Section - A

ZOOLOGICAL GARDEN,ALIPORE

2, Alipore Road, Kolkata-27

Memo. No. **338** **Dated:** **27.09.2016**

Notice Inviting e-Tender No :-- 6/Estt./ZGA/e-tender(2nd Call)/16-17 invites e-tender for the work detailed in the table below.

(Submission of Bid through **online**)

List of Schemes:

Sl. No	Name of the work (1)`	Estimated Amount (Rs.) (2)	Earnest Money (Rs.) (3) 2%	Period of Completion (4)	Name of the Concerned Officer (5)	Eligibility of Contractor (6)
1.	*Finishing works for completion of Leopard enclosure at Zoological garden, Alipore*	**1883311/- Rate offered on BOQ**	**37666/-**	60 (sixty) days from the date of commencement.	Director Zoological Garden, Alipore	**Bonafied, resourceful contractors having experience of similar nature of works and credentials :** **1)Experienced in Animal Enclosure** **2) valid Trade License** **3) Professional Tax Regd. No. & challan** **4) Income Tax Pan No. & I.T. Return(3 years)** **5) EPF&ESI ,if any with code No.** **6) VAT Regd. No.** **Technical bid will accompany the above documents** **7)75% of estimated amount in one tender should be executed.**

In the event of e-filling, intending bidder may download the tender documents from the website https://wbtenders.gov.in **(the web portal of West Bengal Zoo Authority)**directly with the help of Digital Signature Certificate. Necessary cost of tender documents (tender fees) and Earnest Money may be remitted through Demand Draft / Pay Order issued from any nationalized bank in favour of the **"Zoological Garden,Alipore" payable at KOLKATA** and also to be documented through e-filling. The original Demand Draft / Pay Order against cost of tender document , Earnest Money Deposit (EMD) or documents in support should be submitted physically in the Office of Director,Zoological Garden under sealed cover before 24 Hrs. of the date and time of opening of tender.

1) Both **Technical Bid** and **Financial Bid** are to be submitted concurrently duly digitally signed in the website https://wbtenders.gov.in Tender documents may be downloaded from website and submission of Technical Bid and Financial Bid will be done as per Time Schedule stated in Sl. No. 03.

2) The **FINANCIAL OFFER** of the prospective tenderer will be considered only if the **TECHNICAL BID** of the tenderer is found qualified by the 'Tender Evaluation Committee' formed by the Director,ZGA. The decision of the 'Tender Evaluation Committee' will be final and absolute in this respect. The list of Qualified Bidders will be displayed in the website.

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 3 (three) years. Such abandonment or rescission will be considered as disqualification towards eligibility. (A declaration in this respect through affidavit has to be furnished by the prospective bidders without which the Technical Bid shall be treated as non-responsive.)

Registered Partnership Deed for Partnership Firm only along with Power of Attorney is to be submitted. The company shall furnish the Article of Association and Memorandum.

Joint Ventures will not be allowed.

A prospective bidder shall be allowed to participate in the instant job either in the capacity of individual or as a partner of a firm.

Running payment for work may be made to the executing agency as per availability of fund. The executing agency may not get a running payment unless the gross amount of running bill is 10 (ten) lakh and more subject to approval of tendering authority based on prayer of the contractor.

No mobilisation advance and secured advance will be allowed.

Security Deposit:

Retention money towards performance Security amounting to 10% (*ten percent*) of the value of the work shall be deducted from the running account bill of the tenderer as per prevailing order. No interest will be paid on Security Deposit.

All materials required for the proposed work shall be of specified grade inconformity with relevant code of practice (latest revision) accordingly and shall be procured and supplied by the agency at their own cost including all taxes. If required by the Engineer-in-Charge, further testing from any Government approved Testing Laboratory shall have to be conducted by the agency at their own cost.

Constructional Labour Welfare CESS @ 1% (*one percent*) of cost of construction will be deducted from every Bill of the executing agency as per norms.

There shall be no provision of Arbitration.

Bid shall remain valid for a period not less than 120 (*one hundred twenty*) days from the last date of submission of Financial Bid / Sealed Bid. If the bidder withdraws the bid during the validity period of bid, the earnest money as deposited will be forfeited forthwith without assigning any reason thereof.

3) Date and Time Schedule:

Sl. No.	Particulars	Date & Time
1	**Date of uploading of N.I.T. & other Documents (online) (Publishing Date)**	**28.09.2016**
2	**Documents download/sell/submission start date (Online)**	**28.09.2016 at 9.00 hrs**
3	**Bid Submission closing (On line)**	**05.10.16 at 15.00 hrs**
4	**Last Date of submission of original copies for the cost of Earnest MoneyDeposit(Demand Draft) Off line & hard copy of tender documents**	**05.10.2016 at 16.30 hrs**
5	**Bid opening date Technical Bid**	**06.10.2016 at 12.30 hrs**
6	**Bid opening date Financial Bid**	**17.10.2016 at 15-00hrs**

4) The Prospective Bidder shall have to execute the work in such a manner so that appropriate service level of the work is maintained during progress of work . If any defect / damage is found during the period of 6(six) months after the completion of work, the contractor shall restore the damage/defect at his own cost to the specification at par with instant project work. On failure to do so, penal action against the contractor will be imposed by the garden authority as deemed fit. The contractor may quote his rate considering the above aspect and after visit. Refund of Security Deposit will only be made after successful maintaining of appropriate service level of the work as mentioned above for 6 (six) months from the date of completion of the work.

5) Site of work and necessary drawings may be handed over to the agency phase wise. No claim in this regards will be entertained.

6) Earnest Money: The amount of Earnest Money @ 2% (*two percent*) of the Estimated Amount put to tender in the shape of Bank Draft / Pay **Order of any nationalised bank drawn in favour of the , "Zoological Garden,Alipore payable at Kolkata against the work as per the** NIT. The said amount will be adjusted with the security money of the successful bidder.

7) The Bidder, at his own responsibility and risk is encouraged to visit and examine the site of works and its surroundings and obtain all informations that may be necessary for preparing the Bid and entering into a contract for the work as mentioned in the Notice Inviting Tender, before submitting offer with full satisfaction, the cost of visiting the site shall be at his own expense.

8) The intending Bidders shall clearly understand that whatever may be the out come of the present invitation of Bids, no cost of Bidding shall be reimbursable by the garden authority.The tender accepting authority of Zoological Garden. 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 Tenderer at the stage of Bidding.

9) Refund of EMD: The Earnest Money of all the unsuccessful tenderers deposited in favour of Zoological Garden,Alipore will be refunded by the Director,Zoological Garden,Alipore on receipt of application from tenderers .

10) 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.

11) Conditional / Incomplete tender will not be accepted under any circumstances.

12) The intending tenderers are required to quote the rate *online.*

13) Contractor shall have to comply with the provisions of (a) the contract labour (Regulation Abolition) Act. 1970 (b) Apprentice Act. 1961 and (c) minimum wages Act. 1948 of the notification thereof or any other laws relating there to and the rules made and order issued there under from time to time.

14) Guiding Schedule of Rates:Rates have been taken from P.W.D. (W.B.) Schedule of Rates with upto date corrigenda & addenda.

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) The Director,Zoological Garden,Alipore reserves the right to cancel the N.I.T. due to unavoidable circumstances and no claim in this respect will be entertained.

17) If there be any objection regarding prequalifying the Agency that should be lodged on line to the Chairman of Tender Evaluation Committee within 2 (*two*) days from the date of publication of list of qualified agencies and beyond that time schedule no objection will be entertained by the Tender Evaluation Committee.

18) Before issuance of the WORK ORDER, the tender inviting authority may verify the credential and other documents of the lowest tenderer if found necessary. After verification if it is found that the documents submitted by the lowest tenderer is either manufactured or false in that case work order will not be issued in favour of the said Tenderer under any circumstances without any reference to the lowest tenderer.

19) If any discrepancy arises between two similar clauses on different notification, the clause as stated in later notification will supersede former one in following sequence:

1) N.I.T.
2) Special Terms & Conditions
3) Technical Bid
4) Financial Bid

20) Qualification criteria:

The tender inviting and Accepting Authority through a "Tender Evaluation Committee" will determine the eligibility of each bidder. **The bidders shall have to meet all the minimum criteria regarding**:

a) Financial Capacity
b) Technical Capability as required in column no. 7 in the table.
c) Experience / Credential

The eligibility of a bidder will be ascertained on the basis of the document(s) in support of the minimum criteria as mentioned in Column no. 7 **.** If any document submitted by a bidder is either manufactured or false, in such cases the eligibility of the bidder / tenderer will be rejected at any stage without any notice.

21. Escalation of Price on any ground and consequent cost over run shall not be entertained under any circumstances. Rates should be quoted accordingly.

Director
Zoological Garden,Alipore

SECTION - A

INSTRUCTION TO BIDDERS

General guidance for e-Tendering:

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

i. 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, through logging on to (the web portal of ZGA the contractor is to click on the link for e-Tendering site as given on the web portal.

ii. Digital Signature certificate (DSC):

Each contractor is required to obtain a 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 A.1. above. DSC is given as a USB e-Token.

iii. The contractor can search & download N.I.T. & Tender Document(s) electronically from computer once he logs on to the website mentioned in Clause A.1. using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

iv. Submission of Tenders:

Tenders are to be submitted through online to the website stated in Clause A.1. in two folders at a time for work, one in Technical Proposal & the other is Financial Proposal before the prescribed date &time using the Digital Signature Certificate (DSC). The documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (transformed into non readable formats).

Technical Proposal:

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

Statutory Cover Containing the following documents:

1. <u>TENDERS EMD AND OTHER DOCUMENTS:</u>

- Demand Draft towards Earnest Money (EMD) as prescribed in the N.I.T. against the work in favour of the Zoological Garden,Alipore.

Bonafied, resourceful outsiders having experience of similarnature of works (credentials)
1Experinced in Animal Enclosure
2) valid Trade License
3) Professional Tax Regd. No. & challan
4) Income Tax Pan No. & I.T.Return(3 years)
5) EPF & ESI,if any code No.
6) VAT Regd. No.
7) 75% of estimated amount in one tender should be executed
8) Terms & conditions (Section –B)

b) <u>N.I.T.</u>

(NIT & Tender Document downloaded properly and upload the same Digitally Signed). **The rate will be quoted in the B.O.Q.** Quoted rate will be encrypted in the B.O.Q. under Financial Bid. 0.

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N.B.: Failure of submission of any of the above mentioned documents as stated in Sl. No. A.5.(a). and Sl. No. A.5.(b). will render the tenderer liable to be rejected.

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Tender Evaluation Committee (TEC)

Evaluation Committee constituted by the Director,Zoological Garden,Alipore will function as Head of Evaluation Committee for selection of technically qualified contractors.

Opening & evaluation of tender:

If any contractor is exempted from payment of EMD, copy of relevant Government Order needs to be furnished.

Opening of Technical Bid:

Technical proposals will be opened by the Concerned Tender Inviting Authority or his authorized representative electronically from the website using their Digital Signature Certificate (DSC).

Intending tenderers may remain present if they so desire.

Cover (folder) for Statutory Documents (Ref. Sl. No. A.5.(a)&(b.) will be opened first . If there is any deficiency in the Statutory Documents the tender will summarily be rejected.

Decrypted (transformed into readable formats) documents of the non-statutory cover will be downloaded & handed over to the Tender Evaluation Committee.

Summary list of technically qualified tenderers will be uploaded online.

Pursuant to scrutiny & decision of the Tender Evaluation Committee 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.

During evaluation the committee may summon of the tenderers & seek clarification / information or additional documents or original hard copy of any of the documents already submitted & if these are not produced within the stipulated time frame, their proposals will be liable for rejection.

i. **Financial Bid**

The financial bid should contain the following documents in one cover (folder) i.e. Bill of Quantities (BOQ). The contractor is to quote the rate (Above / Below / At per) online through computer in the space marked for quoting rate in the BOQ.

Only downloaded copies of the above documents are to be uploaded virus scanned & Digitally Signed by the contractor.

Financial capacity of a bidder will be judged on the basis of information furnished in Section - B.

Penalty for suppression / distortion of facts:

If any tenderer fails to produce the original hard copies of the documents like Completion Certificates and any other documents on demand of the Tender Evaluation Committee within a specified time frame or if any deviation is detected in the hard copies from the uploaded soft copies, it may be treated as submission of false documents by the tenderer and action may be referred to the appropriate authority for prosecution as per relevant Act.

Rejection of Bid:

Tendering authority reserves the right to accept or reject any Bid and to cancel the Bidding processes and reject all Bids at any time 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 Tendering authority's action.

Award of Contract

The Bidder whose Bid has been accepted will be notified by the Tender Inviting Authority through acceptance letter / Letter of Acceptance.

The notification of award will constitute the formation of the Contract.

The Agreement in From No. 2911(ii) will incorporate all agreements between the Tender Inviting Authority and the successful bidder. All the tender documents including N.I.T. & B.O.Q. will be the part of the contract documents. After receipt of Letter of Acceptance, the successful bidder shall have to submit requisite copies of contract documents downloading from the website stated in Sl. No. 1 of N.I.T. along with requisite cost through Demand Draft / Pay Order issued from any nationalised bank in favour of the Zoological Garden,Alipore within time limit to be set in the letter of acceptance.

Section -B

ZOOLOGICAL GARDEN,ALIPORE
Special Terms and Conditions

1) General:

Unless otherwise stipulated all the works are to be done as per general conditions and general specifications as mentioned either in—

Public Works Department Schedule of Rates for Building Works and Sanitary & Plumbing Works in force including up-to-date addenda and corrigenda, if any, issued from competent authority as applicable for the working area of concerned Circle at the time of submission of tender, or in

Public Works (Roads) Department Schedule of Rates for Road Works, Bridge & Culvert Works and Carriage, etc. in different district of West Bengal for the working area including up-to-date addenda and corrigenda, if any, issued by the Superintending Engineer,

2) Definition of Engineer-in-Charge and commencement of work:

The word "Engineer-in-Charge" means the concerned Chief Engineer. The word "Department" appearing anywhere in the tender documents means WBZA, who have jurisdiction, administrative or executive, over part or whole of the works forming the subject matter of the tender or contract. The word "approved" appearing anywhere in the documents means approved by the Engineer-in-Charge. In case, the work is transferred to any other Chief Engineer under whom the work will be executed should be treated as the Engineer-in-Charge. The work shall have to be taken up within seven days of the receipt of the work order or otherwise mentioned therein. Failure to do so will constitute a violation of the contract stipulation as regards of proportionate progress and timely completion of work and the contractor will thereby make himself liable to pay compensation or other penal action as per stipulation of the printed tender form.

3) Terms & Conditions in extended period:

As per Clause 5 of ZGA F. No. 2911 (ii) if an extension of time for completion of the work is granted by the Engineer-in-Charge for cogent reasons for which the contractor have no control, it will be taken for granted by the working contractor that the validity of the contract is extended automatically upto the extended period with all terms and conditions, rates etc. remaining unaltered, i.e., the tender is revalidated upto the extended period.

4) Transportation arrangement:

The contractor shall arrange for all means of transport required for carriage and supply of materials and also the materials required for the construction work. The contractor must consider this aspect while quoting rate.

5) Contractor's Site Office:

The contractor shall have an office adjacent to the work as may be approved by the Engineer-in-Charge where all directions and notice of any kind whatsoever, which the Engineer-in-Charge or his representative may desire to give to the contractor in connection with the contract, may be left or sent by post to such office or delivered to the contractor's authorized agent or representative. For such intimation to the contractor's site office, it shall be deemed to be sufficient enough to be served upon the contractor.

6) Incidental and other charges:

The cost of all materials, hire charges to tools and plants, labour, Corporation / Municipal fees for water supply, royalty for materials (if any), electricity and other charges of Municipalities or statutory local bodies, ferry charges, toll charges, loading and unloading charges, handling chargers, overhead charges and other charges like Sales Tax (Central and/or State), Income Tax, Octroi Duty / Terminal Tax, Turnover Tax, VAT, etc. will be deemed to have been covered by the rates quoted by the contractor. All other charges for the execution of the specified work, including supply of materials and related carriage, complete or finished in all respect upto the entire satisfaction of the Engineer-in-Charge of the work. No extra claim in this regard beyond the specified rate as per work schedule whatsoever in this respect will be entertained.

7) Authorized Representative of Contractor:

The contractor shall not assign the agreement or sublet any portion of the work. The contractor may however, appoint an authorized representative in respect of one or more of the following purpose only.

8) General day to day management of work.

9) To give requisition for departmental materials, Tools & Plants, etc. and to receive the same and sign hand receipts thereof.

10) To attend measurements when taken by the Departmental Officers and sign the records of such measurements which will be taken of acceptance by the contractor.

The selection of the authorized representative shall be subject to the prior approval of the SAE concerned and the contractor shall in writing seek such approval of the SAE giving therein the name of work, Tender No., the Name, Address and the specimen signature of the representative whom he wants to appoint and the specific purposes as specified here-in-above, for which the representative will be authorized. Even after first approval, the SAE may issue at any subsequent date, revised directions about such authorized representative and the contractor shall be bound to abide by such directions. The SAE shall not be bound to assign any reason for his revised directions. Any notice, correspondences, etc. issued to the authorized representative or left at his address, will be deemed to have been issued to the contractor.

11) Power of Attorney:

The Provision of the power of attorney, if any, must be subject to the approval of the authority. Otherwise the authority shall not be bound to take cognizance of such power of attorney.

12) Extension of time:

For cogent reasons over which the contractor will have no control and which will retard the progress, extension of time for the period lost will be granted on receipt of application from the contractor before the expiry date of contract. No claim whatsoever for idle labour, additional establishment, enhanced cost of materials and labour and hire charges of tools & plants, etc. would be entertained under any circumstances. The contractor should consider the above factor while quoting his rate. Applications for such extension of time should be submitted by the contractor in the manner indicated in Clause-5 of the printed form of ZGA 2911.

13) Contractor's Go-down:

The contractor must provide suitable go-downs for cement and other materials at the site of work. The cement go-down is to be sufficient in capacity and it must be water tight with either an elevated floor with proper ventilation arrangement underneath the floor or if solid raised floor is made, cement is to be stored on bamboo or timber dunnage to the satisfaction of the SAE. No separate payment will be made for these go-downs or for the store yard. Cement, which is found at the time of use to have been damaged, shall be rejected and must immediately be removed from the site by the contractor as per direction of the SAE.

14) Arrangement of Land:

The contractor will arrange land for setting up of Camp office, his go-down, storeyard, labour camp etc. at his own cost for the execution of the work. Departmental land, if available and if applied for, may be spared for the purpose on usual charges as fixed by the Competent Authority.

15) Use of Garden Land:

Before using any space in Garden land for any purpose whatsoever, approval of the Director will be required. Garden land, if available and if applied for, may be spared for the purpose on usual charges as fixed by the Authority. The contractor shall make his own arrangements for storage of tools, plant, equipments, materials, etc. of adequate capacity and shall clear and remove on completion of work, the shed, huts, etc. which he might have erected in Garden land. If after such use, the contractor fails to clear the land, garden authority will arrange to remove those installation and adequate recovery will be made from the the contractor,in the manner as deemed fit by the authority.

16) Work Order Book:

The contractor shall within seven days of receipt of the order to take up work, supply at his own cost one Work Order Book to Engineering cell, who is authorized to receive and keep in custody the Work Order Book on behalf of the garden authority. The Work Order Book shall be kept at the site of work under the custody of Sub-Assistant Engineer or his authorized representative. The Work Order Book shall have machine numbered pages in triplicates. Directions or instruction from garden officers to be issued to the Contractor will be entered (in triplicate) in the Work Order Book (except when such directions or instructions are given by separate letters). The contractor or his authorized representative shall regularly note the entries made in the Work Order Book and also record thereon the action taken or being taken by him complying with the said directions or instruction on any relevant point relating to the work. The contractor or his authorized representative may take away the triplicate page of the Work Order Book for his own record and guidance.

Cases of supplementary items or any claims may not be entertained unless supported by entries in the Work Order Book or any written order from the Tender Accepting Authority.

The first page of the Work Order Book shall contain the following particulars:

17) Name of the Work.
18) Reference to contract number.
19) Contractual rate in percentage.
20) Date of opening of the Work Order Book.
21) Name and address of the Contractor.
22) Signature of the Contractor.
23) Name & address of the Authorized representative (*if any*).
24) Specific purpose(s) for which the contractor's representative is authorized to act on behalf of the Contractor.
25) Signature of the authorized representative duly attested by the Contractor.
26) Signature of the Sub Assistant Engineer concerned.
27) Date of actual completion of work.
28) Date of recording final measurement.

Entries in (11) & (12) above shall be filled in on completion of the work and before the Work Order Book is recorded by Sub Assistant Engineer.

29) Clearing of Materials:

Before starting any work, work site, where necessary, must be properly dressed after cutting clearing all varieties of jungles, shrubs, bamboo clusters or any undesirable vegetation from the alignment or site of works. On completion of works all temporary structure or obstruction including pipes in underground work, if any, must also be removed. All scars of construction shall be obliterated and the whole site shall be left in a clear and neat manner to the satisfaction of the SAE. No separate payment shall be made for all these works, the cost thereof being deemed to have been included in the rates of various items of works quoted by the contractor in the schedule of probable items of works.

30) Sundry Materials:

The contractor must erect temporary pillars, master pillars, etc. as may be required in suitable places as directed by the SAE at his own cost before starting and during the work by which the departmental staff will check levels, layout of different works and fix up alignment and the contractor shall have to maintain and protect the same till completion of the work. All machineries and equipments like Level Machine, Staff, Theodalite etc. and other sundry material like, pegs, strings, nails, flakes, instruments, etc. and also skilled labour required for setting out the levels, laying out different structures, etc. shall also be supplied by the contractor as per direction of SAE at his own cost.

31) Supplementary / Additional items of Works:

Notwithstanding the provisions made in the related printed tender form, any item of work which can legitimately be considered as not stipulated in the specific price schedule of probable items of work but has become necessary as a reasonable contingent item during actual execution of work will have to be done by the Contractor, if so directed by the SAE and the rates will be fixed in the manner as stated below:-

32) Rate of Supplementary items shall be analyzed in the 1st instant extended possible from the rates of the allied items of work appearing in the tender schedule.
33) Rate of supplementary items shall be analyzed to the maximum extent possible from rates of the allied items of work appearing in the P.W.D. and P.W. (Roads) Department schedule of rates of probable items of work as will be in force at the time of N.I.T.
34) If the rates of the supplementary items cannot be computed even after application of clauses stated above, the same shall be determined by analysis from market rates of material, labour and carriage cost prevailing at the time of execution of such items of work. Profit and overhead charges (both together) @ 10% (*ten percent*) will be allowed only. The contractual percentage will not be applicable.
35) Contractual percentage shall only be applicable with regard to the portions of the analysis based on clause 15 (1) and (2) stated above only.
36) It may be noted that the cases of supplementary items of claim shall not be entertained unless supported by entries in the Work Order Book or any written order from the tender accepting authority.

37) Covered up works:

When one item of work is to be covered up by another item of work the latter item shall not be done before the former item has been measured up and has been inspected by the SAE, as the authorized representatives of the Director and order given by him for

proceeding with the latter item of work. If this is not possible for practical reasons, the Sub-Assistant Engineer, if so authorized by the Assistant Engineer, may do this inspection in respect of minor works and issue order regarding the latter item.

38) Approval of Sample:

Samples of all materials to be supplied by the contractor and to be used in the work shall have to be approved by the SAE and checking the quality of such materials shall have to be done by the concerned Department or as directed by SAE prior to utilization in the work.

39) Water and Energy:

The contractor shall have to arrange at his own cost the energy required for operation of equipments and machineries, pumping set, illuminating work site, office, etc. that may be necessary in different stages of execution of work. No facility of any sort will be provided for utilization from the departmental sources. All cost for getting energy and / or for any purpose whatsoever will have to be borne by the contractor for which no claim will be entertained.However cost for energy /any other amenities will be recovered from the contractor' bill, if supplied by garden authority.

40) Amenities for contractors:

All materials, tools and plants and all labour (skilled and unskilled) including their housing, water supply, sanitation, light, procurement of food for staff & crews, medical aids, etc. are to be arranged by the contractor at his own cost. The cost of transport of labour, materials and all other incidental items as required for work shall also have to be borne by the Contractor without any extra claim from garden.

41) Drawings:

All works shall be carried out in conformity with the drawings supplied by the garden. The Contractor shall have to carry out all the works according to the Drawing and Detail Working Drawings to be supplied by the garden from time to time.

42) Serviceable Materials:

The responsibility for stacking the serviceable materials (as per decision of the SAE) obtained during dismantling of existing structures/roads and handing over the same to the SAE of work of this garden lies with the contractor and nothing will be paid on this account. In case of any loss or damage of serviceable materials prior to handing over the same to this garden, full value will be recovered from the Contractor's bill at rates as will be assessed by the SAE.

43) Unserviceable Materials:

The Contractor shall remove all unserviceable materials, obtained during execution at place as directed. The contractor shall dressed up and clear the work site after completion of work as per direction of the SAE. No extra payment will be made on this account.

44) Contractor's risk for loss or damage:

All risk on account of railway or road carriage or carriage by boat including loss or damage of vehicles, boats, barges, materials or labour, if any, will have to be borne by the contractor without any extra claim towards garden.

45) Idle labour & additional cost:

Whatever may be the reason for claim on idle labour, enhancement of labour rate, additional establishment cost, cost of Toll and hire and labour charges of tools and plants, railway freight, etc. would not be entertained under any circumstances.

46) Issue of Departmental Tools and Plants:

All Tools and Plants required for the work will have to be supplied by the Contractor at his own cost; all cost of fuel and stores for proper running of the Tools and Plants must be borne by the Contractor.

47) Realization of Garden claims:

Any sum of money due and payable to the contractor (including security deposit returnable to him) under this contract may be approched by the garden authority.

48) Compliance of different Acts:

The contractor shall comply with the provisions of the Apprentices Act, 1961, Minimum Wages Act, 1848. Contract Labour (Regulation and Abolition) Act 1970 and the rules and orders issued hereunder from time to time. If he fails to do so, SAE of the work may at his discretion, take necessary measure over the contract.

The Contractor shall also make himself liable for any pecuniary liabilities arising out on account of any violation of the provision of the said Act(s). The Contractor must obtain necessary certificate and license from the concerned Registering Office under the Contract Labour (Regulation & Abolition) Act, 1970.

The contractor shall be bound to furnish to the SAE all the returns, particulars or date as are called for from time to time in connection with implementation of the provisions of the above Acts and Rules and timely submission of the same, failing which the contractor will be liable for breach of contract and the SAE may at his discretion take necessary measures over the contract.

49) Safety, Security and Protection of the Environment:

The Contractor shall, throughout the execution and completion of the Works remove the defects therein,at his own cost:

50) The contracto shall have full regard for the safety of all persons and the Works .,

51) Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the SAE for the protection of the Works or for the safety and convenience of the public or others,

52) Take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation,

53) Ensure that all lights provided by the Contractor shall be screened so as not to interfere with any signal light of the railways or with any traffic or signal lights of any local or other authority.

54) Commencement of work:

The work must be taken up within the date as stipulated in the work order and completed in all respects within the period specified in Notice Inviting Tender.

55) Programme of work:

Before actual commencement of work the contractor shall submit a programme of construction of work with methodology clearly showing the required materials, men and equipment. The contractor will submit a programme of construction in the pattern of Bar Chart or Critical Path Method and a time table divided into four equal periods of progress of work to complete the work within the specific period for approval of the Director who reserves the right to make addition, alterations and substitutions to such programme in consultation with the contractor and such approved programme shall be adhered to by the contractor unless the same is subsequently found impracticable in part or full in the opinion of the Director and is modified by him. The contractor must pray in writing, showing sufficient reasons therein for modification of programme. The conditions laid down in clause 2 of the printed tender form regarding the division of total period and progress to work and the time table there for as provided in the said clause shall be deemed to have been sufficiently complied with the actual progress of work and does not fall short of the progress laid down in the approved time table for one fourth, half and three fourth of time allowed for the work.

56) Setting out of the work:

The contractor shall be responsible for the true and perfect setting out of the work and for the correctness of the position, levels, dimensions and alignments of all parts of work. If any rectification or adjustment becomes necessary the contractor shall have to do the same at his own cost according to the direction of the Director. During progress of works, if any, error appears or arises in respect of position, level, dimensions or alignment of any part of the work contractor shall at his own cost rectify such defects to the satisfaction of the SAE. Any setting out that may be done or checked by either of them shall not in any way relieve the contractor of his responsibility for correctness and rectification thereof.

57) Precautions during works:

The contractor shall carefully execute the work without disturbing or damaging underground or overhead service utilities viz. Electricity, Telephones, Gas, Water pipes, Sewers etc. In case disturbances of service utilities is found unavoidable the matter should immediately be brought to the notice of the SAE and necessary precautionary measures as would be directed by the SAE shall be carried out at the cost and expenses of the contractor. If the service utilities are damaged or disturbed in any way by the contractor during execution of the work, the cost of rectification or restoration of damages as would be fixed by the SAE concerned will be recovered from the contractor.

58) Testing of qualities of materials & workmanship:

All materials and workmanship shall be in accordance with the specifications laid down in the contract and also as per M.O.R.T. & H's specification for Road and Bridge Works (Latest Revision) and relevant IS codes and the SAE reserves the right to test, examine and measure the materials/workmanship direct at the place of manufacture, fabrication or at the site of works or any suitable place. The contractor shall provide such assistance, instrument, machine, labour and materials as the SAE may require

for examining, measuring and testing the works and quality, weight or quantity of materials used and shall supply samples for testing as may be selected and required by the SAE without any extra cost. Besides this, he will carry out tests from outside Laboratory as per instruction of SAE. The cost of all such tests shall be borne by the agency and that must be considered during quoting rate.

59) Timely completion of work:

All the supply and the work must have to be completed in all respects within the time specified in Notice Inviting Tender from the date of commencement as mentioned in work order. Time for completion as specified in the tender shall be deemed to be the essence of the contract.

60) Procurement of materials:

All materials required to complete the execution of the work shall be supplied by the contractor after procurement from authorised and approved source.

61) Rejection of materials:

All materials brought to the site must be approved by the SAE. Rejected materials must be removed by the Contractor from the site within 24 hours of the issue of order to that effect. In case of non-compliance of such order, the SAE shall have the authority to cause such removal at the cost and expense of the contractor and the contractor shall not be entitled to any claim for any loss or damage on that account.

62) Implied elements of work in items:

Except such items as are included in the Specific Priced Schedule of probable items and approximate quantities, no separate charges shall be paid for traffic control measures, shoring, shuttering, dewatering, curing etc. and the rates of respective items of works are to be deemed as inclusive of the same.

63) Damaged cement:

Any cement lying at contractor's custody which is found at the time of use to have been damaged shall be rejected and must immediately be removed from the site by the contractor or disposed of as directed by SAE at the costs and expenses of the contractor.

64) Issue of Departmental Materials:

Departmental materials will not be issued under any circumstances.

65) Force Closure:

In case of force closure or abandonment of the works by the Department the contractor will be eligible to be paid for the finished work and reimbursement of expenses actually incurred thereof by him but not for any losses.

66) Tender Rate:

The contractor should note that the tender is strictly based on the rates quoted by the Contractor on the priced schedule of probable item of work. The quantities for various other items of works as shown in the priced schedule of probable items of works are based on the drawing and design prepared by the Department. If variations become necessary due to design consideration and as per actual site conditions, those have to be done by the contractor at the time of execution at the rate prescribed in the tender clause. **No conditional rate will be allowed in any case.**

67) Delay due to modification of drawing and design:

The contractor shall not be entitled for any compensation to any loss due to delays arising out of modification of the drawing, addition & alterations of specifications.

68) Additional Conditions:

A few additional conditions under special terms and conditions:

69) Rate quoted shall be inclusive of clearing site as per direction of the Director.

70) Rate quoted shall be inclusive of West Bengal Sales Tax, Income Tax, Octroi and all other duties, if any.

71) Display board (Informatory) of size 150 cm X 90 cm is to be provided at the work-site with aluminum plate hoisted on steel tubular pipe / angle post to a height of 1.5 Metre at the cost of the contractor including fitting, fixing, painting, lettering, etc. complete as per direction of Engineer-in-Charge.

72) The Contractor is to display caution board at his own cost as per direction of Director.

73) Deep excavation of trenches and left out for days shall be avoided.

74) Labour welfare CESS will be deducted @ 1% (*one percent*) of gross bill value as per rule.

75) The whole work will have to be executed as per departmental drawings available in this connection at the tender rate.

76) Income Tax will be deducted from each bill of the contractor as per applicable rate and rules in force.

77) In accordance with the West Bengal Taxation Laws (amendment) Ordinance, 1993 amending the West Bengal Finance (Sales Tax) Act, 1994 necessary S.T / VAT will be deducted as per rate in force from the bill in addition to other deduction as per extent rules.

78) Royalty:

The Contractor will have to submit the receipt of payment of royalty to the Government for use of sand, stone materials, laterite, Moorum, gravel, etc. to the SAE before preparation of bill for payment, when they collect the materials directly from the source. If they collect the materials from the authorized quarry holder or commercial establishment who directly or indirectly pay the royalty to the Government, necessary certificate or cash memo for sale in that respect from them shall have to be produced to the SAE failing which necessary deduction from the dues of the contractor may be made as fixed by the SAE.

79) Night Work:

The contractor shall not ordinarily be allowed to execute the work at night. The contractor may however, have to execute the work at night, if instructed by the Director. For true technical or emergent reasons, the work may require to be executed during the night also according to the instruction of the SAE. In that case the contractor shall have to arrange for separate set of labour with sufficient and satisfactory lighting arrangement for the night work. No extra payment whatsoever in this respect will be made to the contractor.

Specification of Works

80) General:

The information given hereafter is without any prejudice. The intending bidders should satisfy themselves regarding the latest conditions of the site and its surroundings by personal check and investigation.

81) Name of Work:

As mentioned in N.I.T.

82) Scope of Work:

The Work shall, interalia, broadly consist of:-

83) Works as mentioned in specific Priced Schedule of probable items of work.

84) Location of Work site:

As mentioned in N.I.T.

85) Working condition:

During execution of work, contractor will remain responsible for providing unhindered passage to traffic on road adjacent to site, providing lighting and guarding arrangement during night for safety and no extra cost will be paid on this account.

It is to be noted that there will not be any electrical facility at work site. Bidder should make his own arrangement for water, necessary power of lighting, welding, running of pumps etc. and the cost for such arrangement shall be deemed to have been included in the rates quoted by the bidder.

Work shall have to be executed in accordance with the rules and regulations in vogue of Government of West Bengal and local authorities.

86) Specifications:

Details of Specifications to be followed in the Proposed Construction are given here-in-after, in the Price Schedule.

87) Codes of Practice:

Latest editions of the Indian Standard Specifications and codes of practice – some of which are mentioned below and as per departmental schedule of rates as mentioned in Sl. No. C. 1. of special terms & conditions of contract of bid documents (*Section – C*) are to be followed during execution of the works.

i.	IS 456	:	Code of Practice for plain and reinforced concrete.
ii.	IS 800	:	Code of practice for general construction in steel.
iii.	IS 2751	:	Code of Practice for Welding of Mild Steel Plain and Deformed Bars for Reinforced Concrete Construction.
iv.	IS 383	:	Specification for coarse and fine aggregates for natural sources for concrete.
v.	IS 432	:	Mild steel and medium tensile steel (Part-I) bars and hard drawn steel wire for concrete reinforcement.
vi.	IS 4990	:	Indian Standard Specification for concrete shuttering works.
vii.	IS 2911	:	Code of practice for design and construction of pile.
viii.	IS 1904	:	Code of practice for design and construction of foundations in soils.
ix.	IS 2750	:	Specification for Steel Scaffoldings.

x. IS 1161 : Specification for steel tubes for structural purposes.

xi. IS 3764 : Safety Code for excavation work.

88) Salient Features of Project:

i. As per B. O. Q. of work.

89) **Detailed Specification:**

90) **Materials for civil work / structures:**

All materials to be used for structure must be procured, stored and tested before use conforming to respective Clauses of prevailing codes of practice.

91) **Cement:**

O.P.C. conforming to IS 12269 and P.P.C. conforming to IS 1489 shall be used.

92) **Coarse aggregate:**

Coarse aggregate shall conform to the specifications laid down in IS 383.

93) **Fine aggregate:**

Fine aggregate shall conform to the specifications laid down in IS 383.

Samples of coarse and fine aggregates proposed to be used by the Contractor must be deposited with the SAE for his approval. The Samples shall be fair indications of the general quality and shall be delivered in 3 (three) nos. 450 GMs bottles.

On approval of samples one set will be retained by the SAE, one set shall be sent to his representative at site of works and the third set shall be returned to the contractor for keeping in his site office. Any consignment which in the opinion of the SAE does not conform with the approved samples should be, if so directed, immediately removed by the Contractor at his own cost.

94) **Water:**

Water shall be potable, free from any harmful chemicals or suspended materials.

95) **Steel Reinforcement:**

All steel reinforcement shall conform to the provisions contained in IS 1786-1987. For reinforced concrete work in any part of the structure the provisions of IS 456-2000 will apply.

96) **Structural Steel work:**

Structural steel shall conform to IS 226.

97) **Structural Steel work:**

Structural steel shall conform to IS 226.

98) **Concrete:**

Concrete must be produced and laid conforming to relevant clauses of IS 456. When concrete is specified by strength, it is termed as “Design Mix Concrete” or “Grade of Concrete”. Such concrete is that in which the design of mix. i.e. determination of the proportions of cement, aggregates and water is arrived at to have a Target Mean strength for each grade of concrete.

99) **Mix Design:**

The Mix design shall be done by the contractor as per IS 10262 (Recommended guide lines for mix design) and I.S. SP-23 (S&T) - 1982 (Hand Book on concrete Mix) and I.S. 383-1970.

However, for guidance it is to be noted that the mix and water cement ratio shall be arrived at after preliminary tests which shall be done as per relevant clause of IS 456.

The SAE will approve the final design and job mix in accordance with stipulations of IS 456. The Contractor shall stick to the job mix formula approved by the SAE. However, the same may be modified only with specific written permission of the SAE.

100) **Admixture:**

To improve the workability of concrete and cement grout, admixtures conforming to I.S. 6925 and I.S. 9103 may be used on specific written permission of the Superintending Engineer. Admixtures generating Hydrogen, Nitrogen etc. shall not be used. The cost of admixtures and labour for mixing the same shall be deemed to have been included in the rates quoted for respective works.

101) **Construction Joint:**

Concreting shall be carried out continuously upto construction joints, the position and arrangements of which shall be predetermined by the SAE or his representative. Any intermediate rest/pause shall also be subject to his approval. All construction joints shall have to be provided as per relevant clause of IS 456 – 2000.

102) **Curing of Concrete:**

Concrete shall be cured properly and protected from any harmful effects. Stipulations of relevant Clauses of IS 456 shall be strictly adhered to.

103) **Testing of Concrete for R.C.C. / P.C.C. Works:**

The contractor shall provide all labour, materials and appliances including cube testing machine required to make test specimens for designing concrete mix and testing the quality of concrete going into the job.

Test cube shall be prepared as per IS-1199. 150 mm cubes shall be made, cured & tested at 7 days and at 28 days for compressive strength conforming to IS-516. Strength of concrete at 7 days age can be converted to 28 days as per IS: SP-24.

The contractor shall make all arrangements and do everything necessary for proper making and curing the test specimen under the direction, supervision and control of the SAE or his representatives at their cost.

The SAE or his representative may at any time direct the contractor to make specimen from the concrete actually going into the job. The contractor shall forthwith comply with that direction.

104) **Acceptance Criteria of Concrete:**

Acceptance criteria shall conform to relevant clauses of IS 456.

Where the cube strength falls below the allowable strength specified and the SAE on the basis of test results is satisfied that the concrete deficient in strength is acceptable, the SAE shall have full power in his absolute discretion to reduce the rate as a penal measure.

105) **Reduced Rate for under-specified Concrete:**

The contractor shall remain fully liable for producing concrete of specified strength. In case the concrete is found to be acceptable as under-specified work due to deficiency in strength of concrete and is accepted by the SAE reduction in rate may be applied as under.

$$\text{Percentage reduction} = \frac{\text{Design Strength} - \text{Observed Strength}}{\text{Design Strength}} \times 100$$

If the deficiency in strength of concrete is beyond tolerable limit the SAE may at his discretion direct the portion of concrete certified by him so deficient in strength to be replaced by concrete of specified strength at the Contractor's cost.

The SAE may also at his discretion allow deficient concrete to remain but the deduction on account of such deficiency in strength shall be made above.

106) **Additional Tests of Concrete:**

For any substandard concreting due to bad workmanship, honeycombing, bulging etc. and also due to concreting found deficient in strength, the SAE may conduct additional tests, if required, in the opinion of the SAE for testing the flexural strength, durability and other required parameters of the concrete on cored samples or on the newly constructed structure. The following are the examples (not exhaustive) of tests. Any number of the tests may be carried out as decided by the SAE. The contractor shall arrange for the test and bear the cost of the same, as per direction of the SAE. If the newly constructed concrete structure fails to attain the desired strength, durability and other properties of the concrete by any one of the tests stated in Cl. No. D. 16.1., the SAE shall have discretion to get the defective portion replaced or rectified at the contractor's cost. In such cases the decision of the SAE will be final and binding.

107) **Non-destructive Test Methods:**

108) **Surface hardness Tests:**

They include the William's Testing Pistol, Frank Spring Hammer, Einbeck Pendulum hammer.

109) **Rebound Test:**

Schmidt rebound Hammer.

110) **Penetration Techniques:**

These include the smitz Hammer, Split Pin and Windsor probe.

111) **Dynamic or Vibration Tests:**

These include resonant frequency and mechanical sonic and ultrasonic pulse velocity methods. They include the Sonometer, the PUNDIT equipment and unltrasonic pulse velocity measuring equipments.

112) **Magnetic Methods:**

They include the Pachometer and Covermeter.

113) **Chemical tests to obtain cement content, Aggregate / ratio and grading:**

The above tests shall be carried out by any approved laboratory or firm.

114) **Mode of Measurement for Payment of Concrete:**

Payment shall be made on volume of concrete as per recorded measurement. Cost of cement, stone chips, sand and any admixture, cost of transportation of concrete, and its placement using pumps etc. and any other allied items of work, excluding reinforcement, pre-stressing steel and other accessories shall be deemed to have been included in the rate.

115) **Shuttering:**

Form work must conform to Clause Nos.1501 to 1513 under Section 1500 of specification for road and bridge works – 4th revision published by I.R.C. Shuttering shall be of approved type with hard wood timber planks true to line with smooth surface and not less than 37.5 mm thick with 4 mm thick plywood lining over the planks. The plywood shall conform to IS 4990 – 1993. However, as an alternative, sufficiently rigid steel shuttering may be used, if so desired or approved by the SAE.

All shuttering and framing must be adequately stayed and braced to the satisfaction of the SAE for properly supporting the concrete during the period of hardening. It shall be so constructed that it may be removed without shock of vibration to the concrete.

Drawings showing shuttering details together with supporting design calculation in detail should be submitted by the contractor to the Engineer-in-Charge for his approval before taking up the work.

Before concrete is placed, the shuttering must be coated with an approved preparation for preventing the adhesion of the concrete to the shuttering and it is to be of such a nature and so applied that the surface of the finished concrete is not stained. Cares should also be taken that such approved preparation shall be kept out of contact with the reinforcements. The interior of all moulds and boxes must be thoroughly washed with a hose pipe or otherwise so as to be properly cleaned and free from all extraneous matter previous to the deposition of concrete.

116) **Mode of Measurement for Payment:**

Separate payment shall be made for shuttering, if not otherwise mentioned. Wherever necessary, shuttering and staging must be provided. Unless otherwise stated no payment will be made for such shuttering or staging and the cost thereof will be deemed to have been covered by the rate for relevant finished item of work. Where payment for shuttering has been specified, the rate shall be deemed to cover the cost of the necessary staging as well. Payment if any, for shuttering will be on the basis of surface area of shuttering in actual contact with concrete.

117) **Finishing of Concrete Surface:**

As soon as the shuttering has been removed, the visible surface of the concrete shall be rubbed down to perfectly smooth finish, free from all irregularities. The finish must be produced by using any of the methods specified in the specifications and codes of practice. No separate payment will be made for finishing surfaces.

118) **Steel reinforcement for structure:**

This work shall consist of furnishing and placing reinforcement of the shape and dimensions shown on the drawings and as specified in **Clause Nos. 1601 to 1609 under Section 1600 of Specifications for Road and Bridge Works 4th – revision published by IRC.**

Generally TMT bars of grade Fe 415 shall be used for the structure.

The Contractor's rate shall include the cost of reinforcements and cost of carriage for steel materials to work site, labour for cutting the bars to correct length, bending cold to shape, placing and fixing in the position as shown in drawing with black annealed wire of approved gauge securely tied at every inter-section or as directed. The contractor shall without extra charge provide all other support and fixing required and shall take precautions that all such temporary fixings are removed before the concrete is put in the mould. The contractor's rate shall also include any initial straightening of the bars if necessary and removing loose rust or scales, if any, and other incidental works in this connection. It should also include the cost of supply of black annealed wire of approved gauge required for tying reinforcement. Cost of spot or running welding as and when provided as per direction of the SAE for lap splice shall be included in the rate.

119) **Mode of Measurement for Payment:**

Payment shall be made on weight of reinforcement steel including quantity for laps and splices**.**

120) **Earth Work in excavation:**

121) Specification laid down in PWD schedule of rates shall be followed.

122) **Mode of Measurement for Payment:**

Payment shall be made on the volume of earth excavated. The rate shall include cost of dumping the excavated earth within a lead of 50 M.

123) **Welding:**

Welding shall conform to the specifications laid down in relevant IS codes of practice.

N.B. Specifications of any item of works not covered here in above shall be guided by the P.W.D. / P.W. (Roads) Directorate's Schedule of Rates inforce at the time of N.I.T. and latest edition of relevant Indian Standard Specifications and Codes of Practice.