defect of work is detected by the controlling officer within the period of six months, the defect 8.2 liability period shall continue beyond six months.
- 8.3 Defects/rectification work so notified shall have to be attended and completed satisfactorily within the specified date or as deemed fit by the Controlling Officer. For faithful & due fulfilment of all obligations, this defect liability period shall be covered by Security Deposit submitted by the contractor detailed in clause 5.0.
- 8.4 After completion of defect liability period, and on completion of satisfactory rectification of defects, if any reported within the defect liability period, and on receipt of the application from the contractor the controlling Officer of the work will recommend release of security deposit.

### 9. MANNER OF EXECUTION OF CONTRACT AGREEMENT

- 9.1 The successful bidder has to submit acceptance of the LOI/order within 10(ten) days from the date of issue of the Letter of Intent/order. The successful bidder shall be required to execute an Agreement on a non-judicial stamp paper of Rs 100/- with the company with all related documents for satisfactory execution of the work.
- 9.2 The agreement shall be signed on a date and time to be mutually agreed upon in the office of the controlling officer of the work and the same has to be signed by both the parties within 30 days from date of acceptance of the order. Power of attorney of the authorized representative of the contractor who will sign the contract agreement on behalf of the contractor is to be submitted before signing of the agreement.
- 9.3 The agreement shall be signed in original and three (3) photo copies. The original agreement shall be retained by the Company and a copy will be handed over to the Contractor.

### 10. GENERAL REQUIREMENT

- The contractor shall execute, complete and maintain the work as per direction of the Controlling 10.1 Officer/Engineer-in-Charge of the work or his representative
- 10.2 Contractor to submit programme: Within 14 (fourteen) days from the date of issue of letter of intent/order, the contractor shall submit a programme showing the order, procedure and method in which he proposes to carry the work.
- 10.3 Contractor's staff at site: The Contractor shall provide at site his authorized representative duly approved by the controlling officer (approval may be withdrawn for a person, if necessary). The contractor and/ or his authorized representative is to be constantly on the work and shall give whole time supervision of the same. Such authorized agent or representative shall receive (on behalf of the contractor) direction and instructions from the Controlling Officer/ Engineer-in-charge or his representative.

- Removal of persons employed at site: The Controlling Officer/ Engineer-in-Charge shall be at liberty to ask 10.4 the contractor to remove from the site any person, employed by the contractor in the execution of work, who in the opinion of the Controlling Officer/ Engineer-in-Charge misconducts himself or is incompetent or negligent in the proper performance of his duties and such persons shall not be again employed upon the work without the permission of the Controlling Officer/ Engineer-in-Charge.
- 10.5 Setting out: The contractor shall be responsible for the true and proper setting out of the work and for the correctness of the position, levels, dimensions and alignments of all parts of the work. If any time during the progress of the work any error shall appear or arise in the positions, levels, dimensions or alignments of any part of the work, the contractor on being asked to rectify by the Controlling Officer/ Engineer-in-Charge or his representative shall at his own expense rectify such error to the satisfaction of the Controlling Officer/ Engineer-in-charge.
- 10.6 **Protection of work**: The Contractor shall in connection with the work provide andmaintain at his own cost all lights, guards, fencing and watching when and where necessary if required by the company or by any competent authority for the protection of the work or for the safety and convenience of the public or others.
- 10.7 Care of works: From the commencement to the completion of the works, the Contractor shall take full responsibility for the care of permanent works, therefore and of all temporary works and in case of any damage, loss, or injury to works or to any part thereof or any temporary works due to any cause whatsoever shall at his own cost repair and make good the same, so that at completion the works shall be in good order and condition and in conformity in every respect with the requirements of the contract. The contractor shall take every practicable precaution not to damage or to cause injury to any adjoining or other properties or to any persons. However even if any damage or injury occurs, the contractor shall be responsible in meeting the necessary claims and demands as may be required.
- 10.8 Workmen's Compensation for accident or injury to any workman: The Company shall not be liable for damages or compensation payable as per provision of law in respect or consequence of any accident or injury to any workmen or other person in the employment of the contractor. The contractor shall have to pay all claims, demands, preceding costs, charges and expenses whatsoever in respect thereof or in relation thereto. Insurance policy covering provisions for workmen's compensation for all the workmen to be engaged by the contractor is to be made by him.
- 10.9 Facilities for other Contractors: The Contractor shall afford all reasonable Facilities for any other contractor employed by the company in execution on or near the site of any work not included in the contract.
- Clearing site on completion: On Completion of the work the Contractor shall clear away and remove from 10.10 the site all constructional plant, surplus materials, rubbish and temporary work of every kind and leave the whole of the site and work clean and in good and tidy condition to the satisfaction of the Controlling Officer/ Engineer- in-charge.

### 11. CHANGE OF OUANTITY

The quantity mentioned in the schedule of work is provisional. The company reserves the right to vary the quantities as may be necessary but such variation shall be limited to  $\pm 25\%$  (plus or minus twenty five percent) of the contract price. Payment shall be made as per execution.

### 12. GOODS AND SERVICESTAX:

Goods and Service Tax shall be paid extra as per prevailing statute.

### 13. LABOUR LICENSE:

Contractor will have to obtain Labour License in respect of the above work as per Contract Labour (Regulation & Abolition) Act, 1970 as early as possible.



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### 14. COMPLIANCE OF LABOUR LAWS:

The contractor shall comply all statutory labour laws to protect the labourers engaged by them. In this connection the contractor will be required to execute an indemnity bond (as per specimen enclosed as Annexure-B) after placement of letter of intent/ order.

### 15. NIGHT AND HOLIDAY WORK:

If any work of permanent nature is to be carried out in three shifts and/or in Sundays & Holidays, prior written permission of the Controlling Officer shall have to be obtained.

## 16. DEDUCTIONS OF PROVIDENT FUND & REMITTENCE THEREOF IN RESPECT OF CONTRACT LABOURERS:

In respect of casual workers or workers engaged for any job for a very short duration or sporadic nature having no employer-employee relationship (for example Soil testing, repair of transformer etc done by outer agency) and engaged in works which are neither preparatory, nor incidental, nor any way connected with the main operation of the establishment, deduction of provident fund and remittance thereof in respect of the contract labours will not be applicable. However, it is further clarified that no mechanical approach should be adopted in deciding the applicability of the Act and each case should be considered on its own merits.

### 17. VARIATION, OMISSION, ADDITION & ALTERATION:

The Contractor shall not modify the work except under direction in writing by the Company. The quantities provided in the Schedule of work are provisional only, which may vary up to any extent or may be deleted altogether. The quoted rate of each item shall remain firm till completion of contract. The Company reserves the right to alter, amend, and omit or otherwise vary the quantities as may be necessary but such variation will be limited to  $\pm$  25% (plus or minus twenty five percent) of the contract price. Payment shall be made as per actual execution.

### 18. PAYING AUTHORITY:

Payment will be made by the Manager (F & A), Bhangar Division.

### 19. SUPPLEMENTARY WORKS:

Whenever supplementary work becomes unavoidable for completion of the work in all respect, the Contractor shall bring the matter to the notice of the Controlling Officer and submit their proposal. However, the controlling officers shall have the right to advise the contractor to proceed with such item (s) of work. Rates for supplementary item shall be arrived at as given hereunder:

- 19.1 The rates of all supplementary items shall be decided on pro-rata basis from the existing items in the contract.
- 19.2 When above clause no 19.1 shall not be applicable the rates shall be taken from P.W.D(WB) schedule of rates for building works, sanitary & plumbing works & PWD(WB)(Roads) schedule prevailing at the time of submission of bids plus/minus the contractual rate of quotation.
- 19.3 When clause no 19.1 & 19.2 above shall not be applicable, the rates should be analyzed, to the mutual acceptance from present market rates of different elements involved in the item, against documentary evidence, with contractor's profit as 10% and 1% cess towards BOCWWC Act,1996. In that case contractual rate of quotation will not be applicable.

Controlling Officer's decision regarding finalization of rate of non-scheduled item(s) shall be final and binding upon the contractors.

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### 20. MEASUREMENTS AND TERMS OF PAYMENT

- All items of work carried out by the contractor in accordance with the provision of the contract having a financial value shall be entered in the measurement book/ log book etc. as prescribed by the company so that a complete record is obtained of all works performed under the contract and the value of work can be ascertained and determined there from.
- 20.2 Measurement shall be taken jointly by the supervisory officer or his authorized representative and by the contractor or his authorized representative. Every measurement thus taken shall be signed and dated by both the parties.
- 20.3 In the event of failure on the part of the contractor to attend or send his authorized representative after receiving the information to countersign or record objection within a week from the date of measurement, the measurement taken by the Engineer-in-charge/controlling officer or his authorized representative shall be taken to be correct measurement of the work done.
- 20.4 Progressive R/A bills against the prayer of the contractor, for an amount of minimum 20 %of the ordered value or as deemed justified by the controlling officer shall be released against certification by the controlling officer after deducting the amount already paid or other amounts as may be deductible. The bills shall be released within 45(FortyFive) days of its submission if all formalities as per terms of the contract is maintained. The final bill shall be released on completion of the work in all respect and fulfilment of all contractual obligations by the contractor.
- 20.5 The company reserves the right to recover/ enforce recovery of any overpayments detected after payment as a result of post-payment audit or technical examination or by any other means, notwithstanding the fact that the amount of disputed item, if any, of the contractor exceeds the amount of such overpayments and irrespective of the fact whether such disputed claims of the contractor are subject matter of arbitration or not. The amount of such overpayment may be recovered from subsequent bill, under the contract, failing that from contractor's claim under any other contract with the company or from contractors' security deposit or from the amount retained or the contractor shall pay the pay the overpayment on demand.

### 21. COMPLETION OF CONTRACT

All works under the contract must be completed by period of completion mentioned in NIT while portions of work as per programme settled in consultation with the controlling officer shall be completed by the date stipulated in the programme. It is to be noted that time is the essence of the contract and any default on the part of the contractor to complete the work within the stipulated date/dates aforesaid or within the time as may be extended in writing by the controlling officer subject to the payment of liquidated damages, the company shall have the right, without prejudice to any other clauses, to terminate the contract forthwith and to take possession of balance work/ materials and have the same allotted to any other agency and the contractor shall be liable to compensate the loss that may be occasioned to the Company on that account. Any letter in writing by The Controlling Officer shall be treated as conclusive on behalf of the Company.

### 22. DEFECTIVE MATERIAL

If in the opinion of the Engineer-in-Charge/ Controlling Officer, any of the materials brought to the site for use are not of the quality or kind specified in the contract and/ or are unfit for work, he shall be at liberty to order the removal of the said materials and the contractor shall remove the same within 24 (twenty four) hours after notice has been given to him, and if he fails to remove them within the time the Engineer may cause them to be removed anywhere at the risk of the contractor and any cost incurred in so doing shall be deducted from the dues to the contractor under the contract.

### 24. MATERIAL AND WORKMANSHIP

All the work shall be executed with the materials as specified and with best workmanship and/or in the best manner to the satisfaction of the Engineer-in-Charge/ Controlling Officer.

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### **25. EXTENSION OF TIME:**

If the work is suspended due to reasons beyond the control of the contractor, the contractor shall immediately give notice in writing within 7(seven) days to the controlling officer for each occasion. On receipt of such notice, the controlling officer may verify the matter and agree to extend the completion period as may be reasonable but without prejudice to other terms and conditions of the contract as the case may be if the reasons behind the suspension of work are found to be justified.

### **26. LIQUIDATED DAMAGES:**

26.1 If the contractor fails to complete the work successfully within the time specified in the contract or any extension thereof, the company shall recover from the contractor as liquidated damages a sum of half percent(0.5%) of the contract value of works for each calendar week of delay or part thereof of delay subjected to Force Majeure.

26.2 The total recovery against liquidated damage shall not exceed ten percent (10%) of the contract value of the work An extension of time without imposition of liquidated damage, may be granted for delay in execution of work provided there is no fault whatsoever on the part of the contractor. Such extension may only be granted on the basis of application to be submitted by the contractor who has to establish that the extension of time required by him was not due to his fault.

### 27. COMPANY'S RIGHT TO TERMINATE THE CONTRACT:

If the contractor neglects or fail to proceed with the work proportionate to the scheduled time of completion or fails to complete the work within scheduled time of completion or within extended time approved by the company, the company shall have right to terminate the order, Letter of intent, after giving notice in writing to the contractor. If the contractor fails, after 14(fourteen) days" of such notice, to proceed with the work in the manner notified, the company shall terminate the contract and call the contractor to take joint measurement along with the Engineer for finished portion of work. If the Contractor does not appear for a joint measurement, ex party measurement taken by the company will be taken as final.

In that case, the company shall take possession of the work site and may engage other agency to complete the work. Extra cost, if incurred to get the unfinished work done through other agency, will be realized from him, from his pending bills and security deposit. If the contract is terminated as above, the contractor shall have no claim for compensation against the company for any loss or deterioration of any materials that he may have collected or engaged or entered into on account of the work.

### 28. QUALITY OF WORK/MATERIAL AND MODE OF MEASUREMENT:

As regards to the specification of materials, execution of work and the mode of measurement relevant stipulation of P.W.D schedule of rates (applicable at site of work) in this respect shall be applicable. The Contractor shall arrange and provide all necessary facilities along with necessary manpower for inspection, testing and measurements at his own cost.

### **29. DEPARTMENTAL MATERIALS:**

Departmental materials shall not be issued to the contractor for any CivilWorks except under special circumstances. However, for Electrical works, following points may be noted:

(a) The materials for this work will be supplied by WBSEDCL from our nearest site store. In excess of 35 kms only the cost of transportation of excess kms beyond 35 kms is payable to you as per approved rate of the WBSEDCL prevailing at the time of actual transportation. The agency will be supply fabricated structural materials with nuts bolts and washer for 33 kv Isolator structure, 11 kv & LT cable support structure. G.I. Pipe 40 mm diameter of 3 mtr. Long ISI marked of make (TATA / Jindal) and GI flat 65x6 mm for earthing arrangement also be supply by agency by taking necessary GTP and sample approval from Controlling Officer. The DI of materials will be issue by Controlling Officer after necessary testing and sample inspection. The guarantee certificate and challan of all purchased materials must be submitted. The WBSEDCL will have

right to test any material(s) at any moment, if found necessary. In that case the contractor will be liable to take appropriate actions, which include the cost of testing and other incidentals. Authenticated document for confirmation of quality of material, purchased by the contractor, shall have to be submitted on demand by the Engineer-in-charge.

### (b) Insurance:

The bidder on awarding of contract shall arrange, secure and maintain all insurance as may be pertinent to the work and obligatory in terms of law in force to protect the interests of WBSEDCL against all perils. The form & the limit of such insurance together with underwriting in each case shall be acceptable to WBSEDCL. However, irrespective of such acceptance the responsibility to maintain adequate insurance coverage at all times during the period of contract shall be contractor's alone.

### (c) Safe custody of WBSEDCL materials and executed works:

You shall be entirely responsible for all the materials issued to you for the works and the executed portion of the work till it is officially taken over by the WBSEDCL. The working site till handed over to WBSEDCL to be clearly demarcated (Through temporary fencing / Danger Tape) and execution of works to be cautioned before pedestrians & vehicles by using Caution Boards.

It is your responsibility to keep the policy alive throughout the desired period by timely and adequate payment of the premium. The insurance policy should cover towards materials. If the amount of contract is modified subsequently the Insurance coverage should also be modified accordingly.

### 30. DEDUCTION OF TAXES AND CESS FOR BOCWWC ACT, 1996:

If it is obligatory under the provision of Income tax Act 1961 and West Bengal VAT Act 2003 (VAT on works contract) to deduct tax at source then the same will be deducted from the bills as applicable. The contractor is required to follow the Building and other Construction Workers welfare Act, 1996. Registration of his establishment under section-7 of the Building and other Construction Worker's (Regulation and condition of service) Act, 1996 is to be made after the contract is awarded. 1% cess towards BOCWWC Act, 1996, will be deducted from its total amount of each bill. For this deductions certificate will be issued as per rules.

### 31. FORCE MAJEURE:

The Contractor shall not be liable to pay any liquidated damage for delay/failure to perform the contract for reasons of force majeure such as acts of God, acts of the public enemy, acts of Governments, fire, flood, epidemics, quarantine restriction, strikes, freight embargos and provided that the contractor shall within 10(ten) days from the beginning of such delay notify the Company in writing of the cause of delay. The Company shall verify the facts and grant such extension as found to be justified without imposing liquidated damage. The department shall not be responsible or liable to pay any compensation for any interruption in your work at the site due to strike, lockout, riot earthquake, flood, cyclone or civil commotion or any other force of accident due to any reason beyond control. The department shall not be held responsible to or liable to pay for any interruption in your work at the site arising out of resistance from the local public due to any resistance towards work.

### **32. SUB-LETTING OF CONTRACT:**

The contractor shall not, without the written consent of the Company, assign or sublet his contract or any part thereof, other than for raw materials, or for any part of the work provided that any such consent shall not relieve the contractor form any obligation, duty or responsibility under the contract. In the event of sub-letting of contract or any part thereof is permitted, the fact that such permission has been accorded shall not establish any contractual relationship between the approved Sub-vendor and WBSEDCL of any of his liabilities and obligations under the contract.

### **33. ENGINEERS DECISION:**

Controlling Officer's decision is final in respect of all matters which are left to the decision of the Controlling Officer including the granting or with-holding of certificates. If, in the opinion of the contractor, a decision made by the Controlling Officer is not in accordance with the meaning and intent of the contract, the contractor may file with the Controlling Officer, within 7 (seven) days after receipt of the decision, a written objection to the decision. Failure to file an objection within the allotted time will be considered as an acceptance of the Controlling Officer's decision and the decision shall become final and binding.

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### 34. LIABILITY OF ACCIDENTS AND DAMAGE:

The Contractor shall be responsible for the loss, damage or depreciation of the Company's materials while in their custody and until the same is taken over by the Company. Until the completed work is taken over by the Company the contractor shall also be liable for and shall indemnify the Company in respect of all injury to person or damage to properly resulting from the negligence of the contractor or his workmen or sub-contractor or from defective workmanship etc.

### 35. LANGUAGE AND MEASUREMENT:

All documents pertaining to the contract including specifications, schedule notices, correspondences, operating and maintenance instruction, drawings or any other writings be written shall in English language. The metric system measurement shall be used exclusively in this contract.

### **36. SETTLEMENT OF DISPUTES:**

All disputes concerning question of act arising under the contract shall be decided by the owner/company on receipt of written appeal by the contractor. Any dispute or differences arising out of or in connection with this contract shall to the extent possible be settled amicably and where settlement cannot be reached then such disputes shall be subject to settlement under the jurisdiction of Calcutta High Court.

### **37. COMPLEITION OF WORK:**

Completion of the work means completion of the work in totality and acceptance/takeover of the same by the Company. Partial or phase wise completion will have no bearing towards consideration of guarantee/defect liability period.

**38. CONTROLLING OFFICER: The DM**, **Bhangar Division** shall be the Controlling Officer for the work.

39. Technical Controlling Officer: The AE(C)/DE(C) of Bidhannagar Regional Office and the AE(Tech)/DE(Tech) of B hangar Division are the Supervising Officer for the Civil & Electrical works respectively, who will supervise the work alongwith technical guidance for execution of the work.

### **40. IDLE LABOUR/MACHINERY:**

Whatever the reasons may be no claim for idle labour and machinery, additional establishment cost, hire and labour charges of tools & plants would be entertained by the Company, under any circumstances.

### **41. SAFETY RULES:**

The bidder shall also provide necessary fencing and lights to protect the public from accident. Fire extinguishers shall be kept by the Contractor at the site of works where there is risk of fire hazard. Adequate washing facilities shall be provided near the place of work.

When the work is done near any place where there is risk of drowning, all necessary equipment's shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provisions shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work

These safety provisions shall be brought to be notice of all concerned by displaying on a notice board at a prominent place at the work spot. The person responsible for the compliance of code shall be named by the bidder.

To ensure effective enforcement of the rules & regulations relating to safety precautions, the arrangement made by the bidder shall be open to inspection of the employer and WBSEDCL.

Notwithstanding the above clause there is nothing in those of exempt the bidder from the operation of any other Act or Rule in force in the Republic of India.

All storage, handling & use of flammable liquids shall be under the supervisions of qualified persons. First aid arrangements with the degree of hazard and numbers of workers employed shall be maintained in a readily accessible place throughout the whole of working hours.

### REPORTING OF ACCIDENT:

All accidents, major or minor, must be reported immediately to WBSEDCL and the contractor will provide first aid to the injured person immediately. The injured person shall report to the First Aid station along with the 'Injure on Work' form as per appropriate Proforma, duly filled in quintuplicate and submit to the Medical Officer of the First Aid Station.

Serious Injuries: In case of serious injuries, the following procedure shall be adopted by the contractor.

- To provide first aid at his own First Aid Station.
- To take the injured person to the hospital along with the 'Injured on Work' form duly filled in.
- To report the accident to WBSEDCL.

Fatal Accident: Fatal accident must be reported immediately to WBSEDCL as well as to Police.

Penalty: Failure to observe the Safety Rules will make the contractor liable to plenty by way of suspension of work and termination of contract. Adequate arrangement for proper lighting & guarding shall be made at the work site.

### **FATAL ACCIDENT:**

Fatal accidents must be reported immediately to WBSEDCL as well as to the Police.

### **PENALTY:**

Failure to observe the Safety Rules will make the contractor liable to penalty by wayof suspension of work and termination of contract. Adequate arrangement for proper lighting & guarding shall be made at the work site.

### **42. EQUIPMENT & MACHINERIES:**

For timely completion of the work the bidder/contractor must have to deploy all necessary equipment, tools & tackles and machineries e.g. J.C.B., Hot-mix-plant, Boiler, transit mixer etc. to execute the work at a time to perform all works simultaneously as per requirement of WBSEDCL.

### 43. RISK PURCHASE:

In the event of failure of the contractor to execute the work timely and/or to the satisfaction of WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LTD., the order/Letter of Award may be terminated prematurely and the balance work may be got done through any other agency at risk and cost of the contractor.

### West Bengal State Electricity Distribution Company Ltd.

(A Govt. of West Bengal Enterprise)

### **Additional Conditions of Contract:-**

- 1. The work shall be inspected time to time by WBSEDCL representatives. The contractor shall provide all facilities for such inspection free of cost. Notwithstanding any inspection of site, WBSEDCL shall have the right to reject any work not conforming to the specification without being liable for any explanation or compensation. The authorized representative of WBSEDCL shall have the free access to the work site, contractor site and store.
- **2.** During the execution of work, if any problem arises which is not covered by the specification, the contractor shall seek necessary clarification and instruction from WBSEDCL, such instruction shall be binding on the contractor and shall be observed in full.
- **3.** The contractor shall make his own arrangement for labour, construction equipment, tools and tackles and construction materials, construction water, office/ labour accommodation, water supply, sanitation etc.
- **4.** Electricity for construction purpose, is supplied by WBSEDCL, the charge shall be borne by the Contractor at the rate specified by the WBSEDCL. The contractor cannot claim any compensation for any failure in such supply caused due to any reason whatsoever in case of non-availability of electricity for construction purpose from WBSEDCL. The contractor will have to arrange for the same at his own cost.
- **5.** The contractor shall strictly follow the construction safety rules, regulations, and instructions issued from time to time in absence of any particular reference the contractor shall refer to relevant Indian standard and also the State Government rules and regulations.
- **6.** The contractor shall take all precautions during execution, especially while excavating underground works, such as cables, pipe lines, drains etc. and provide all possible protection to these works and in case any materials got damaged, rebuilt them at his own cost.
- 7. All guarantees and test certificates obtained by the contractor during the execution of work shall be transferred to the WBSEDCL before issue of final payment.
- 8. The contractor shall provide all necessary storage at the site in specified areas for all the materials such as timber, cement, lime and such other materials which are likely to deteriorate by the action of Sun, winds, rain or other natural cause due to exposure in the open in such manner that all such materials shall be duly protected from damage by weather or any other cause. All such stores shall be cleared after completion of the work and the entire site shall be clean and free from debris. All materials shall be stacked in such a manner as to facilitate rapid and easy checking of such materials.
- **9.** The cost of testing materials shall be borne by the contractor.
- 10. All works are to be carried out with due regard to the convenience of the occupants of the premises or road users and with close coordination with other contractors who may be workingin the area. All arrangements/ programmes of work must be adjusted accordingly. All precautions must be taken to guard against chances of injury or accidents to other occupants, users and workers. The contractor must see that all damages to any property, which in the opinion of the controlling officer are due to work of the contractor, are promptly rectified as per direction and to his satisfaction. The construction work must be done in such a way as not to dislocate or disturb any sewerage system and other existing structures.
- 11. It must be clearly understood that WBSEDCL is indemnified by the contractor against payment of any compensation or award on account of any accident, injuries and damages and if any such payment has to be made by WBSEDCL under order of appropriate authorities, the same shall be recovered from the contractor.
- 12. Any services if affected by the work must be restored by the contractor on emergency basis at his own cost.
- 13. After completion of the work, the finishes shall be of high quality and of approved standard.
- **14.** No omission or ambiguities in the drawing or in the specification will relieve the contractor from responsibility for material and completeness of the work.
- 15. The contractor shall not off-load the contract or part thereof to any subcontractor without obtaining written permission from the controlling officer of the work. In the event of sub-letting of contract or part thereof. In the event

sub-letting of contract is permitted, the fact that such permission has been accorded shall not establish any contractual relationship between approved sub-contractor and WBSEDCL of any of his liabilities and obligations under the contract.

- **16.** A complete list of execution/ deviation from the tenderer scope of work shall be clearly indicated. Similarly, if any departure, commission of substitution from stipulated specification is made. This fact should be clearly indicated in the offer with reasons. However, WBSEDCL shall have the absolute discretion to summarily reject such offers.
- 17. WBSEDCL"s representative may during progress of work, order for re-execution of part or whole of the work executed, found not in accordance with the approved drawings / specifications/ instructions. No extra claims shall be entertained for re-execution or altering or such work
- **18.** The contractor shall provide sufficient strong and stable staging as to ensure safety of the labourers and structures.
- 19. The contractor shall dismantle and remove the staging and other temporary structures like Stores, offices, labour camps etc. on completion of work, clear and clean the site where such temporary facilities were built and restore the same to original condition.
- **20.** Materials brought to the site shall not be removed from the site without the written consent of the WBSEDCL. The contractor shall submit well in advance for approval of samples, specimens as the WBSEDCL may demand from time to time. Any materials brought to the site and rejected by the WBSEDCL shall be removed by the contractor from the site of work immediately.
- **21.** All materials including reinforcing steel, cement for concrete work, sanitary, plumbing and carpentry fittings shall be procured after approval of brand and make by WBSEDCL.
- 22. All bricks have to submerge in vats before put to use. Curing shall be done with proper care.
- 23. The contractor has to make arrangement for temporary cover to enable civil construction works to continue if interrupted due to rains during monsoon.
- **24.** If necessary extra items beyond S.O.W are executed the unit rate shall be as per the rates of PWD, West Bengal on the date of bid opening. Those items which are not covered under PWD rates shall be based on analysis of rate as applicable, on mutual agreement.
- **25.** Bar chart showing all activities needs to be submitted before commencement of work.
- 26. Depth of the tube well, if any shall be complied with Public Health Engineering Directorate recommendations.
- 27. All drawings supplied with the bid documents are tentative/ for guidance only.
- **28.** WBSEDCL shall not be liable under any circumstances for any accident/ untoward incidents, if happened during execution of works.
- **29.** The contractor shall submit test certificate from the appropriate authority for palatable of drinking water indicating presence of arsenic and other chemicals, if any.
- **30.** If specification of any items of work is not covered in the bid documents the same shall be guided from PWD schedule of rates.
- **31.** All dismantled departmental materials shall have to be returned to store/ disposed and stacked in a place (within 200m lead) provided by the purchaser without any extra cost to WBSEDCL.
- 32. Mode of measurement shall be followed as described in PWDSOR, unless otherwise stated.

TECHNICAL	SPECIFICATION	ONSOF	CONTR	ACT
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TECHNICAL SPECIFICATION FOR GENERAL CIVIL WORK

**GENERAL** 

### 1.1. Scope of work

This technical specification is general in nature & description. The relevant description of a particular item shall be guided by the item description in the Schedule of Rates of this Bid Document. THE PWDSOR along with relevant IS Specifications and the National Building Code shall have to be followed as a general guideline. In case of any dispute/discrepancy, the decision of the Engineer-In-Charge and/or Technical Controlling Officer shall be final & binding on the bidder.

The work contemplated under this contract includes General Construction for the aforesaid project, all as detailed in the Bill of Quantities. Specifications and Drawings.

Such other works which are not included in the aforesaid Bill of Quantities are generally intended to be executed through a separate agency. Notwithstanding the above, the WBSEDCL (West Bengal State Electricity Distribution Company Limited) reserve the right to order additional works under the same Contract. The WBSEDCLalso reserve the right to omit any item of work included in the aforesaid Bill of Quantities and award the same to any other Contractor or not perform it at all at their discretion and the Contractor shall not have any claim because of the same.

The Contractor for this work shall be required to work in co-operation and co-ordination with other agencies on site and give them all reasonable assistance and help for the execution of the work in an efficient manner all as directed. The words "approved" or "as directed" shall be deemed to convey approval or the discretions of WBSEDCL.

### 1.2 Indian Standard Specifications

The particular Specifications for the work is as detailed hereinafter. These specifications shall be read in conjunction with the relevant Indian Standard Specifications and the obtainable local practice as detailed in various regional handbooks of practice and the work shall be executed accordingly. Where the specifications in any of the standards are at variance with the specifications detailed herein, the specifications herein shall govern.

In case of any ambiguity/contradiction among different specification, the decision of WBSEDCL shall be final and binding on the Contractor.

### 1.3 Quality of materials & General Standards of work

The Contractor under this contract commits himself to use first class materials and assumes full responsibility for the quality of all material incorporated or brought for incorporation in the work. The work shall be executed in accordance with best engineering practice and as per direction of WBSEDCL.

In all possible cases, sample approved shall be done by the Contractor from WBSEDCL before bringing in the materials in bulk at site and the approved sample shall be well preserved at site at the risk and cost of the Contractor as a ready reference. Over and above, the submission of test certificate by the manufacturer, WBSEDCL may instruct further sample testing from Govt. Laboratories/ testing houses at the risk and cost of the Contractor for submission of test reports to become eligible for payment for those particular items used at work.

In all possible cases, where the warranty of manufacturers are sought for by WBSEDCL, the Contractor shall submit the cross warranty in the form and manner as directed by WBSEDCL including workmanship etc. along with the manufacturer's warranty certificate.

The relevant IS and PWD specification shall have to be complied with for all possible cases. The relevant clauses of GCC shall also be applicable and should be read in conjunction with technical specification of this contract

- 1. In case of any anomaly / contradiction, decision of WBSEDCL shall be final and binding on Contractor.
- 2. No extra claim shall be admissible for sample testing, sample approval, testing of sample at site etc to the Contractor and shall be considered as deemed to have been included in the rates quoted by the Contractor.

### 1.4 Power for construction

Construction power may be provided by WBSEDCL, if applied for by the Contractor as per prevailing rules and regulations of WBSEDCL. However, all charges for the construction power shall have to be borne by the Contractor. The relevant clause may also be referred to GCC in this regard.

Alternatively, the Contractor shall have to arrange required capacity D.G. set at his own cost, risk and responsibility to work. Necessary permission to operate DG set to be obtained from the concerned authority by the Contractor.

Arrangement of DG may also be kept for exigencies or power failure.

### 1.5 Scaffolding

All scaffolding and ladders required for the proper execution of the work shall be provided by the Contractor. The scaffolding should be stout and strong to prevent any collapse or displacement. Proper measure for safety of workmen working on scaffolding should be taken by the Contractor.

### West Bengal State Electricity Distribution Company Ltd.

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### 1.6. Measurements

The mode of measurements, wherever possible is specifically mentioned in these documents, where it has not been mentioned, it shall be as per provision of the PWDSOR and relevant Indian Standards IS 1200. All the measuring equipments, labour, manpower and other accessories necessary, shall be provided by the Contractor at his own risk and cost.

### 1.7 Tools and plant

The bidder along with his bid furnish a list of tools, plant and machinery which he intends to use for the works (as per proforma, if enclosedwith the bid document). The list should indicate the exact type of machine, its capacity, and year of manufacture, kind and capacity of propelling force, spare parts readily available and all other pertinent informations. The Contractor is obliged to use all the machinery mentioned in his list mentioned or others as required and instructed if WBSEDCL considers it necessary.

### 1.8 Setting out

The Contractor shall set out the building or other involved works after clearing the site and get the same approved by the owner. It shall be the responsibility of the Contractor to install substantial reference marks, bench marks etc. and maintain them as long as required by the owner. The Contractor shall assume the full responsibility for proper setting out, alignment, elevation and dimension of each and all parts of the work.

### 1.9 Surveying and Staking

It is the express responsibility of the Contractor to bring to site all surveying instruments necessary for the marking out, fixation of levels, etc. and conduct these survey operations himself with utmost accuracy. The Contractor shall put-up stable bench marks etc. as necessary for the work. Representative (s) of WBSEDCL may become present when this work is being carried out and will inspect all these operations with the Contractor's assistance. The Contractor shall be entirely responsible for accurate setting out of the work and he shall at his own expense make good any defects arising from errors in line and levels. Before commencement of excavation, spot levels on an approved grid covering the entire plot shall be taken by the Contractor in consultation with the owner and a proper record of these levels shall be kept jointly signed by the Contractor and the owner.

#### 1.10 Dewatering

Dewatering of accumulated water in all locations on jobsite from whatever source or cause until the virtual completion of the entire work shall be done by the Contractor at his own expense and shall not be separately paid for. The rate quoted by the Contractor shall be deemed to be inclusive of this.

### 1.1.11. Access to site, approach roads and roads within the premises

The Contractor shall at his own cost provide all approach roads required for the purpose of carrying out the work in the most expeditious and efficient manner and shall remove the temporary roads on completion. He shall acquaint himself thoroughly regarding condition and suitability of public roads leading upto the limits of the premises and will provide vehicles for transportation of materials which meet the requirements of these road conditions. It shall also be responsibility of the Contractor to maintain at his own cost these roads till the construction is completed. The tenderer shall also acquaint himself with local laws and By laws and complying with all police and traffic requirements.

### 2. <u>EARTH WORK</u>

### 2.1 Excavation

Excavation for trenches over areas and for pits, etc. shall be done to widths, lines and levels as shown in drawings or to such lesser or greater widths lines and levels as directed. The bottom and side of excavation shall be trimmed to required levels, profile, etc. watered and thoroughly rammed. Where the Contractor excavated below required level in good ground inadvertently or carelessly they shall make up the void in concrete (1:5:10) at his own expense. In general, during excavation the Contractor shall take necessary precaution to retain earth (viz sal ballah piling, shoring etc) so that the earth will not slide or fall down to avoid any accident and hamper the progress of work at his own risk & responsibilities. They will take necessary step to prevent the damage the adjacent structure or existing services. They shall repair and make good any such damage at their own expense to the satisfaction of the owner. A suitable path for men and materials around the excavated pit should be maintained throughout the work.

### 2.2 Shoring

The sides of excavation should be timbered and supported in such a way as is necessary to secure these from falling in and the shoring shall be maintained in position as long as necessary . The Contractor shall be responsible for the proper design of the shoring to be approved by the owner to hold the sides of the excavation in position and ensure safety of persons and properties. The shoring shall be removed as directed after the items for which it is required are completed. Unless & otherwise mentioned in the schedule of quantities , no extra payment will be made for shoring, unless & otherwise specifically instructed in writing by WBSEDCL over and above the general requirement as mentioned in clause no. 1.2.1 under the heading "Excavation" in this tender document.

### 2.3 Dewatering

All water which may get accumulated in excavations during the progress of work from whatever cause or source, shall be bailed or pumped out as necessary. The rate for excavation shall be deemed to include for the same.

### 2.4Silver sand filling

Filling sand may be silver sand having silt content less than 5% by weight and 300mm compacted thick layers will be spread, wetted & saturated to achieve the compaction. However for any special case, WBSEDCL may instruct filling by sand other than silver sand which the Contractor shall comply. The specification etc shall be guided by relevant IS code.

### 2.5 Filling

Filling under floors or other places indicated shall be done by fine sand or silver sand brought from outside by the Contractor. The material should generally be good quality. Filling shall be done in layers not exceeding 15 cms. thick and each layer shall be fully inundated and consolidated properly by 8 to 10 tones power rollers in the case of where floor is coming or pneumatic

rammers wherever conditions permit. If it is not possible, the consolidation shall be done by hand rollers and pneumatic/plate vibrator followed by hand rammer. The surface of the filling shall be finished true to lines and levels as required. The filling shall be compacted in such a manner as to guarantee full stability. The compaction shall be such that minimum relative density obtained on testing is 90%. In general, test shall be performed for every 1000 M2 of compacted area. The filling final level after compaction then cutting and ready to take up soling work under the floor item, shall be checked by WBSEDCL.

### Disposal of excavated materials

All materials unearthed shall be removed from the site of excavation and disposed off during excavation with prior written permission of WBSEDCL from the site in an approved manner with the approval of local authority. The disposal of the materials can be in any of the following ways as directed by WBSEDCL:

- 1. Removal of surplus material outside the plot for disposal.
- 2. Removal of surplus materials to a particular place / dumping ground as directed by the owner. No extra claim on any account will be entertained. The Contractor must also secure the approval of the owner regarding the quantity of surplus materials to be removed prior to commencement of this item of work.

### Back filling

All shoring and form work shall be removed after their necessity ceases and trash of any sorts shall be cleaned out from the excavation. All space between foundation masonry or concrete and sides of excavation shall be refilled to the original surface with approved excavated materials in layers 15 cm in thickness watered and rammed. The filling shall be done after concrete or masonry is fully set and done in such a way as not to cause undue thrust on any part of the structure . Where suitable excavated materials is to be used for refilling, it shall be brought from the place where it is temporarily stacked and used in refilling.

No excavation of foundation shall be filled in or covered up until all measurements of excavation, masonry, concrete and other works below ground level are jointly recorded. Black cotton soil shall not be used for back filling or in plinth filling.

#### Measurements

Measurements for all excavation, filling, carting away and earthwork shall be in solid measure. The rates quoted by the tenderers are thus for solid measure units. The following factors shall be applied to obtain quantities of solid measure.

- No reduction in volume (as per drawing area ).
- ExcavationFilling Volume shall be determined and consolidated by levels taken before and in layers after compacted filling and by measuring the length and breadth as required.

The mode of measurement for various types of excavations shall be as under:-

- In case of trenches, pits and areas, measurements shall be on the basis of size of foundation & the depth of bottom of foundation (bottom of bed concrete if provided) formation. Surface dressing shall be measured in plan only.
- In case of pipe trenches and drains, measurement of width of trench shall be diameter of the pipe plus an allowance of 50 cms. to allow for collars, flanges etc.
- c) The relevant clauses of IS Code and/or PWDSOR shall be applicable.

#### Sub-grade conditions 2.9

Sub soil investigation report will be provided by WBSEDCL, if sought for by the Contractor in writing.

### 2.10 Brick Soling

Where brick soling is required to be provided, it shall conform to the following specifications:-

It shall be flat of the bricks touching each other as per item. Soling shall be closely packed leaving no interstices or gaps. shall be sprayed with water. If crevices appeared between two bricks after spraying The interstices to be filled with fine sand and with water it shall be mended again by spreading fine sand.

### CONTROLLED CONCRETE, PLAIN & REINFORCED CONCRETE

### 3.1 General

Concrete and reinforced concrete work shall be carried out generally in conformity with the latest Indian Standards IS: 456 except for provisions indicated herein below. All work is to be carried out with utmost precision and upto date scientific knowhow and the Contractor shall employ thoroughly competent staff to achieve the highest standards.

### 3.2 <u>Cement</u>

Cement for the work shall be either of ordinary Portland Cement conforming to the latest Indian Standards IS:8112 -1989 for 43 grade and IS 12269 -- 1987 for 53 grade or Portland Pozzolana Cement conforming to IS 1489 (Part 1) 1991specification (fly ash based), IS 1489 (Part 2) 1991 - specification (Calcined clay based) or Portland Slag Cement as per IS:455 (with latest revision), as instructed & approved by the E-I\_C and/or Technical Controlling Officer for the work and of the best normal setting quality unless a quick setting quality is expressly instructed in the specifications or otherwise during the course of the work by WBSEDCL. If directed the Contractor shall purchase Portland cement as fresh as possible after manufacture and where there is reason to believe the cement has been WBSEDCL may demand a Laboratory Test Certificate regarding the character of cement and the Contractor shall furnish the same at no extra cost. WBSEDCL shall reject any cement which in its opinion does not meet the required standards.

The list of manufactures for cement shall be as per the list provided in the bid document and/or PWDSOR and/or as instructed in writing by WBSEDCL.

Any field or laboratory test for cement, if asked for by WBSEDCL shall be carried out at the risk and cost of the Contractor as per provision of relevant IS codes.

All bags and containers in which cement is packed shall be stored in a dry, weather-tight, properly ventilated structure with adequate provision against absorption of moisture. The Contractor shall at all times maintain for the inspection of WBSEDCL, a log book indicating the receipt of cement brand and agent from whom obtained and the age of cement. Cement which has caked or perished by being wet or otherwise shall on no account be used on the work. Cement shall be consumed on the works in the same sequence as that of their receipt at site. Cement reclaimed from cleaning of bags or from spillage from containers or otherwise shall on no account be used. The cement is to be stacked in an orderly and accessible way to permit WBSEDCL physical verification of existing stock at all points of time. The Contractor has to ensure furnishing a copy of manufacturer batch test certificate along with every lot of supply.

If so felt, WBSEDCL may instruct the Contractor for further testing of cement in Govt. laboratories/testing houses as has been detailed in the relevant clause of GCC, over and above the submission of test certificates at the risk and cost of the Contractor.

Sand: fine aggregate shall generally conform to latest Indian Standards (IS:383). Sand shall be natural sand, crushed gravel sand or crushed stone sand at the discretion of WBSEDCL. Use of sea sand is prohibited. It shall be composed of hard siliceous material and shall be clean and of sharp angular grit type. Sand shall be properly graded minimizing all voids.

Its grading shall fall within the limit of grading zone I, II for non-plastering work and Zone III for plastering work, of Table 1 (Ref clause no 3.1.4.3 of CPWD specifications 1996, revised to 2000 vide page no 33.). Allowance for bulking of sand shall be made. Silt content on sand should not be more than 5%. Laboratory equipment such as

measuring jars etc. are to be kept at site for time to time checking of bulkage and silt content.

For sand testing periodicity may be given at the rate of every 150 cum of concrete work of all kinds (apart from RMC) and part thereof. For plastering work however, a separate periodicity of testing in term of every 500 SQM of plastering of any thickness irrespective of number of coats and part thereof is to be adopted. For brick masonry one test for 100 cum or part thereof for masonry may be adopted. The tests so mentioned shall have to be carried out through reputed Central/State Government registered testing house/ laboratory and not from site testing facilities.

All tests, to carry out field as well as laboratory tests shall be borne by the Contractor.

### 3.4 Coarse Aggregate

Coarse aggregate shall be approved hard aggregate generally conforming to latest Indian Standards: IS - 383. The following tests should be carried out for every new lot of supply:---

- Crushing value
- Impact value
- Sieve analysis
- Deleterious material
- Flakiness index

For every 150 CUM of concrete work of all kinds (apart from RMC) and part thereof one test shall be carried out. All costs to carry out field as well as laboratory tests shall be borne by the Contractor .

### 3.5 Types of concrete, strengths etc.

The Bill of Quantities specifies M20 grade of reinforced cement concrete. The strength corresponding to this grade is given as under :-

### TYPE OF CONCRETE

SI. No.	Type of concrete	Characterize design strength	Target design strength
	N/mm2	N/m	nm2
1.	M - 20	20	≥27

Even though the Bill of Quantities specified various types of concrete, it is possible that the type may be altered 15 cm. after normal curing for 28 days. The strength of preliminary test cubes shall be as per IS :456( latest revision )

Sufficient number of cube mould should be kept ready at site . Relevant IS code of Specification and PWDSOR shall have to be followed.

The type of concrete for any particular situation or work shall be as per instructions given to the Contractor by WBSEDCL notwithstanding anything contained in the foregoing clauses.

### 3.6 Water

Water conforming to IS 456 - 2000 for all concrete work shall be clean, free from deleterious matter such as oils, acids, alkalis, sugar and vegetable matter. Every attempt shall be made to use potable water. Water storages facilities provided by the Contractor shall be maintained properly to preclude contamination of water by any of the harmful substances. WBSEDCL may instruct the Contractor to carry out test of water sample as per provision of relevant IS code, in Govt. laboratories and the Contractor shall comply the same at his risk and cost. The quantity of water to be added to concrete for mixing shall be such as to afford workability consistent with strength. Water/cement ratio shall be recorded in every batch of concrete. Arrangement for slump cone test shall be kept at site to arrive workability whenever WBSEDCL wants to check at site. The periodicity of testing may be conducted as once in six weeks and part thereof or as specifically instructed by the Owner.

### 3.7 <u>Tests for determination of strength of Reinforced concrete</u>

As will be apparent from the Bill of Quantities, the strength of concrete specified is the criterion and the Contractor shall make every effort to obtain the specified strengths by good quality control. In case of concrete which does not obtain the specified strength at 28 days, such work shall be demolished and reconstructed to obtain the requisite strengths all as directed by WBSEDCL. To determine whether concrete in any particular part of the work is of the requisite strength or not, test cubes (works test cubes) shall be made from samples collected from the concrete being poured for the particular part and determined as per acceptance criteria detailed hereinafter. The salient features for the collection of samples is as indicated below:

### 3.8 Testing of Concrete Cubes for determining Compression Strength for Reinforced Concrete Work at own cost

- 3.8.1. Quality as specified.
- 3.8.2. Compression Strength shall be as specified for the particular type of concrete.
- 3.8.3. Criteria for acceptance of work

The test and acceptance criteria shall comply to relevant IS codes including IS :456Part or element of concrete work shall be deemed to be acceptable, provided the three cubes tested for 28 days strength conform to the following :

- 3.8.3.1 Average of the three cubes strengths shall not be less than the specified strength.
- 3.8.3.2 No individual cube strength shall be less than 90% of the specified strength.
- 3.8.3.3 If any individual cube strength exhibits more than 133% of the specified strength, such cube shall be classified as freak and criteria in 1.3.9.3.1 and 1.3.9.3.2 above, shall be applied for the remaining two cubes only and the acceptability determined.

### 3.8.4 Quantum of cubes and testing

The decision of WBSEDCL in this regard shall be final and binding. Cube testing shall be done at site regularly and at least 20% of this testing shall be carried out in the reputed laboratory (as approved by the Owner) as defined in the relevant clause of GCC.

Testing machine with valid calibration certificate to be kept at site for crushing of cubes . The testing shall be duly witnessed and approved by WBSEDCL.

All costs to carry out tests at field as well laboratory shall be borne by the Contractor .

### 3.9 Making of non-RMC concrete

All mixing of aggregates, cement and plasticizer shall be done by volume which is equivalent to design mix. All the necessary equipment such as measuring boxes, devices for determination of moisture and bulk in sand, slump cone etc. shall be provided by the Contractor. Concrete shall be machine mixed until there is a uniform distribution of materials and uniform colour and consistency is achieved and under no circumstances for less than two minutes.

A wooden board approximately 30 cms. x 40 cms. shall be put up at the concrete mixer on which shall have been legibly written in English and the local language, the quality of concrete that is being mixed, the proportions and other relevant data.

### 3.9.1 <u>Cubes</u>

The size of cubes to be prepared and tested shall be 15 x 15 x 15 cm.(6" x 6" x 6").

The minimum number of cubes to be collected from each samples as detailed below shall be six. Three cubes each are intended for testing at 7 and 28 days respectively and determining the strength.

Cubes tested at 7 days should give a strength of not less than 70% of the corresponding strength at 28 days. It shall however be expressly understood that the test results at 28 days only shall govern and the 7 days tests are intended to obtain a fair idea only.

Relevant IS codes including IS: 456 ( latest revision ) shall be followed by the Contractor . All costs for sampling and field as well as laboratory testing shall be borne by the Contractor.

### 3.9.2 Number of tests

The number of cube tests in a work shall be entirely guided by the relevant IS Codes and/or at the discretion and as directed by the Controlling Officer of the work. Cubes shall generally be collected for various structural members and also for works at various levels. It shall also be collected whenever the usual quality for a particular strength is in suspect. The number of cubes may at most be twelve or even more as instructed by WBSEDCL and as per provisions of relevant IS code on any given day in a particular work. However, in case other important casting works are running in parallel with a major concreting work, additional cubes in the range of six or twelve shall be taken for each of them as well.

### 3.9.3 Preparation and Testing of Cubes

Casting of cubes, preparation of moulds for the same, processing and curing the cubes and pressure testing the same shall be as per detailed instructions which will be issued to the Contractor from WBSEDCL from time to time or as per relevant

Indian Standard as amended upto date as directed. All costs including construction of vat for curing of cubes at site shall have to be borne by the Contractor.

### 3.9.4 Equipment modules, testing etc.

It is the entire responsibility of the Contractor to prepare and get the cubes tested and provide for all material, labour, modules, equipment, facility and charges for sampling, testing, curing etc. The Contractor's quoted rate work shall be deemed to include for these and no extra payment whatsoever is admissible on this account.

### 3.9.5 Slump

If in the opinion of WBSEDCL, slump cone tests are required to be performed to establish workability the same shall be carried out at free of cost. Slump tests are however, to serve as guide only.

### 3.10 Transporting and pouring of concrete

No mixing of concrete shall be started unless the situation where they are to be poured are prepared and kept ready. Concrete shall be poured immediately on preparation. Transporting of concrete shall be done as speedily as possible and also in a manner to prevent segregation of aggregates. No re-tempered concrete shall be allowed to be used on the works. No concrete shall be allowed fall through a height more than 1.20 M. where the concrete to be placed from more height it should be done through chute as per relevant IS specification and as directed by WBSEDCL.

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Before fresh concrete is placed against an already cast and hardened section, such surfaces shall be roughened, swept clean, moistened with water and treated with cement slurry. Fresh concrete shall then be poured as required. Under no circumstances, concrete mixed more than stipulated initial setting time as per IS code shall be used. Dewatering of excavations for concreting where necessary shall be carried out by the Contractor as directed and the rates quoted by the Contractor are deemed to be inclusive of such dewatering. No concreting shall be done in adverse weather condition, except exigencies with proper precautions or prior approval from WBSEDCL.

### 3.11 Ready Mixed Concrete

If allowed and approved by WBSEDCL, the Contractor shall buy the RMC from a manufacturer approved by the Owner. The Contractor in association with the manufacturer will make a suggested trial mix with correct water cement ratio, slump and workability. To verify this, the test cubes from the concrete used should be made and tested. The tests results will determine the cement content and water cement ratio that produces the required strength. If the test result satisfies the WBSEDCL this mix design shall be followed throughout the work for RMC work, until and unless there is variation in shape and size of course aggregate, fineness of fine aggregate, cleanliness moisture content etc. The design mix as per stipulated strength of concrete mentioned in this technical specification shall be approved by the Consultant or any other designated authority as directed by WBSEDCL.

RMC will be supplied by manufacturer at site from a mixing area by transit mix trucks. The Contractor will get a assurance from manufacturer that initial setting will not start during the distance to be travelled from batching plant to job site. Again the Contractor will take a written statement from the manufacturer that within which time concrete should be delivered and discharged from transit truck mixer after the introduction of water to cement and aggregate and when the initial setting will start.

The manufacturer will also ensure that transit mix truck will discharge concrete with slump designated for the job. The time period between the discharge and placement in position should also be worked out and got approved.

The Contractor should arrange a material hoist to carry the wheelbarrow to the floors under construction for transferring of concrete and a smooth runways is to be provided for their travel to avoid any segregation or concrete mix may be carried by head load for placing of concrete as directed by WBSEDCL from the point of transfer of concrete at upper floors. During transferring of concrete to walls or deep beams baffle board, downspout or chute to be used for prevention of segregation. It is essential to closely supervise the discharging of concrete to prevent segregation at all points. The alternative approach can be to pump out the ready mixed concrete to the location. The method of pumping/placing, the W/C ratio and the plasticizer used need to be approved before commencing the operation as defined herein above in this clause .

Regular mandatory tests on the consistency and workability of the concrete after transferring from transit mix trucks at job site shall be done to achieve the specified compressive strength of concrete. The frequency of testing and the acceptability criteria will be according to I.S: 456 and I.S:516. A register of work test of concrete shall be maintained at site by the Contractor. Cube testing register in standard CTE format is to be kept at site. WBSEDCL shall decide whether a particular set of cubes would be tested at site or at a reputed central/state government registered testing house/laboratory. In any case, at least 20% of the testing would be carried out at such laboratories. The Contractor shall undertake the entire cost of transporting of cubes to such testing facilities outside the site and testing charge therein.

In general , payment for RMC shall be made on the basis of actual measurement or as per drawing whichever is less , of different reinforced concrete elements at site. If any deviation from the original drawing is required as per decision of the Controlling Officer , the Contractor shall comply to the same during execution . In such case, the payment will be made based on the actual measurement of different reinforced concrete elements or as per revised drawing issued subsequently whichever is less . No extra payment will be made for wastage during transfer of RMC at site or extra concreting done by the Contractor at his own . The rate includes the cost of materials and labour for carrying of RMC to upper floors, placing, consolidating, finishing, curing & testing etc.

The Contractor shall submit the design mix report and its further corroboration through trial cube tests (both 7 days and 28 days) from a reputed institute for approval by WBSEDCL and adoption at site. All related cost would be borne by the Contractor.

No RCC work shall be taken up till such time final test report of trial design mix is not available with WBSEDCL.

In case any admixture is used in RMC it shall conform to IS: 9103 latest edition and after obtaining necessary approval from WBSEDCL.

For RMC concreting, regular cube tests in the multiple of six (three for 7 days and three for 28 days respectively) are to be carried out as per IS :456 ( latest revision ) and the works to be carried out as per stipulations laid down in IS codes and clearance by WBSEDCL. The decision of WBSEDCL shall be deemed as final in this regard.

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3.12.1 Materials and Design

a) The method and design of form work to be adopted by the Contractors is to be produced for approval of the same by the WBSEDCL before any form work is taken up.

The form work shall be of approved 12 mm. thick water proof ply surface to be in contact with concrete, to be planed smooth. In every case joints of the shuttering are to be such as to prevent the loss of liquid / water from concrete. In ply shuttering the joints shall be perfectly close and lined. Steel shuttering using hydraulic jacks shall preferably be used in all possible cases and as directed by WBSEDCL.

If any particular materials or materials be specified in the schedule of quantities for form work such particularly specified material or materials shall be used in work. The form work shall be so constructed as to remain sufficiently rigid during placing of the concrete. All shuttering and forming must be adequately stayed and braced to the satisfaction of WBSEDCL for properly supporting the concrete during the period of hardening. The forms shall have sufficient strength and rigidity to hold concrete and withstand the pressure of remaining and vibration without excessive deflection from the prescribed lines and more so when the concrete is vibrated. The surface of all forms in contact with concrete shall be clean, rigid, watertight and smooth. Suitable devices shall be used to hold corners, adjacent ends and edges of panels of other forms together in accurate alignment.

- b) The form work shall conform to the shape, lines and dimensions to suit the R.C.C. members as shown on drawings and be so constructed. Form work shall be adequately designed to support the full weight of workers, fresh placed concrete without yielding settlement or deflection, and to ensure good and truly aligned concrete finished in accordance with the construction drawings. A camber in all directions of 6mm for every 5 M span in all slab and beam centering shall be given to allow for unavoidable sagging due to compression or other causes, unless otherwise specifically instructed in writing by WBSEDCL.
- c) The form work shall be as designed that the sides of the beams retain its position and does not get bulged these however should be so designed that the sides of the beams can be first struck leaving the soffit of beams and the supporting props in position. Props shall be designed to allow accurate adjustment and to permit of their being struck without jarring the concrete. No bamboo propping shall be used . Bulged section shall not be accepted and need to be rectified or rebuilt as per instruction of WBSEDCL . No extra claim , in any case shall be entertained by WBSEDCL .
- d) Temporary openings shall be provided at the base of columns forms and at other points where necessary to facilitate cleaning and observation immediately before concrete in deposited.
- e) Unused and new waterproof ply of 12 mm thickness is to be sited only and it shall be good enough to withstand a maximum of 5 (five) repetitions. In case in the opinion of WBSEDCL the formwork is seen to be no longer in order even before undergoing the maximum permissible 5 (five) repetitions, the same would be rejected and forthwith removed from site.

f)Vertical Shuttering

The vertical shuttering shall be carried down to such solid surface and is sufficiently strong to afford adequate support and shall remain in position until the newly constructed work is able to support itself. Props shall be securely braced against lateral deflection. Where timber props are used like bullies, they shall be a minimum diameter of 10cm, and shall be straight and adequately strong. The spacing of such struts shall be designed to carry to carry loads imposed on it without undue deflection of the members supported by the props. The spacing of props shall be approved by the WBSEDCL and any alterations suggested by

him shall be carried out at Contractor's expense. Bracing shall be provided as directed without extra cost. Contractor shall allow in his rates for providing props and struts for any height shown in the working drawings issued to Contractor from time to time.

### g)Curve & Circular shuttering

Unused and new waterproof ply of 6 mm thick supported by good quality wooden batten shall be used. Repetition of the material will be same as stated above for the other shuttering.

#### 3.12.2 Water Tightness

It is the Contractor's responsibility to ensure that the forms are checked for water tightness just before concreting operation starts and to make good any deficiencies.

### 3.12.3 Cleaning and Treatment of Forms

All rubbish, particularly chippings, shavings and saw dust, shall be removed from the interior of the forms before the concrete is placed and the form work in contact with the concrete shall be cleaned and thoroughly wetted or treated with an approved composition. Care shall be taken that such approval composition is kept out of contact with the reinforcements. Interior of all moulds and boxes must be thoroughly washed out with a hose pipe or otherwise so as to be perfectly clean and free from all extraneous matter previous to the deposition of concrete.

Prior approval of the form work should be taken from the WBSEDCL before placing reinforcements on form work. No concrete shall be commenced until the WBSEDCL has inspected the form work and until his approval is obtained. A notice of at least 24 hours shall be given to the opinion of the WBSEDCL any materials is not accordance with the specification or the form work, is wrongly done or otherwise defective the Contractor shall immediately remove such materials from site and replace the same and rectify any other defects in accordance with the instruction of the WBSEDCL and to his entire satisfaction.

The lines , levels, form work, reinforcement etc shall be checked by the Contractor with subsequent approval / checking by WBSEDCL prior to allowing of concreting , by WBSEDCL . However , the cost, labour etc for such checking shall be borne by the Contractor and this will not relieve any of the obligations under this contract .

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### 3.12.4 Stripping

Forms shall be left in place and removal shall be done as per norms laid down in IS codes and as instructed by the WBSEDCL and shall then be removed with care so as to avoid injury to concrete. In no circumstances shall forms be struck until the concrete reaches a strength of at least twice the strength as to which the concrete may be subjected at the time of striking. The strength referred to shall be that of concrete using the same cement and aggregates, with the same proportions, and cured under conditions of temperature and moisture similar to these existing on the work. Where possible, the form work should be left longer as it would assist the curing. Exposed surfaces of concrete which are indicated/ required to be plastered shall be roughened with wire brushes and hacked out closely immediately after removal of formwork by free of cost.

Any honeycomb , appeared after removal of form work shall be mended as per procedures laid down in IS codes including pressure grouting required , if any, as instructed by WBSEDCL with risk and cost of the Contractor without any further claim.

### 3.12.5 Stripping Time

In normal circumstances (generally where temperature are above 20°C) and where ordinary cement is used, forms shall be struck after expiry of the following periods and as per relevant IS code , CPWD manuals unless otherwise directed at site by WBSEDCL.

### 3.12.6 Form Work In Lift For Continuous Surfaces

Where forms for continuous surface are placed in successive units, (as for example in columns or walls) the forms shall fit tightly over the completed surface so as to prevent leakage of slurry from the concrete and to maintain accurate alignment of the surface.

### 3.12.7 <u>Procedure While Removing The Form Work</u>

All form work shall be removed without such shock or vibration as would damage the reinforced concrete. Before the soffit and strata are removed the concrete surface shall be exposed where necessary in order to ascertain that the concrete has sufficiently hardened. Proper precautions shall be taken to allow for the decrease in the rate of hardening that occur with all cements in the cold-weather.

### 3.12.8 <u>Tolerances</u>

The following shall be the maximum permissible tolerance :-

- a) On general setting out dimensions upto 4 M. in length a tolerance upto 3mm will be allowed.
- b) On lengths of more than 4 M. tolerance of not more than 5mm will be allowed.
- c) On the cross sectional dimensions of columns, beams, slabs, faces, chajjas, mullions, grills, fins, louvers, and such other members tolerance more than 2mm will not be allowed.
  - d) The top surface of concrete floor slab will be within plus/minus 3mm of the level and line shown on the drawings.
- e) Columns and walls and other vertical members shall not be more than 3mm out of plumb in their storey height and not more than 6 mm out of plumb in their full height.

f) If work is not carried out within the tolerance set out above (a) to (d) the cost of all rectification measures of dismantling and reconstructing as decided by the WBSEDCL shall be borne by the Contractor. In case of work dismantled, the same shall not be measured and no payment even for cement and reinforcement shall be allowed.

### 3.13 Consolidation and processing of concrete

Concrete for all works shall be compacted by means of suitable vibrating equipment. One or more spare vibrators which are in complete working condition shall always be kept ready at sites to be put into commission in case of failure of the vibrators under use. The vibrators shall be operated by skilled personnel, thoroughly instructed as regards the mode, frequency, duration etc. regarding vibration. Concrete of low volume/ quantum for a particular work may however, be permitted by WBSEDCL at their sole discretion to be consolidated by hand only after prior permission.

#### 3.14 Finish to concrete surfaces

Finish to concrete surfaces at various situations shall be as per directions of WBSEDCL. Where form finish is specified, the final surface shall be smooth and even and no-undulations, ridges, spots etc. shall be permitted. They shall be laid to pattern as directed. In case surfaces intended and directed for form finish, exhibit any of the defects above mentioned, the surfaces shall be rubbed with carborundum or plastered and finished all as directed at the risk and cost of the Contractor. The decision as to the acceptability or otherwise of a surface will be notified by WBSEDCL and the Contractor will implement the instructions accordingly.

### 3.15 <u>Concrete cover for reinforcement</u>

Where not specifically indicated in the drawings, concrete cover for reinforcement shall be as per the latest Indian Standards IS 456 - 2000 and as per directions at site from time to time. Proper concrete cover blocks adequately cured to suit various covers as required shall be provided in adequate numbers sufficiently ahead of the work.

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### 3.16 <u>Construction joints</u>

Construction joints in concrete work shall be provided as far as possible only at predetermined places as per direction and in consultation with WBSEDCL. Joints shall be provided as specified in latest. Indian Standards or as directed by WBSEDCL.

### 3.17 Curing

It is very important that all cement concrete work shall be cured properly. All concrete work shall be kept continuously in a damp or wet condition by pouring or by covering with a layer of moist sack, canvas, hessian or similar material for a period as stipulated in the relevant IS codes and specifications from the date of concreting. Water used for curing shall also be free from any deleterious substances and shall generally be fit for drinking. The work shall be adequately protected from drying, winds and direct sun rays. The Contractor should arrange at his own cost a temporary water supply line with provision of centrifugal pump, valves etc. for curing and constructional purpose at higher level. A sample sketch is enclosed for the reference purpose.

### 3.18 Openings and inserts

All openings and inserts which are designated in due time or as required for services, will be exactly provided by the Contractor. The Contractor should also fix the anchors or such items which may be supplied by the Proprietor in exact position and in perfect lines and levels. Inserts apply to such items as timber, dowels, bolts, loop, brackets, suspension irons, hooks, screws, plates, pipe of various types and diameter etc. etc. Openings in concrete or masonry must be provided in exact location to correct shape, size and depth or slightly bigger, if directed so, as shown in drawings or as instructed. It must be clearly understood that the provisions of inserts and openings as contemplated in this contract are to be carried out with "utmost precision" and any deviation of the same from that as shown in drawing or instructed, have to be rectified by the Contractor at his own cost and responsibility. The Contractor should make provision of openings to deep beams and their members at bottom or at lower level as necessary for cleaning purpose prior to concreting.

### 3.19 Tor Steel Reinforcement

TMT bar for reinforcement shall be of tested quality and shall conform to the relevant Indian Standards (IS:1786). Reinforcement shall be fabricated to shapes and dimensions shown on the drawing and shall be placed where indicated on the drawings or required to carry out the intent of drawing and specifications or as directed by WBSEDCL. Before placing, reinforcement shall be thoroughly cleaned of loose rust, coating etc. which would result in reducing or destroying the bend. Oiling the bars to clean them is strictly prohibited. Bending, straightening, cutting etc. operations shall be carried out in a manner not injurious to the material. List of manufacturers for reinforcement shall be as per BOQ and/or as per PWDSOR (Latest amendment) and/or list given in the technical specification of the "Bid Document" and finally, as instructed in writing by WBSEDCL.

All reinforcement shall be bent cold. Unless otherwise directed, reinforcement shall not be spliced at points of maximum stresses. WBSEDCL shall be informed well in advance before such splicing is taken up. Laps and splicing shall conform to the latest Indian Standards.

Reinforcement shall be accurately tied at all intersections and laps with 16 SWG soft drawn binding wire, such that the reinforcement will give a rigid structure. Binding wire will not be measured or accounted for separately. The Contractor's rate for reinforcement will be measured and paid for according to bending lists without allowances for cutting, wastages, binding wire

etc. Authorised laps, hooks, chairs, spacers etc. shall, however be accounted for. In case, the Contractor or WBSEDCL desires to resort to welding, there shall however be made as if the laps have been provided and no extra claim whatsoever shall be admissible on this account. The relevant IS code and schedule of specification shall be followed and applicable for the case also. Reinforcement shall be assembled in place with proper concrete cover blocks to suit various covers as required. The Contractor has to ensure furnishing of manufacturer certificate with every lot of supply.

If felt necessary, WBSEDCL may ask for testing of reinforcement sample, over and above, submission of manufacturer's certificate, in Govt. laboratories/ testing houses as detailed in the relevant clause of GCC, at the risk and cost of the Contractor.

### 4. MASONRY AND PLASTERING

### 4.1 Materials

### 4.1.1 Bricks

All bricks shall be table moulded, burnt bricks of crushing strength not less than 75 kg/Sq cm. They shall be hard sound and well burnt with sharp edges and of uniform sizes and shapes. Bricks shall be neither under-burnt nor over-burnt and shall be free from cracks, stone floats, or other such defects as defined in relevant IS code and relevant schedule of specification. When immersed in water for 24 hours, bricks shall not be absorb more water than 20% of its dry weight. All bricks shall be identical/equal to samples submitted and approved by WBSEDCL before the commencement of the work. Metallic sound of brick is also a criteria.

### 4.1.2 Cement and Sand

Cement and sand used for masonry and under the heading plastering work shall conform to the specifications laid down under the heading "Plain and Reinforced Concrete" as per clause of 1.3 above and relevant IS code, PWDSOR and schedule of specifications.

### 4.1.3 Additives

Additives, like integral waterproofing compounds, shall be of the approved type from reputed manufacturers and as per instruction in writing by WBSEDCL. These shall be used strictly in accordance with the manufacturer's instructions/specification. The additives shall conform to IS: 9103.

### 4.2 Samples

When demanded by WBSEDCL, the Contractor shall produce samples of materials or carry out samples of work for WBSEDCL approval. All materials used as also works carried out shall conform to the quality of approved samples. Production of these samples shall be at Contractor's cost. However, approval of samples by WBSEDCL shall not relieve the Contractor's obligation of the Contract during entire period of Contract.

Testing of bricks shall be carried out in respect of dimension, crushing strength, water absorption and efflorescence in a standard sample size of six bricks. The periodicity of testing may be taken as once for every 50 CUM of brick masonry of nominal thickness not less than 250 mm and part thereof. Similarly for half brick masonry once for every 500 sqm and part thereof. These tests shall be guided as per relevant IS code and CPWD specifications at the risk and cost of the Contractor.

### 4.3 Brick masonry

Brick shall be soaked in clear water for at least six hours in a vat before use. Bricks shall be laid in English bond unless specified otherwise. No half or quarter brick shall be used except as closers. Brick shall be accurately raised to plumb.

Brick work shall be raised uniformly all round and no part shall be raised more than 1 metre above another at any time, and the work shall be properly toothed and racked back. In case of 125 mm. thick brick walls, wire mesh shall be provided in every third course as per relevant specification and as instructed by WBSEDCL. The wire mesh shall be properly bedded in mortar, as directed.

Joints in brick work shall not be more than 10 mm. thick. Brick work shall not be raised more than 10 courses a day. The work shall be kept watered thrice a day for 10 days and afterwards twice a day for 3 weeks. All joints shall be thoroughly flushed with mortar at every course. Care shall be taken to see that bricks are properly bedded and all vertical joints completely filled to the full depth. The jointed of brick work shall be raised out to a depth not less than 10mm. as the work proceeds. The surface of brick work shall be cleaned down and watered properly before the mortar sets.

### 4.4 Plastering

Plastering work in general shall proceed from top to bottom. An entire unobstructed area shall be plastered in one operation. The surface to be plastered shall be thoroughly cleaned, watered and roughened to provide key. Joints in brick work shall be raked out and cleaned. The surface shall be watered and well wetted for at least 24 hours before the commencement of work.

The entire plastered work shall be truly vertical and to proper lines and levels. All exposed angles shall be carefully flushed to provide neat and even surface. Any work that does not conform to approved samples or is not to the satisfaction of WBSEDCL shall be rejected and the Contractor shall be liable to redo the work at his own cost.

Cement sand plaster will be used. Sand will be coarse or fine (Zone-III) .

Where waterproofing compound is specified to be provided in mortar for plaster, approved integral waterproofing compounds shall be used. These shall be used and plastering work shall be carried out strictly as per manufacturer's recommendations.

### 4.5 <u>Measurements</u>

### 4.5.1 General

All the rates quoted by the Contractor shall be for a fully finished item of work and shall include for all material, labour, miscellaneous works like storage, loading/unloading, scaffolding, hoisting gear etc. as also all taxes, duties,

overheads, profits, etc. complete. The measurement of all items shall be guided by relevant provisions of the GCC and specification, in general .

### 4.5.2 Masonry

Accounts on masonry shall be settled on the basis of cubic metres or square metres as indicated in the Bill of Quantities. Quantities will be decided on the basis of pertinent plans. Openings and recesses which exceed 0.10 sqm. will be deducted from quantities. Openings left initially on specific instructions or as required shall be closed at a later date, if so instructed by WBSEDCL, at no extra cost. Similarly, all openings, recesses, grooves etc. shall be provided at no extra cost.

### 4.5.3 Plastering

Accounts on plastering shall be settled on the basis of square metre, as arrived at from pertinent plans and for a particular type of plaster. Accounts shall be settled on the basis of dimensions of raw structure, Grooves, notches, drip notches etc. shall be provided in plaster free of cost, wherever indicated by WBSEDCL or shown in drawings. Similarly, no special compensation shall be paid for plastering in recesses, grooves, etc. shall be accounted for under relevant item of work. However, providing cleavage or similar miscellaneous works shall be deemed to have been include in the rates quoted by the Contractor and shall not be separately paid for.

### **ANNEXURE-A**

### **Pro-forma for Contract Agreement**

(To be executed on Non-Judicial Stamp Paper of Rs. 100/-)

	day ofin the yearin the year	
Bengal Enterprise) having its head as 'WBSEDCL' (which expression	engal State Electricity Distribution Company Limited (A G office at Vidyut Bhaban, Block-DJ, Sector-II, Kolkata-700091 on shall unless excluded by or repugnant to the context be de E PART, AND	hereinafter referred eemed to include its
	hereinafter referred to as the 'CONTRACTOR' (Which exponents to be deemed to include his heirs, executors, administrators,	
dated	d tenders vide Tender Notice No ( annexed hereto ) for construction of	
··································		
AND WHEREAS in pursuance of sdated	such invitation for tenders, the contractor submitted a tender vio - (annexed hereto).	de no
	eration of the tender submitted by the contractor with clarificer submitted by the contractor and placed order noannexed hereto).	
NOW, THEREFORE, the WBSEDO	CL and the contractor agree as follows:	
	ndertake the work of	
datedrefe	as per order no erred to above.	
2. The WBSEDCL agrees to p	pay the Contractor as per order noreferred to above.	dated
In witness whereof the parties have	hereunder affixed their signature on the day, the month and year	ar written as above.
SIGNED, SEALED AND DELIVE	ERED	
Contractor	WBSEDCL	

1)	1)
Witness	Witness
2)	2)
Witness	2) Witness

BY THE PRESENT INDEMINITY BOND EXCUTED by me / us on this



### West Bengal State Electricity Distribution Company Ltd.

(A Govt. of West Bengal Enterprise)

**ANNEXURE-B** 

Day

### SPECIMEN COPY OF INDEMNITY BOND

(To be executed on Non-Judicial Stamp Paper of Rs. 100/-)

of	,20	I/We	having	Registered	Office/	residing	at
		(herein	nafter called	"OBLIGOR/OF	BLIGORS" wh	nich expression	shall
mean and includes my/our S	Successors 1	egal represer	ntatives, assig	gns ) do hereby b	oinds myself / o	ourselves and als	o our
Company /firm						ne power to bir	
with the promise and under	taking in fa	avour of the	West Benga	State Electricity	y Distribution (	Company Limite	ed., a
government Company withi	n the mean	ing of sec.61	7 of the Indi	an Company "s a	ct having regis	tered office at B	idyut
Bhavan, Block-DJ, Sector-II	, Salt Lake	City, Kolkat	a-700091( he	reinafter called a	is OBLIGEE, w	which expression	shall
mean and include it's legal r	epresentativ	ve, administra	ators assigns.			_	
-			_				
WHEREAS OBLIGOR/O	BLIGORS	has /have	been awa	arded to exec	ute the job/v	works under	letter
no	Dated_			_ issued by the	OBLIGEE af	ter having obse	rving
necessary formalities the det	ails of whi	ch is describe	ed in the scho	edule given hereu	ınder as per lett	ter mentioned he	erein-
above and whereas the said	job/works	will be/likely	to be done	in places covere	d under Employ	yees" State Insu	rance
Act(ESI) and /or the Workn	nen Compe	nsation Act(	W.C. Act) at	nd or other laws	relating to the	Labour Manage	ment
and Welfare.							

AND WHEREAS according to the condition of the contract the OBLIGOR/OBLIGORS is under obligation to execute this Indemnity Bond before the commencement of actual execution and OBLIGOR/OBLIGORS is/are aware that unless this Indemnity Bond is executed in accordance with the condition of contract before the actual execution in accordance with law the OBLIGEE shall have the power to deem that actual work has been started within the meaning of the contract before the execution of this Indemnity Bond

NOW THIS INDENTURE WITNESS THAT I / We the OBLIGOR/OBLIGORS do hereby undertake.

- 1. THAT the OBLIGEE shall not be held responsible for any type of accident which may take place during the course of work undertaken by the OBLIGOR/OBLIGORS.
- 2. THAT the OBLIGOR/OBLIGORS will take adopt all safety norms in respect of each and every Workmen labour personnel according to the rules or to the satisfaction of the OBLIGEE in all cases.
- 3. THAT the OBLIGOR/OBLIGORS undertakes to engage only those labour worker or any other personnel whether skilled or unskilled or any other person whether in technical management or non-managerial or any other capacity in the area covered under Employees" State Insurance Act, 1948 who has/have insurance coverage within the meaning of Employees State Insurance Act and further undertakes NOT to engage any person in the area covered under the Employees State Insurance Act, who does / do not has/have insurance coverage within the meaning of Employees State Insurance Act.

4. THAT the OBLIGOR/OBLIGORS further undertakes to engage only those labour worker, or any other personnel, whether skilled or unskilled, whether in technical, managerial or non- managerial or any other capacity in the area NOT covered under Employees" State Insurance Act who has life insurance for the sum assured equivalent to the amount of Compensation under the Employees" Compensation Act in case of accidental death or inquiry and such insurance has been effected by the OBLIGOR/OBLIGORS.

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- 5. THAT the OBLIGOR/OBLIGORS undertakes / undertake to indemnify and keep harmless the OBLIGEE from all claims action proceedings and of risk damage danger to any person whether belonging to/or not belonging to OBLIGOR/OBLIGORS.
- 6. THAT the OBLIGOR/OBLIGORS shall keep harmless the OBLIGEE from all claims compensation damages any proceedings in respect of any of its employee/workmen under the Workmen Compensation Act. or any other laws for the time being in force.
- 7. THAT if during the course of execution of work as stated in the letter mentioned hereinabove issued by the OBLIGEE, it is found that the OBLIGOR/OBLIGORS has/have not complied with guidelines/formalities within the meaning of Employees" State Insurance Act or Workmen Compensation Act or any other laws relating to the Labour Welfare for the time being in force, and also has not observed the safety norms in accordance with the law to the satisfaction of the OBLIGEE, the OBLIGEE shall have the right to stop the execution of work/job and the period of such stoppage shall continue till adequate safety and other compliance mentioned hereinabove under the labour welfare legislation have been observed and such period of stoppage shall not be taken into account for the calculation of the total period of completion of work for which the OBLIGOR/OBLIGORS is responsible to complete the work/job and it will be deemed that discontinuance was due to default of OBLIGOR/OBLIGATOR.
- 8. THAT, if at any time due to exigency, the OBLIGEE i.e. the West Bengal State Electricity Distribution Company Limited as the Principal Employer, becomes liable to pay any such compensation mentioned hereinabove, whether on failure of the OBLIGOR/OBLIGORS or for any other reason, the OBLIGEE shall have the right to recover the said amount from any amount receivable by OBLIGOR/OBLIGORS or any bank guarantee deposited or anything payable whether in connection with this contract or other contract by the OBLIGEE to the OBLIGOR/OBLIGORS
- 9. THAT the OBLIGOR/OBLIGORS is/are aware and accept that for the persistent or repeated violation of any condition mentioned in this Indemnity Bond, the OBLIGEE shall have right to terminate the contract of work issued by the OBLIGEE to OBLIGOR/OBLIGORS.

SIGNED AND DELIVERED BY THE OBLIGOR/OBLIGORS	(Signature)	
WITNESS 1 Name, Designation		
Signature		
2. Name, DesignationSignature		

### ANNEXURE-C

### **Proforma for Goods & Services Tax Declaration**

I/We do hereby declare that, our firm is a Small Service Provider in terms of the Finance Act 1	994 & v	ve need
not be registered with the Central Goods & Services TaxAct'2017.		

Signature and seal of the Contractor