



WEST BENGAL STATE FISHERMEN'S CO-OPERATIVE FEDERATION LTD

BENFISH

31, G.N. BLOCK, SECTOR – V SALT

LAKE CITY, KOLKATA – 700091

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NOTICE INVITING TENDER

N.I.T No.:- BENFISH/MD/NIT-06(e)/2024-25

Memo No: 1565/IV-291/II

Dated: 22/11/2024

Separate tenders are invited by the **Managing Director, Benfish, 31, G.N. Block, Sector – V, Salt Lake City, Kolkata – 700091** on behalf of the West Bengal State Fishermen's Co-Operative Federation Ltd. for the work mentioned in the list of work/s attached here with, through electronic tendering (e-tendering) from eligible and resourceful contractors having sufficient credential and financial capability for execution of work/s of similar nature.

Intending bidders desirous of participating in the tender are to log on to the website benfish.co.in/Tenders (the web portal of the West Bengal State Fishermen's Co-Operative Federation Ltd.) They may also visit the website <https://wbtenders.gov.in> for the tender. The tender can be searched by typing the NIT No. in the search engine provided in the website.

Bidders willing to take part in the process of e- tendering are required to obtain Digital Signature Certificate (DSC) from any authorized Certifying Authority (CA) under CCA, Govt. of India viz. NIC, nCode Solution, Safescrypt, e-Mudra, TCS, MTNL, IDRBT, etc. DSC is given as a USB e-Token. After obtaining the Class 2 or Class 3 Digital Signature Certificate (DSC) from the approved CA they are required to register the fact of possessing the Digital Signature Certificates through the registration system available in the website.

Bidder can participate in one or more work as per the enclosed list. However, in case of a bidder applying for participation in more than one work, the technical evaluation for eligibility criteria will be based on the summation of the minimum required credentials for all such multiple works taken together, which the applicant should have executed in a single work within the stipulated period as mentioned in the Technical Credential chapter

Tenders are to be submitted online and intending bidders are to download the tender documents from the website stated above, directly with the help of the e-Token provided. This is the only mode of collection of tender documents. Details of submission procedure are given below under “General terms and conditions and information”.

Last Date & Time of Submission of Bids Online is 09.12.2024 at 13.00 Hrs.

The intending bidders must read the terms and conditions of the NIT carefully. They should particularly go through the eligibility criteria required and satisfy themselves of the requirements for eligibility. they should only submit their bids if they consider themselves eligible and are in possession of all the documents required. All information posted on the website consisting of NIT, Price Schedule (BOQ), Corrigendum & Drawings if any shall form part of the tender document.

LIST OF WORK

N.I.T No.:- BENFISH/MD/NIT-06(e)/2024-25

Sl. No.	Name of Project	Amount put to Tender (Rs.) Including GST & CESS	Earnest Money Deposit (Rs.) 2% of Tender Amount	Time Allowed for Completion
1	Renovation of 6TH Floor ,Flooring, Painting , Aluminum Works , Electrical ,Including Sanitary & Plumbing Works at Benfish Bhawan Within Benfish Office Complex ,Salt Lake City, Kolkata-91 (2 nd Call of NIT-03(e)/2024-25. SL.NO.-01)	Rs.3687779 .00	Rs.73756 .00	120 Days
2	Repairing and Renovation of Benfish IT Building North side Two nos Duct With Toilet Sanitary and Plumbing Work Within Benfish Office Complex ,Salt Lake City, Kolkata-91. (2 nd Call of NIT-03(e)/2024-25. SL.NO.-02)	Rs. 1468932.00	Rs.29379 .00	90 Days

**Managing Director
West Bengal State Fishermen's Co-Operative Federation
Ltd. (BENFISH)**

Memo No: 1565/1(3)/IV-291/II

Dated: 22/11/2024

Copy forwarded for favour of kind information to the:-

- 1) Additional Chief Secretary, to the Govt. of West Bengal, Fisheries Department
- 2) PS to Hon'ble MOS, Fisheries Department.
- 3) Office Notice Board.

**Managing Director
West Bengal State Fishermen's Co-Operative Federation
Ltd. (BENFISH)**

GENERAL TERMS AND CONDITIONS AND INFORMATION

1. Eligibility for Participation:

Contractors, Registered Engineers Co-operative Societies, Bona fide Outsiders, Consortiums and Partnership Firms registered with the Central or any State or Union Territory of Union of India and Contractors of equivalent Grade / Class registered with Central Government / MES / Railways for execution of Mechanical / Civil / Electrical works are eligible to participate, depending on the criteria as detailed below.

2. Submission of Tenders:

2.1. General Process of Submission:

Tenders are to be submitted online through the website stated. All the documents uploaded by the Tender Inviting Authority form an integral part of the contract. Tenderers are required to upload all the tender documents along with the other documents, as asked for, through the above website within the stipulated date and time as given in the NIT. Tenders are to be submitted in two folders at a time for each work, one is Technical Proposal and the other is Financial Proposal. The tenderers shall carefully go through the documents and prepare the required documents and upload the scanned documents in Portable Document Format (PDF) to the portal in the designated locations of Technical Bid. They need to fill up the rates of items/ percentage in the BOQ, downloaded for the work, in the designated Cell and upload the same in designated location of Financial Bid. The documents uploaded should be virus scanned and digitally signed using the Digital Signature Certificate (DSC). Tenderers should specially take note of all the addendum/ corrigendum related to the NIT and upload the latest documents as part of the tender.

2.2. Submission of Earnest Money Deposit (EMD):

The amount of Earnest Money is 2% (Two per cent) of the estimated amount of the concerned work put to tender in favour of WEST BENGAL STATE FISHERMEN'S CO-OPERATIVE FEDERATION LIMITED

Tenderer will select the tender to bid and initiate payment of pre-defined EMD/ Tender Fees for that tender by selecting from either of the following payments modes: (vide Finance Department Memorandum no. 3975-F(Y) Dt. 28/07/2016).

- i) Net banking (any of the banks listed in the ICICI Bank Payment gateway) in case of payment through ICICI Bank Payment Gateway;
- ii) RTGS/NEFT in case of offline payment through bank accounts in any Bank.

Payment Procedure:

a) Payment by Net Banking (any listed bank) through ICICI Bank Payment Gateway :

- i. On selection of net banking as the payment mode, the bidder will be directed to ICICI Bank Payment Gateway webpage (along with a string containing a Unique ID) where he / she will select the Bank through which he wants to do the transaction.
- ii. Bidder will make the payment after entering his Unique ID and password of the bank to process the transaction.
- iii. Bidder will receive a confirmation message regarding success/failure of the transaction.
- iv. If the transaction is successful, the amount paid by the bidder will get credited in the respective Pooling account of the State Government /PSU/Autonomous Body/Local Body/PRIs, etc maintained with the Focal Point Branch of ICICI Bank at R.N. Mukherjee Road, Kolkata for collection of EMD/Tender Fees.
- v. If the transaction is failure, the bidder will again try for payment by going back to the first step.

b) Payment through RTGS/NEFT:

- i. On selection of RTGS/NEFT as the payment mode, the e-Procurement portal will show a pre-filled challan having the details to process RTGS/NEFT transaction.
- ii. The bidder will print the challan and use the pre-filled information to make RTGS/NEFT payment using his Bank account.
- iii. Once payment is made, the bidder will come back to the e-Procurement portal after expiry of a reasonable time to enable the NEFT/RTGS process to complete, in order to verify the payment made and continue the bidding process.
- iv. If verification is successful, the fund will get credited to the respective pooling account of the Central / State Government /PSU/ Autonomous Body/Local Body/PRIs, etc maintained with the Focal Point Branch of ICICI Bank at R.N. Mukherjee Road, Kolkata for collection of EMD/Tender Fees.
- v. Hereafter, the bidder will go to e-Procurement portal for submission of his / her / bid.
- vi. But if the payment verification is unsuccessful, the amount will be returned to the bidder's account.

c) Refund/Settlement Process:

- I. After opening of the bids and technical evaluation of the same by the tender inviting authority through electronic processing in the e-Procurement portal of the State Government, the tender inviting authority will declare the status of the bids as successful or unsuccessful which will be made available, along with the details of the unsuccessful bidders, to ICICI Bank by the e-Procurement portal through web services.
- II. On receipt of the information from the e-Procurement portal, the Bank will refund, through an automated process, the EMD of the bidders disqualified at the technical evaluation to the respective bidders' bank accounts from which they made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on rejection of bid is uploaded to the e-Procurement portal by the tender inviting authority.
- III. Once the financial bid evaluation is electronically processed in the e-Procurement portal, EMD of the technically qualified bidders other than that of the L1 and L2 bidders will be refunded, through an automated process, to the respective bidders' bank accounts from which they made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on rejection of financial bid is uploaded to the e-Procurement portal by the tender inviting authority. However, the L2 bidder should not be rejected till the LOI process is successful.

- IV. If the L1 bidder accepts the LOI and the same is processed electronically in the e-Procurement portal, EMD of the L2 bidder will be refunded through an automated process, to his / her bank account from which he / she made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on Award of Contract (AOC) to the L1 bidder is uploaded to the e-Procurement portal by the tender inviting authority.
- V. As soon as the L1 bidder is awarded the contract (AOC) and the same is processed electronically in the e-Procurement portal –
- a) EMD of the L1 bidder for tenders of State Government offices will automatically get transferred from the pooling account to the State Government deposit head “8443-00-103-001-07” through GRIPS along with the bank particulars of the L1 bidder.
 - b) EMD of the L1 bidder for tenders of the State PSUs/Autonomous Bodies/Local Bodies/PRIs, etc will automatically get transferred from the pooling account to their respective linked bank accounts along with the bank particulars of the L1 bidder.
- In both the above cases, such transfer will take place within T+1 Bank Working Days where T will mean the date on which the Award of Contract (AOC) is issued.
- vi. The Bank will share the details of the GRN No. generated on successful entry in GRIPS with the E- Procurement portal for updation.
- vii. Once the EMD of the L1 bidder is transferred in the manner mentioned above, Tender fees, if any, deposited by the bidders will be transferred electronically from the pooling account to the Government revenue receipt head “0070-60-800-013-27” through GRIPS for Government tenders and to the respective linked bank accounts for State PSU/Autonomous Body/Local Body/PRIs, etc tenders.
- All refunds will be made mandatorily to the Bank A/c from which the payment of EMD & Tender Fees (if any) were initiated.

2.3. Technical Proposal:

The Technical Proposal should contain scanned copies and/or declarations in the following standardized formats in two covers (folders).

:

A. Technical Files (Statutory Cover) containing:

- i. Application for Tender (*Vide Form-1*) (*To be submitted in “Forms” folder*)
- ii. Notice Inviting Tender (NIT) (*To be submitted in “NIT” folder*)
- iii. 2911_ii (*To be submitted in Tender document*)

- iv. Average annual turnover from contracting business summary statement of average annual turnover from contracting business for a period of the last five years or during the period since formation of the Firm, if it was set up in less than 5 year period. (*Vide Form-2*). (*To be submitted in "Forms" folder*) (*Scanned copy of power of attorney by the competent authority is to be submitted, if the power is delegated for signing the bid to persons other than the applicant.*)
- v. Declaration of not having common interest in the same serial (*Vide Form-3*). (*To be submitted in "Forms" folder*)
- vi) List of machineries possessed by own / arrange through lease hold agreement along with authenticated copy of invoice & challan. (FORM- 4)
- vii) List of technical staff along with structure and organization (FORM- 5)

Note: Tenders will be summarily rejected if any item in the statutory cover is missing

B. My Document (Non-Statutory Cover) containing:

i) Certificates / Documents:

(a) The bidder must have valid Electrical Contractor License with full time engagement of an Electrical Supervisor holding Supervisor competency on the parts 1,2,3,4,5,6(A),6(B), 7(A), 7(B), 11 & 12 or equivalent National Supervisors' Certificate of Competency. [Self-attested scan copy of valid "Electrical Contractors License", "Supervisors' Certificate of Competency", & Authentic Notarized documents regarding engagement of Electrical Supervisor as submitted to the Licensing Board, Govt. of West Bengal" required as Non statutory Documents (FOR SL.NO- 01)]

(b) Professional Tax (PT) Clearance Certificates, IT, ESI, PF, PAN valid up to the date of opening of the tenders. Application for such clearance addressed to the competent authority may also be considered.

(C) G.S.T Registration Certificate.

(d) The prospective bidders shall have in their full time engagement experienced technical personnel, the minimum being one Diploma holder one B Tech / BE **Electrical** (Authenticated documents in respect of qualification and engagement shall be furnished for Technical Evaluation)., failing which the bid may be treated as non responsive [Non statutory Documents].

(c) Contractors should have proper technical credential for Electrical and Construction of similar nature of works s.(Name of Project, Pg No- 02).

Credential certificate issued by the Executive Engineer or equivalent or competent authority of a State / Central Government, State / Central Government undertaking, Statutory / Autonomous bodies constituted under the Central / State statute, on the executed value of completed / running work will be taken as credential.

I) Intending tenderers should produce credentials of a similar nature of completed work of the minimum value of 35% of the estimated amount put to tender during 5(five) years prior to the date of issue of the tender notice; or,

ii) Intending tenderers should produce credentials of 2(two) similar nature of completed work, each of the minimum value of 25% of the estimated amount put to tender during 5(five) years prior to the date of issue of the tender notice; or,

iii) Intending tenderers should produce credentials of one single running work of similar nature which has been completed to the extent of 75% or more and value of which is not less than the desired value at (i) above;

In case of running works, only those tenderers who will submit the certificate of satisfactory running work from the concerned Executive Engineer, or equivalent competent authority of a State / Central Government will be eligible for the tender. In the required certificate it should be clearly stated that the work is in progress satisfactorily and also that no penal action has been initiated against the executing agency, i.e, the tenderers.

Copy of final bill of the work containing details of executed items certified by the concerned Executive Engineer or equivalent officer should be submitted.

ii) Company Details:

- a) Registered Deed for Partnership Firm / Consortiums from the concerned Registrar of Assurances. Mere application for registration will not be considered. However, in cases where the applicant is yet to receive registration certificate, the applicant is to submit an affidavit in non judicial stamp paper along with the application pledging that *“the registration certificate of the Consortium/ Partnership Firm would be submitted to the tender Inviting Authority before making agreement with the Tender Accepting Authority in case he is found lowest.”* In case of in-ordinate delay in submitting the document his bid is liable to be rejected and his EMD deposited will stand forfeited to Government. Any change in the constituents of the consortium/ partnership firm should also be registered from the Office of the concerned Registrar of Assurances; prior to the date of application of tender otherwise his application will be rejected.
- b) Trade License for Proprietorship Firms.
- c) Memorandum of Articles for Limited Companies.
- d) Society Registration and Bye-Laws for Cooperative Societies

iii) Balance Sheet:

Audited Balance Sheets of last five financial years (2018-2019, 2019-2020, 2020-2021, 2021-2022 & 2022-2023), with auditor's certificate regarding annual turnover from contracting business in each year.

Bidders whose annual turnover is less than Rupees One Crore shall need to submit payment certificates obtained from clients and IT return submission certificates for the corresponding years in support of the Form 2 submitted under Statutory cover above.

Note: If the company was set up less than three years ago, audited balance sheet for the no of years Since inception is to be submitted.

iv) Technical Credential:

Contractors should have proper technical credential for Electrical and Construction of similar nature of works. Credential certificate issued by the Executive Engineer or equivalent or competent authority of a State / Central Government, State / Central Government undertaking, Statutory / Autonomous bodies constituted under the Central / State statute, on the executed value of completed / running work will be taken as credential.

I) Intending tenderers should produce credentials of a similar nature of completed work of the minimum value of 35% of the estimated amount put to tender during 5(five) years prior to the date of issue of the tender notice; or,

ii) Intending tenderers should produce credentials of 2(two) similar nature of completed work, each of the minimum value of 25% of the estimated amount put to tender during 5(five) years prior to the date of issue of the tender notice; or,

III) Intending tenderers should produce credentials of one single running work of similar nature which has been completed to the extent of 75% or more and value of which is not less than the desired value at (i) above;

In case of running works, only those tenderers who will submit the certificate of satisfactory running work from the concerned Executive Engineer, or equivalent competent authority of a State / Central Government will be eligible for the tender. In the required certificate it should be clearly stated that the work is in progress satisfactorily and also that no penal action has been initiated against the executing agency, i.e, the tenderers.

Copy of final bill of the work containing details of executed items certified by the concerned Executive Engineer or equivalent officer should be submitted.

v) Addendum / Corrigendum: (If published)

Note:- *Contractors are to keep track of all the Addendum/Corrigendum issued with a particular tender and upload all the above digitally signed along with the NIT. Tenders submitted without the Addendum/Corrigendum will be treated as informal and liable to be rejected.*

vi) Others: Any other documents found necessary

Note : Failure of submission of any one of the above mentioned documents will render the Tender liable to summary rejection

2.4. Financial Proposal:

The financial proposal should contain the following document in one cover (folder).

A. Bill of Quantities (BOQ):

The contractor is to quote the rate (percentage above or below) online through computer in the space marked for quoting rate in the BOQ. *(Only downloaded copies of the above documents are to be uploaded, duly virus scanned and digitally signed by the contractor)*

SECHEDULE OF RATE = (SOQ) TO BE UPLOADED IN FINANCIAL PROPOSAL

3. Eligibility Criteria:

The tendered work is subdivided into various major items (being the summation of associated items of the BOQ having weightage of 15% or more in terms of monetary value in respect to the amount put to tender). Each major item is considered to fix the physical requirements to match credential in terms of quantity executed by the bidder in previous work. Contractors are to submit credential of having executed the corresponding major item by the bidder thus calculated from the BOQ of the work to the required extent as specified later.

Completion Certificate(s) submitted by the tenderer should preferably indicate the monetary value of any one or more of such major items executed in any one work within the last three years.

3.1. General Note:

- a)** While calculating the amount, i.e. money value of the major items stated above, amount of all sub- items included in the major items should be arithmetically added.
- b)** All Completion Certificates should be supported by BOQ of the work. If the BOQ is not signed by the issuing authority, it should be supported by the certificate of 100% completion of the job from the competent authority in addition to the BOQ of the work.
- c)** The tenderer may submit the performance certificate for the up to date work done out of the total work mentioning there the percentage of total work of similar nature issued by the appropriate authority.

3.2. Special Note:

Average turnover from contracting business as stated in Form 2 should be at least **100%** of the amount put to tender of work in which the contractor/firm intends to participate.

4. Completion Certificate:

- a) Completion Certificate/s must contain fully (100%) completed works during the last 5 (Five) years prior to issue of the notice of which at least one work of desired technical credential mentioned above. Payment Certificates to the effect of completion of work may also be considered.
- b) Completion Certificate of works executed under other Departments of Central or any State Government like Public Works & Public Works (Roads) Department/ Irrigation Department/ Public Health Engineering Department, Zilla Parishad, District Board, Autonomous/ Notified Govt. Authority/Council/Board, Municipalities/ Municipal Corporations, or similar other project/ authorities under Central or any State Govt. may also be considered.
- c) Such Completion Certificates are to be issued by an officer not below the rank of Executive Engineer or equivalent ranking competent authority of the concerned Central or any State Govt /Dept. /Organizations.

The prospective tenderers must have sufficient credential to participate in the tender as per notification bearing No. 04-A/PW/ 0/10C-02/14 DATED 18.03.2015 of Accounts Branch, PWD, Govt. of W.B. [Non Statuary document].

5. Penalty for suppression / distortion of facts:

If any tenderer 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 evaluation 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 Evaluation Committee upon suggesting suitable punitive measures will bring the matter to the notice of the M D BENFISH immediately and the tenderer may be suspended from participating in the tenders on e- tender platform M D BENFISH for a maximum period 3 (Three) years. In addition, his /her Earnest Money Deposit will stand forfeited to BENFISH. Besides, Benfish may take appropriate legal action against such defaulting tenderer.

6. Taxes & Duties to be borne by the Contractor:

Income Tax, GST, Royalty, Construction Workers' Welfare Cess and similar other statutory levy / cess will have to be borne by the contractor and the rate should be quoted accordingly after consideration of all these charges.

7. Site inspection before submission of Tender:

Before submitting any tender, the intending tenderers should make themselves acquainted thoroughly with the local conditions prevailing at site by actual inspection of the site and taking into consideration all factors and difficulties likely to be involved in the execution of work in all respect including transportation of materials, communication facilities, climate conditions, nature of soil, availability of local labour and market rate prevailing in the locality etc. and no claim, whatsoever, will be entertained on these account afterwards. In this connection intending tenderers may contact the office of the MD BENFISH, within working hours between 11.30 a.m to 4.30 p.m on any working day prior to date of submission of tenders

8. Conditional or Incomplete Tender:

Conditional or incomplete tenders are liable to be summarily rejected.

9. Opening and Evaluation of Bid:

A. Opening of Technical Proposals:

- a) Technical proposals will be opened by the tender inviting authority or his / her authorized representative electronically from the website stated above, using their Digital Signature Certificate.
- b) Technical proposals for those tenders whose receipt copy of NEFT/RTGS have been received in 'Draft folder' will only be opened. Proposals corresponding to which receipt copy towards NEFT/RTGS has not been received will not be opened and will stand rejected.
- c) Intending tenderers may remain present during the opening if they so desire.
- d) Decrypted (transformed into readable formats) documents of the Non-statutory Cover will be downloaded and handed over to the Tender Evaluation Committee.

B. Uploading of Summary List of Technically Qualified Tenderers (1st Round):

- a) Pursuant to scrutiny and decision of the Technical Evaluation Committee (TEC), the summary list of eligible tenderers whose Financial Proposals will be considered for the work under particular sl. no. of list of work will be uploaded in the web portals.
- b) While evaluation, the Committee may summon of the tenderers and seek clarification / information or additional documents or original hard copy of any of the documents already submitted and if these cannot be produced within the stipulated timeframe, their proposals will be liable for rejection

C. Provision for appeal and its disposal

- a) Intending tenderer not satisfied with the decision of the tender Evaluation Committee (TEC) may prefer an appeal to the MD BENFISH in writing (through facsimile / e-mail or speed post) within two working days after the date of uploading of the summary list of the successful tenderers. Copy of such appeal should also be sent to the Tender Inviting Authority of BENFISH.
- b) The Appellate Authority of BENFISH will dispose such appeals by hearing the aggrieved tenderers as well as consulting the Tender Evaluation Committee within next three working days and the tenderer will be communicated accordingly.

D. Final Publication of Summary List of Technically Qualified Tenderers

In case, the Appellate Authority asks the Tender Inviting Authority to consider tender of any of the aggrieved tenderers, who may have preferred appeal, the process of uploading of qualified tenderers will be re-done. Date of opening of financial bid is to be intimated after publication of the final list of technically qualified tenderers.

E. Opening and Evaluation of Financial Proposal

- a) Financial proposals of the tenderers declared technically eligible by the Tender Evaluation Committee will be opened electronically by the Tender Inviting Authority from the web portal stated above on the prescribed date.
- b) The encrypted copies will be decrypted and the rates will be read out to the contractors remaining present at that time.
- c) After opening of the financial proposal the preliminary summary result containing inter alia, names of contractors and the rates quoted by them will be uploaded.

- d) If the Tender Inviting Authority is satisfied that the rate obtained is fair and reasonable and there is no scope of further lowering down of rate he /she may after having necessary comments from the concerned Engineer for the work and after test check to the comparative statement by the G.M. (Finance) attached to the office of the MD BENFISH, upload the final summary result containing the name of contractors and the rates quoted by them against each work after acceptance of the rate by the Tender Accepting Authority.
- e) However, if there is any scope for lowering down of rates in the opinion of the Tender Inviting Authority, he /she may choose to notify all the tenderers through the website to attend sealed bids to be followed by open bids to be held at his office at prescribed date and time, which will be done offline, i.e. as manually, as per prevalent norms.
- f) After holding such bids, final result after acceptance of the rate by the Tender Accepting Authority would be uploaded in the web portal.
- g) The Tender Accepting Authority may ask any of the tenderers to submit analysis to justify the rate quoted by that tender.

10. Bid Validity:

The Bid will be valid for **120 Days** from the date of opening of the financial bid

11. Acceptance of Tender:

Lowest valid rate should normally be accepted. However, the Tender Accepting Authority does not bind himself / herself to do so and reserves the right to reject any or all the tenders.

12. Tender Accepting Authority:

The Managing Director, Benfish will accept any Amount of Tender.

13. Execution of Formal Tender after Acceptance of Tender:

The tenderer(s), whose tender is approved for acceptance, shall within 15 days of the receipt of Letter of Acceptance (LOA) will have to execute 'Formal Agreement' in WB Form No: 2911(ii) with the Tender Accepting Authority, in quadruplicate copies. The terms and conditions as laid down in the different clauses of WB Form No. 2911(ii) will be the part and parcel of the 'Agreement' and binding to the successful tenderer(s) / contractor.

14. Payment:

Payment of RA Bill, final bill for the work will be made according to relevant Govt. norms laid down in Financial Rules of accounting procedures, subject to the availability of fund and no claim for delay in payment will be entertained.

15. Schedule of Dates for E–Tendering

Sl. No.	Particulars	Date & Time
a)	Date of uploading of NIT & other Documents (online) (Publishing Date)	22.11.2024
b)	Documents download start date (Online)	23.11.2024 from 10.00 AM
c)	Documents download end date (Online)	09.12.2024 upto 1.00 PM
d)	Bid submission start date (On line)	23.11.2024 from 11.00 AM
e)	Bid Submission closing date	09.12.2024 upto 1.00 PM
f)	On Line NEFT /RTGS	09.12.2024 upto 1.00 PM
g)	Date ,Time and place of Opening of Technical Bid through the Website https://wbtenders.gov.in	11.12.2024 at 2.00 PM
h)	Pre bid meeting date	03.12.2024 at 2.00 PM in the chamber of TIA
i)	Uploading of final list Technically Bid qualified bidders	To be notified later
j)	Financial Bid opening date	To be notified later
k)	Uploading of final list financial Bid qualified bidders	To be notified later

Managing Director
West Bengal State Fishermen's Co-Operative Federation Ltd.
(BENFISH)

ADDITIONAL TERMS & CONDITIONS

- 1. “Additional Performance Security”** has been made mandatory which shall be obtained only from the successful L1 bidder, if the accepted bid price is below 20% of tender BOQ or below by more than 20% of the tender BOQ. This Additional Performance Security shall be equal to 10% of the tendered amount i.e. 10% of the L1 bid price. The said Bank Guarantee (BG) shall have to be valid up till the end of the contract/Agreement period including extended time period till 100% physical completion of work in all respects and shall be renewed within validity period accordingly if required. The said Bank Guarantee shall remain in custody of the DDO & Executive Engineer in-charge of the work, which shall be returned to the bidder/contractor after successful physical completion of the work as per contract. If the bidder fails to complete the work successfully, this Additional Performance Security shall be forfeited at any time during the pendency of the contract period after serving proper notice to the contractor/bidder agency. Necessary provisions regarding deduction of security deposit from progressive bills of the contractor in respect of the tendered work shall be governed as per relevant clauses of the tender contract/Agreement which will in no way be affected / altered due to this Additional Performance Security. The entire Security Deposit or the Performance Security may be released after physical and financial completion of the project but before expiry of the security period or defect liability period against receipt of equivalent amount of bank guarantee of approved bank of RBI which should remain valid till the expiry of the defect liability period.
- 2. The contractor must not have any project with BENFISH which is pending for more than Three years.**
- 3.** The SE concerned will be the Engineer-in-Charge in respect of the contract and all correspondences concerning rates, claims, change in specification and/or design and similar important matters will be valid only if made by the Engineer-in-Charge. If any correspondence of above tender is made with Officers other than the Engineer-in-charge for speedy execution of works, the same will not be valid unless copies are sent to the Engineer-in-Charge and approved by him. Regarding specification, supervision, approval of materials and workmanship. In case of dispute, the decision of Engineer-in-Charge shall be final and binding.
- 4.** The acceptance of the tender including the right to distribute the work between two or amongst more than two bidders will rest with the competent authority without assigning reason thereof. The accepting authority reserves right to reject any or all tenders without assigning any reason thereof.
- 5.** The Bidder shall have to comply with the provisions of (a) Contract labour (Regulation & abolition) Rules, 1970 (b) Minimum Wages Act 1948 or the modification thereof or any other laws relating thereto as will be in force from time to time.
- 6.** Federation shall not entertain any claim whatsoever from the contractor for payment of compensation on account of idle labour on any ground including non-possession of land.
- 7.** The Government shall not be held liable for any compensation due to machines becoming idle for any circumstances including untimely rains, other natural calamities, strike etc.

- 8.** Imposition of any duty / tax rules etc whatsoever of its nature (after work order / Commencement and completion of the work) is to be borne by the bidder. Original challans of those materials, which are procured by the bidder, may be asked to be submitted for verification.
- 9.** Cess @ 1% of the cost of construction works shall be deducted from the Gross value of the Bill in Terms of Finance Department order No. 4170-F (Y) dated 28.05.2015. Also it is instructed to register his Establishment under the Act, under the competent registering Authority, i.e. Assistant Labour Commissioner/Dy. Labour Commissioner of the region concerned.
- 10.** No mobilization / secured advance will be allowed unless specified otherwise.
- 11.** GST and Cess, as applicable, shall be incorporated in the value of work after finalization of rates and selection of lowest bidder.
- 12.** All working tools and plants, scaffolding, construction of vats & platforms will have to be arranged by the contractor at his own cost.
- 13.** The contractor shall supply mazdoors, bamboos, ropes, pegs, flags etc. for laying out the work and for taking and checking measurements for which no extra payment will be made.
- 14.** The contractor should see the site of works and tender documents, drawings etc. before submitting tender and satisfy himself regarding the condition and nature of works and ascertain difficulties that might be encountered in executing the work, carrying materials to the site of work, availability of drinking water and other human requirements and security etc. Work on river banks may be interrupted due to a number of unforeseen reasons e.g. sudden rise in water level, inundation during flood, inaccessibility of working site for carriage of materials. The Engineer-in Charge may order the contractor to suspend any work that may be subjected to damage by climate conditions. No claim will be entertained on this account. The contractor will not be entitled to any claim or extra rate on any of these accounts.
- 15.** A machine page numbered Site Order book (with triplicate copy) will have to be maintained at site by the contractor and the same has got to be issued from the Engineer-in-Charge before commencement of the work. Instructions given by inspecting officers will be recorded in this book and the contractor must note down the action taken by him in this connection as quickly as possible.
- 16.** The work will have to be completed within the time mentioned in the tender notice. A suitable work program is to be submitted by the contractor within 7(seven) days from the date of receipt of work order which should satisfy the time limit of completion. The contractor should inform in writing the name of his authorized representative at site within 7 (seven) days from the date of receipt of work order who will receive instruction of the work, sign measurement book, bills and other Govt. papers etc.
- 17.** The contractor will have to apply as per clause 5 of W.B.F. No. 2911(ii) for extension of time, if the work is not commenced or stopped or delayed due to non-receipt of departmental materials or land or due to injunction or public interference etc. No compensation for idle labour, establishment charge or on other reasons such as variation of price index etc. will be entertained.
- 18.** All possible precautions should be taken for the safety of the people and work force deployed at worksite as per safety rule in force. Contractor will remain responsible for his labour in respect of his liabilities under the Workmen's Compensation Act etc. He must deal with such cases as promptly as possible. Proper road signs as per P.W.D. practice will have to be made by the contractor at his own costs while operating a public thoroughfare.

19. The contractor will have to maintain qualified technical employees and/or Apprentices at site as per prevailing Apprentice Act or other Departmental Rules & Orders circulated from time to time.
20. The contractor will have to accept the work program and priority of work fixed by the Engineer-in-Charge so that most vulnerable reach and/or vulnerable items be completed before the date needed by the Department due to impending monsoon or for other reasons.
21. The quantities of different items of work mentioned in the tender schedule or in work order are only tentative. In actual work, these may vary considerably. Payment will be made on the basis of works actually done in different items and no claim will be entertained for reduction of quantities in some items or for omission of some items.
22. Any materials brought to site by contractor must be subject to approval of the Engineer-in-Charge. The rejected materials must be removed by the contractor from the site at his own cost within 24 hrs of issue of the order to that effect. The rates in the schedule are inclusive of cost and carriage of all materials to worksite. The materials will have to be supplied in phase with due intimation to the Assistant Engineer concerned in conformity with the progress of the work. For special type of materials, i.e. Geo Synthetic Bags, HDPE Bags, Geo Textile Filter, Geo jute Filter etc. if any, relevant Data Sheet containing the name of the Manufacturers, Test Report etc. will also be submitted in each occasion. Engineer-in-Charge may conduct independent test on the samples drawn randomly before according approval for using the materials at site. In this regard decision of Engineer-in-Charge is final and binding.
23. The contractor shall also have to satisfy the Engineer-in-Charge regarding the proper utilization of materials which have been issued departmentally.
24. An amount of not less than 3% of the total quoted amount of the work, excluding Taxes and Charges, (as may be mentioned in the Work Order / Letter of Acceptance) Shall be deducted from the bill during payment as Security Deposit for a Defect Liability Period of 1 Year from the date of completion of the work. At the end of the defect liability period, the S.D. may be released upon certificate issued by the Engineers.
25. In case of tie bid the selection of L1 Bidders will be as per memorandum no. 2320- F(Y) Dated: 07.06.2022. Principal Secretary, Govt. of West Bengal.

Managing Director
West Bengal State Fishermen's Co-Operative Federation Ltd.
(BENFISH)

Special terms and conditions

1. Drawings

The tender must be based on the Departmental G.A.D. and execution of work shall be done as per detailed working drawings to be supplied by the Department from time to time.

2. Site Conditions

i) The tenderer must inspect and examine the site and its surroundings and satisfy himself before submission of his tender about the nature of the ground, sub-soil characteristics, the quantities and nature of the work, material necessary for completion of the work, the means to access to the working site, the H.F.L. & O.F.L., the accommodation he may require for his men and materials and in general he shall obtain all necessary information as to risks, contingencies overhead and other circumstances that may influence or affect his tender rates, and no claim whatsoever will be entertained after acceptance of his tender.

ii) The contractor must accept the entire site, as it is, including changes, if any, during the period of construction, and any work that may be necessary to carry out the entrusted job, except those otherwise specifically mentioned or included in the priced schedule of work / B.O.Q. shall be deemed to have been included for in the rates quoted by the tenderer.

3. Access Road

The contractor shall, construct and maintain through out the contractual period of work as access road, without intervening the water flow of the cross-channel suitable for the loaded trucks for carriage of his construction materials from the nearby State Highway to the actual place of work-site at his own cost and for which no separate, payment will be made.

4. Excavation And Earth Work

i) General

The excavation will generally refer to open excavation of foundation wet or dry.

ii) Excavation and Preparations of Foundation for Pilling and Concreting

It shall include removal of all materials of whatsoever nature for all depths, whether wet or dry. necessary for the construction of foundation (including mass excavation) in accordance with lines, levels, shown on the Departmental drawings and the plan, dimension of the excavation shall be the theoretical dimensions Plus 0.16 meter on all sides or as directed by the Engineer-in-Charge. The Bottom of excavation shall be leveled both longitudinally and transversely or stepped as directed by the Engineer in- Charge. If the contractor excavate greater depth or width than shown on the Departmental drawings or as directed by the Engineer-in-Charge, he shall at his own expenses fill the extra depth or width with cement concrete in proportion as directed by the Engineer-in-Charge but in no case with concrete of mix leaner than 1:4:8 cement concrete.

The contractor shall report to the Engineer-in-Charge when the excavations are ready for piling or laying of lean concrete or soling or to receive structural concrete. No concrete shall be placed in foundations until the contractor has obtained the approval of the Engineer-in-Charge. In case, the excavation is done through different strata of soil and if the same is payable as per provision in the schedule of items with quoted rates, the contractor shall get the dimensions of the strata decided and approved from the Engineer-in-Charge. If no specific provision is made in the Schedule of Items with rates appearing in the priced schedule of items of work it will be presumed that excavation shall be in all types of soil and the

contractor's rate cover for the same. After the excavation is approved by the Engineer-in-Charge and before commencement of piling work or laying of the concrete) the contractor shall get the depth and dimensions of the excavation and levels (and nature of strata if applicable as per Schedule of Items like

hard rock, soft rock etc) and measurements recorded from the Engineer-in-Charge.

iii) Shoring

The sides of the excavations should be timbered and shored in such a way as is necessary to secure them from falling 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 hold the sides of the excavation in position and ensure safety from slips and present damages to work and property and injury to persons. The shoring shall be removed as directed after the items for which it is required are completed.

iv) Protection

All foundation pits and similar excavations shall be strongly fenced and marked with red lights at night in charge of watchman to avoid accidents. Adequate protective measures shall be taken to see that the excavation does not effect or damage adjoining road structures or any temporary structure erected at site for the work. All measures required for the safety of all people working in and near the foundation trenches and the people in the vicinity shall be taken by the contractor at his own cost. The Contractor will be entirely responsible for any injury and damage to property caused by his negligence or accident due to his constructional operations.

v) Stacking of Excavated Materials

All materials excavated will remain the property of the department and rate for excavation includes shorting out of useful materials and stacking unserviceable materials as directed. Materials suitable and useful for backfilling or leveling of the site or other use shall be stacked in convenient place but not in such a way as to obstruct free movement of men and vehicles or encroach on the area required for construction purpose.

vi) Backfilling

All shoring and frame work shall be removed after their necessity ceases and trash of any sort shall be cleaned out from the excavation. All space between foundation concrete and the sides of excavation shall be refilled to the original surface with approved excavated materials in layers of 15 cm. to 20 cm. thick, watered and rammed. The filling shall be done after concrete is fully set and done in such a way as not to cause undue thrust on any part of the structures. Where suitable excavated materials are to be used for refilling, it shall be brought from the place where it was temporarily stacked for use in refilling. Measurement of excavations, lean concrete or soling, piling work, concrete and other works below ground level are to be jointly recorded. Black Cotton soil shall not be used for backfilling.

vii) Dewatering

Rate for excavation shall include bailing or pumping out water which may accumulated in the excavation during the progress of work either from seepage, springs, rain or any other cause, and diverting surface flow, if any by bunds or other means. Pumping out water shall be done in such approved manner as to preclude the possibility of any damage to the foundation or trenches or masonry or any adjacent structure. When water is met in foundation trenches, pumping out water shall be from an auxiliary pit of adequate size dug, slightly outside the foundation excavations. The depth auxiliary pit shall be more than the working foundation trench levels. The auxiliary pit shall be refilled with approved excavated materials, after the dewatering is over.

The excavation shall be kept free from water.

- a) During inspection and measurements.
- b) During placement of reinforcements.
- c) When concrete work is in progress and till it completion comes above the natural water level.
- d) Till the Engineer-in-Charge considers that the concrete is sufficiently set.

viii) Rate to Include for Excavation

Apart from other factors mentioned elsewhere in the contract, rates for the item of excavation shall also include for the following :

- a) Clearing site.
- b) Setting out works as required.
- c) Providing shoring and shuttering to avoid sliding of soil and to protect adjacent Structure and subsequently removing the same.
- d) Bailing out and pumping out water as required and directed.
- e) Excavation at all depth (unless otherwise specified in the Schedule of Items) and removal of all materials of whatever nature wet or dry and necessary for the construction of foundation etc. and preparing bed for laying concrete.
- f) Sorting out useful excavated materials and conveying beyond the structure and stacking them neatly in the size for backfilling or reuse as directed.
- g) Necessary protection including labour, materials and equipment to ensure safety and protection against risk or accident.
- h) Drilling of holes / pits for local inspection as directed to explore the nature of substratum if necessary.
- i) Dismantling, cutting and removing under-ground drainage, concrete or masonry structure if any encountered during excavation.
- j) The excess excavation required for fixing for work or working space and refilling the same on completion of all works.
- k) Removing surplus excavated materials from site upto 450 metre including loading and unloading.

I) MEASUREMENT FOR EXCAVATION

Excavation for foundation shall be measured and paid as per drawing dimensions (or the actual work done at site whichever is less) of concrete (bed concrete where so specified) at the lowest level plus 0.46 metre in all sides. In regard to length and breadth, and depth shall be completed from the concerned excavation levels and ground levels taken before excavation. Any additional excavation required for working space for from work planking dewatering installation and shuttering etc. shall not be measured and paid for separately but rate quoted by the tenderer shall include for all these factors. No increase in bulk after excavation shall be made.

5. Concrete Work

A) General

i) Supervision

A competent person approved by the Engineer-in-Charge shall be employed by contractor whose first duty will be to supervise all stages in all preparation and placing of the concrete. All tests required shall be carried out as directed by the Engineer-in-Charge.

ii) Approval of Concreting Arrangement etc.

Well before construction commences the contractor shall supply to the Engineer-in-Charge his approved drawing showing the general detailed arrangement for his concreting plant, system of form work, conveyance of the concrete to the point of pouring and all other devices which he proposes to use for the construction of the structure.

iii) Samples and Tests

Every facility shall be provided to enable the Engineer-in-Charge to obtain samples and carry out tests on the materials and construction. If those test show that any of the materials for construction do not comply with the requirements of the relevant IS specification, the contractor shall be responsible for replacement of the defective materials, and or construction. The necessary cost of all such tests has to be borne by the contractor.

iv) Rejected Materials

All materials which have been damaged, contaminated or have deteriorated or do not comply in any way with the requirements of the relevant IS specification shall be rejected immediately from the site at the contractors own expenses.

v) Equipment

Contractor shall keep of work site testing equipment for aggregate, concrete like test sieves, balance, slump cones, cube testing machine, cube moulds, weight batch, mixer machine with hoppers, vibrators, hoist, pile driving machineries etc. as required conforming to relevant IS specification.

B) Materials

All materials shall be of approved quality.

i) Cement

Brand of Cement: Ultratech / Ambuja / Lafarge / ACC / Ramco / or equivalent (Cement from Mini Plant will not be allowed)

a) Ordinary Portland Cement shall conform to the IS specification IS:269-1967, Portland Pozzolona Cement shall conform to IS:1489-1967. PSC conforming to IS-455.

b) Cement shall be stored in dry Weather proof godowns (or shed) built at the cost of the contractor in the stocks which are not higher than 100 bags. Sufficient space shall be provided for circulation and rotation of bag in order to minimize the length of storage time of any of the bags. The floor of the godown shall consist of wooden planks resting on base prepared of dry bricks laid on edge and joints grouted with cement mortar.

c) Cement which is deteriorated, damaged or wet shall not be allowed to be used. All such cement shall be immediately removed from work site by the contractor. The cost of all such removal of cement shall be borne by the contractor.

ii) Steel

HYSD Bars conforming to IS 1786 of appropriate grade shall be used.

iii) Aggregates

All aggregates shall conform to IS:383-1970

iv) Fine Aggregate

a) The fine aggregate sand shall be hard, dense durable and clean with uncoated grains. The maximum size of particles shall be graded down. The sand shall be 4.75 mm. (3/ 16 in) and shall be graded down. The sand shall not contain any harmful materials such as iron, pyrites, coal, mica, silt, clay, alkali, sea shells, organic impurities, loam etc. or in case of reinforced cement work any material which might attack the reinforcement or detrimental to concrete. Aggregate which are chemically reactive with the alkalies of the cement shall not be used. The maximum quantity of the deleterious materials shall not exceed the limits specified in the relevant IS specification. The fineness modulus for such sand should normally not less than 2.

b) Grading the natural sand used for work shall have a grading conforming to one of the three grading zones of I, II & III of IS:383-1970.

v) Coarse Aggregates

a) Coarse aggregate unless otherwise stated shall consist of hard, dense, durable, uncoiled crushed rock of Pakur or Pakur variety.

b) The aggregate shall be free from soft, friable than or long laminated pieces. Aggregate shall be free from injurious amounts of alkali organic matter and other deleterious materials. Flaky or weathered stones shall not be used. The maximum percentage of deleterious materials shall not exceed those specified in the relevant IS specifications. The Engineer-in-Charge at his direction may allow the use of Graded Aggregate of nominal size to conform to the grading in the IS:383- 1970.

c) Contractor shall arrange to supply coarse aggregate, in single sizes. The single sizes shall be combined in suitable proportion to get desired over all grading of aggregates.

d) Size of Aggregates: Nominal maximum size of aggregate in R.C.C. piles, piers, shutters, slabs etc. should be restricted to 6 mm. less than the minimum clear distance between the main bars or 6 mm. less than the minimum cover to the reinforcement whichever is less. In no case the maximum size of the aggregate should be more than 40 mm.

e) In selecting the aggregate, the contractor shall satisfy himself that the source is suitable for regular supply and a watch shall be maintained that the particular shape and grading remain available uniformly throughout the progress of work. Unless authorised specified, this shall be obtained from Pakur.

- f) Where directed by the Engineer-in-Charge, aggregate shall be washed by approved methods at contractor's expenses.
- g) The sample of coarse aggregate for concrete work should be produced for the approval of Engineer-in-Charge and the whole work should be done with coarse aggregate conforming to the approved sample.
- h) Stack - piling of aggregate

Unless otherwise directed with a view to maintain uniform water cement ratio, the aggregate shall be stocked in stack - piles. Where stock-pile are unused, the floor should be clear, the stock - piles should as far as possible be large, flat - topped and drained. It is recommended that the aggregate should not be drawn bottom 0.5 metre of the stock piles, since this is normally such than that above.

vi) Water

Water used for easing of aggregate, mixing and curing shall be potable, free from injurious amounts of deleterious materials which are likely to affect the strength and durability of concrete pH value of Water shall be between 6 to 8.

In addition, water shall not contain an excess of acid, alkali, sugar or salt. The permissible limits of those materials shall be as stipulated in IS. 456-2000.

C) Mixing of Concrete

C.1) Machine Mixing

Concrete shall be mixed in a Batching Plant or as the case may be mechanical mixer. Mixing shall be continued until there is uniform distribution of materials and the mass is uniform in colour and consistency. Mixing shall be continued till individual particle of the coarse aggregates shown complete coating of mortar containing its proportionate amount of cement. The mixing time from the time of adding water shall be in accordance with IS:1951-61. but in no case mixing shall be done for less than two minutes. Mixers which have been out of use for more than 30 minutes shall be thoroughly cleaned before putting in a new batch. Unless otherwise agreed to by the Engineer-in-Charge the first batch of concrete from the mixer shall contain only two thirds of the normal quantity. Mixing Plant shall be thoroughly cleaned before changing from one type of cement to other.

C.2) Transporting, Placing, Compacting and Curing of Concrete

a) Transporting Concrete shall be handled from the place of mixing at site to the place of final deposit as rapidly as practicable by method which will prevent contamination, segregation or loss of any of the ingredients. If segregation occurs during transport the concrete shall be remixed before use. The concrete shall be placed in position and compacted before the initial set of cement has commenced and shall not be subsequently disturbed. During hot or cold weather concrete shall be transported in deep containers to reduce loss of water by evaporation during hot weather and loss of heat during cold weather. Deep containers are specified on account of their lower surface area.

b) Placing of Concrete

Unless otherwise agreed to by the Engineer-in-Charge, Concrete shall not be dropped into position from height greater than 1.2 metre.

c) Removal of Debris etc .

All debris dust etc. shall be removed from the shuttering at the cost of the contractor before any concrete is placed. Care should be taken to see that shuttering is watertight and has been properly treated with approved composition to prevent absorption of water. No concrete shall be placed in any part of the structure until the approval of the Engineer-in-Charge has been obtained.

d) Temperature of

Concrete when deposited shall be a temperature of not less than 4.5°C and not more than 38°C. When concreting under water, the concrete shall not be placed in water having a temperature below 4.5°C. The temperature of the concrete, when deposited under water, shall not be less than 16°C nor more than 18°C.

e) Protection and Placing in Layers

Concrete shall be placed into the form in layer not exceeding 450 mm. in thickness. Concrete after placing shall be protected by use of covering subject to approval of the Engineer-in-Charge during first stages of hardening against high

winds hot sun and/or rain or surface water. No shock or vibrations shall be allowed to be imported to forms supporting fresh concrete. No such vibration shall be given in reinforcing bars portion of which are embodied in fresh compacted concrete.

f) Compaction

All concrete shall be compacted to produce it dense homogeneous mass. Concrete shall be thoroughly compacted during operation of placing by the use of Mechanical Vibrators. It shall be compacted in its final position within 30 minutes of its discharge from the mixer unless carried in properly designed agitators operating continuously when this time shall be within 2 hours of the addition of cement to the mix and within 30 minutes of its discharge from the agitator. Sufficient number of vibrators (including standby) of adequate capacities shall be used for compaction of concrete. Vibration shall be carried out by trained men and in presence of a qualified supervisor trained in the use of vibrators and vibrated concrete. In certain portions where vibration is not effective, careful rolling and tamping shall be earned out and sufficient men employed to ensure that thorough consolidation taken place. Where manual compaction becomes necessary the workability of the mix should be controlled to suit such mode of compaction, subject of course to strength requirement if specified also being complied with. When concreting has to resume on a surface which has hardened, it shall be roughened swept clean, thoroughly wetted, and covered with a 13mm. layer of mortar composed of cement and sand in the same ratio as in the concrete mix itself. This 13 mm. layer of mortar shall be freshly mixed and placed immediately before placing new concrete. Where concrete has not fully hardened, all laitance shall be removed by scrubbing the wet surface with wire or bristle brushes, care being taken to avoid dislodgement of any particulars of coarse aggregate. The surface shall then be thoroughly wetted, oil free, water removed and then coated with neat cement grout. The first layer of concrete to be placed on this surface shall not exceed 150 mm. in thickness, and shall be well ram mad against old work.

g) Packing Round Reinforcement;

In the case of reinforced concrete work, the concrete shall be carefully consolidated and packed round the reinforcement and care shall be taken to ensure that the reinforcement is not displaced during the placing and compaction of concrete. If reinforcement moves out of the place, it must be brought back to position immediately.

h) Lapse of approval for Concreting & Method of Continuous Concreting

If concreting is not started within 2 hours of the approval being given, it shall have to be obtained again from the Engineer-in-Charge. Concreting shall be carried out continuously unto predetermined positions of construction joints. The position and arrangement for construction joints shall be approved by the Engineer-in-Charge. Fresh concrete shall not be placed against concrete which have been in position for more than 30 minutes unless a proper construction joint is formed. Rest, Panes for meals etc. shall be suitable to the approval of the Engineer- in- Charge.

i) Protecting & Curing

The contractor shall adequately protect freshly laid concrete from rapid drying due to strong sunshine, drying winds etc, and also from running of surface water and shocks. All concrete work shall be water-cured for a minimum period of 14 days after concreting as advised by the Engineer-in-Charge. Horizontal surface shall be kept covered with water ponded by means of builds and vertical surfaces like those of walls etc. by burlaps kept constantly wet with water sprays. More sprinkling of water of vertical surface without sacks or burlaps will not be allowed. In respect of concrete made out of Puzzolona cement, curing shall be continued for another 8 days.

j) Trained Supervisor

It is essential that the contractor's supervisor who is in charge of the construction of all concrete work whether reinforced or not, shall be skilled in this class of work and shall superintend personally the whole construction and pay special attention to:

- a) The quality, testing, proportioning and mixing of the materials particularly control of water cement ratio.
- b) Laying of materials in place and through consolidation of the concrete to ensure solidity and freedom for voids.
- c) Sizes and positions of reinforcements.

D) Construction Joints:

i) General

The position of all the construction joints shall be determined by contractor in consultation with the Engineer-in-Charge before the work commences. The joints shall be vertical (in rafts, beams etc.)

and horizontal (in walls, columns. etc.) as required, except in the case of inclined or curved member the joints shall be at right angles to the exist of the member. No Vertical Joint shall be formed without a proper stop-board at the joint. Where directed, the joints shall be of approved shape. All costs of the construction joint shall be included in the rates for the respective concrete items and no claim for extra amount on this accounts would be entertained.

E) Test for Concrete

i) General

Tests shall be conducted in accordance with IS:516/1956 with upto date amendments. It shall be the responsibility of the contractor to ensure that test moulds are prepared in work-man like manner. If in the opinion of the Engineer-in-Charge there is doubt regarding the quality of cement, the sample of cement shall be tested before being used in the work. The Engineer-in-Charge reserves the right to reject the structure (columns, coping, beams, girders, slabs etc.) if the results obtained from concrete cube tests falls short according to criteria as laid down in IS:456/2000 with latest amendment, and in such case, the dismantling and reconstruction of the structure or and component thereof shall be done by the contractor at his own cost.

ii) Test Cubes

a) Works test cubes shall be taken in sets of 6 cubes. The concrete for preparation of one set of 6 cubes shall he taken from the batch of mixed concrete discharged from mixture. The cubes shall be moulded in accordance with Indian Standard Code of Practice.

b) A minimum of one set of 6 cubes shall be taken for every 28 cum. or part thereof of concrete poured and they shall be considered as representative for the said quantity. This is an average figure, and may be decreased to cater to special conditions like different mixes, special structures etc. at the discretion of the Engineer-in-Charge.

c) The cubes shall be cured as per I.S. Code of Practice. The entire operation of casting, arranging and dispatch of cubes to Laboratory will be carried out by the contractor under the supervision of the Engineer-in-Charge. Out of '6 cubes, 2 cubes shall be tested at the age of 7 days and the other 4 at the age of 28 days in an approved Laboratory. Usually testing of the cube would be carried out at site by the cube testing machine of the contractor in presence of the Engineer-in-Charge or his authorized representatives. Out of the 4(four) sets to be tested at 28 days, the Engineer-in-Charge may arrange to have any two tested at any Government Engineering Collage whose report shall be binding on all parties concerned. The contractor shall have to install at site the machine for testing concrete test cubes. In such case the same shall have to be got approved by the Department before undertaking any test and the accuracy and performance of such machine(s) shall be subject to checking and inspection by the Engineer-in Charge or any person authorized by him to do so.

d) The cubes will be initialed, and dated jointly by contractor's representatives and the Engineer-in-

Charge or his authorized representative with a piece of wire or nail so that an indicating of the initials is left on the cube.

e) The contractor shall arrange transport the cubes to the approved laboratory and arrange to have

the testing results for warded (in duplicate) directly from laboratory to the Engineer-in-Charge. The contractor shall bear all expenses in connection with the preparation of test cubes like cost of mould, cost of concrete, labour and transport charges to the approved laboratory etc, including necessary laboratory testing charges.

f) A Register shall be maintained at site by the contractor with the following details entered initialed by the contractors and the Engineer-in-Charge.

1) Reference to specific structural member receiving the batch of concrete from which the cubes were cast.

2) Mark on cubes.

3) Grade and/or mix of concrete.

4) Date and time of casting.

5) Water cement ratio by weight and slump.

6) Crushing strengths as obtained at the age of 7 days for 2 cubes out of a set of 6 and at the age of 28 days for the 2 cubes. In case of doubt the remaining 2 cubes shall be tested at any recommended Engineering College.

7) Laboratory in which tested and reference to test certificate.

8) Any other information directed by the Engineer-in-Charge.

g) A record of the quality of concrete incorporated in the work that is represented by the quality of concrete of the set of cubes along with the description of the structural members where such concrete has been deposited shall be maintained. This record shall be initialed by the contractor and maintained by the Engineer-in-Charge.

F) Vibration of Concrete:

a) Water Cement Ratio

The water-cement ratio (by weight) for all vibrated concrete (except controlled concrete) shall generally be 0.45 and it shall not be varied unless otherwise directed. In respect of Controlled concrete the water-cement ratio shall be as determined in the laboratory mix design suitable for vibrated concrete.

b) Placing

Concrete shall be placed in layers not over 15 cm. deep and each layer shall be vibrated into place by methods which will not permit the ingredients to separate.

c) Number and size of Vibrators

Vibrators shall be of sturdy-construction, adequately powered and capable of transmitting to the concrete not less than 3,500 impulses per minute when operating under load. The vibration shall be sufficiently tense to cause the concrete to flow or settle reading into place and visible affect the concrete over a radius of at least 450 mm. (18") when used in concrete having slump of 25 mm. Sufficient number of vibration at least one vibrator for a rate of concreting of 1.5 cum (50 cft.) per hour shall be employed so that at the required rate of placement, vibration throughout the entire volume of each layer of concrete and complete compaction are incurred.

d) Manipulation of Vibrators

Internal vibrators shall be kept constant moving in the concrete and shall be applied at points uniformly placed not further apart than the radius over which the vibrator is visibly effective. The vibrator shall not be held in one location long enough to draw a pool of grout from the surrounding concrete. The vibration shall be such that the concrete becomes uniform plastic and there shall be at least 200 second of vibration per Sq.metre (20 second of vibration per sq.ft) of surface of each layer of concrete computed on the basis of visibly affected radius and taking overlap into consideration.

G) Grades of Concrete

i) General

Before taking up the concrete work the contractor shall have to get mix design desired and approved by the Engineer-in-Charge and necessary tests conducted to satisfy the requirement specified for the respective grade of concrete. Contractor when there is any change in the quality or aggregates (both coarse and fine) and alteration made in the mix which should be got approved by the Engineer-in-Charge before being carried out for the work. The preliminary test and work test results should conform to the requirement of I.S.Code of Practice 456-2000 with latest amendment. Cube tests shall have to be done in accordance with IS:516-1959.

ii) Criterion Regarding Strength

Although the works test cubes are specified to be conducted at the age of 7 and 28 days. compressive strength specified at 28 days shall alone be the criterion for acceptance or rejection of concrete.

iii) Sample size and Acceptance Criteria

All tests shall be carried out in accordance with IS:516-1959. The criteria for acceptance of a concrete of a specific grade shall be in accordance with recommendation of IS:456-2000.

H) Execution of Concrete Work

No concrete work shall be done in absence of Engineer-in-Charge or his representative.

I) Form Work

i) General

Form work shall include all temporary or permanent forms required for forming the concrete together with all temporary construction required for their support.

ii) Material and Design

The form work shall be of approved dressed timber/plywood true to line and level not less than 3 cm. thick. Surface in contact with concrete are to be planed smooth except where otherwise stated. Where timber is used for form work it shall be well reasoned. Free from loose knots, projecting nails, splits or other defects that may not affect the surface of concrete. As an alternative, sufficiently rigid steel shuttering may be used. In every case, joints of the shuttering are to be such as to prevent the loss of liquid from concrete. In timber shuttering the joints shall therefore be either tongued and grooved or the joints must be perfectly close and lined with kraft paper or other types of approved materials. In case of steel shuttering also the joints are to be similarly lined to ensure water tightness. The inside surface of the form work shall be properly greased to prevent adhesion of concrete. The form work shall be so constructed as to remain sufficiently rigid during placing of the concrete.

All shuttering and framing must be adequately stayed and braced to the satisfaction of the Engineer-in-Charge 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 ramming and vibration without excessive deflection from the prescribed lines when the concrete is vibrated. Suitable device shall be used to hold corners of adjacent ends and edges of panels of forms together for accurate alignment.

iii) If directed by the Engineer-in-Charge suitable camber shall be provided in horizontal members e.g. R.C.C. beams, girders of the structure to counter act the effects of any deflection. The formwork shall be so fixed as to provide for such camber.

iv) Forms shall be so constructed as to be removable in sections in the desired sequence without damaging the surfaces of concrete or disturbing other sections.

v) Unless otherwise specified or directed, chambers or fillets of size 25 mm. X 25 mm. shall be provided at all angles of the formwork to avoid sharp corners.

vi) The form work shall conform to the shape, lines and dimensions to suit the R.C.C. member as shown in drawings. Formwork shall be adequately designed to support the full weight of workers, freshly placed concrete, without yielding settlement or deflection and to ensure good and truly aligned concrete finished in accordance with drawings.

vii) Staging with salbullah posts of adequate diameter to support the mould for concrete shall be sufficiently rigid with provision of stays and bracing. For the staging of sub-structure, the Salbullah posts shall be capable of sustaining dead load due to formwork, concrete etc. and working load on it without yielding. Before actual erection of the staging of the sub-structure the contractor shall have to get the drawing showing their arrangement of staging and form work along with supporting calculations approved by the Engineer-in-Charge.

viii) The arrangements for side shuttering including supporting arrangement to be done by the contractor shall have to be get approved by the Engineer-in-Charge.

ix) The load carrying capacity of the Iron / Salbullah timber posts which will be considered in the design of staging for super structure shall be ensured at site prior to the erection staging by suitable arrangement of load testing to the satisfaction of the Engineer-in-Charge.

x) Cleaning and Treating of Forms

All rubbish particularly chipping, sawings and saw- cast 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 treated with an approved composition. Care shall be taken that such approved 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 cleaned and free from all extraneous matter prior to the deposition of the concrete. Prior approval of the formwork shall be taken from the Engineer-in-Charge before placing of reinforcements in the formwork.

xi) Stripping

Forms shall be left in place until their removal is authorised by the Engineer-in-charge and shall then be removed which reaches adequate strength so as to avoid injury to concrete. In no circumstances shall forms be struck until concrete reaches strength of at least twice the stress to which the concrete maybe subjected to at the time of striking. The strength referred to shall be that of concrete using the same cement and aggregates with the same proportion and cured under conditions of temperature and moistures similar to those existing on the work. Where possible, the formwork should be left longer as it would assist the curing.

xii) Stripping Time

In normal circumstances (generally where temperatures are above 20°C) and where Ordinary Portland Cement is used, the shuttering for the vertical sides shall be retained for a minimum period of 2 days unless otherwise directed at site by the Engineer-in-Charge.

xiii) Tolerances

The following shall be maximum permissible tolerances :

- a) On general setting out for dimensions upto 4 metre in length a tolerance upto 3 mm. will be allowed.
- b) On lengths of more than 4 metre, tolerance of not more than 5 mm. will be allowed.
- c) On the cross sectional dimension of R.C. members, tolerance of more than 3 mm. will not be allowed.

If the work is not carried out within the tolerances set out above in (a) to (c), the cost of all rectification measure, dismantling and reconstruction as decided by the Engineer-in-Charge shall be borne by the contractor. In case of work dismantle, the same shall not be measured and paid for.

J) Defective / Poor Concrete – Procedure for Dealing with :

a) General

If in the opinion of the Engineer-in-Charge there is doubt as to the strength of the structure due to the works test cubes failing to attain specified strength or due to poor workmanship like honey combing etc. or displacing of concrete or similar circumstances or any reason attributing the negligence on the part of the contractor, then the decision of the Engineer-in-Charge regarding dismantling of such concrete or rectification of concrete allowed to be retained in its place shall be final and binding on the contractor.

b) Where Concrete in Structure is Allowed to Retain :

When the works test strength as revealed by cube tests lies below the specified strengths, then if in the opinion of the Engineer-in-Charge the lower strength attained is acceptable to be retained in the structure then such concrete shall be allowed retained in the structure and payment for such concrete to the contractor shall be made at such reduced rate as may be decided by the Engineer-in- Charge whose decision shall be final and binding on the contractor. For deficiency in strength upto 5 percent from the specified strength rates will be reduces by 5 percent and for deficiency above 5 percent and upto 10 percent rates will be reduced by 10 percent. Concrete deficient in strength beyond 10 percent of the specified strength if allowed to be retained the limit of reduction in rate will be limited to 15 percent of the rate.

c) Concrete ordered to be Dismantled

Where the Engineer-in-Charge does not accept the poor or defective concrete and order the same to be dismantled, then the contractor shall dismantle such concrete at his expense and reconstruct the same to the satisfaction of the Engineer-in-Charge. Concrete thus dismantled will not be measured and paid for.

d) Concrete Retained with Rectification

Where the Engineer-in-Charge in order to save time and where he considers adequate steps that defective concrete be strengthened as directed by him, the contractor shall carry out all rectification measures to the approval of the Engineer-in-Charge at contractor's expenses. The concrete of lower strength thus accepted shall however be paid for after necessary reduction of rate as would be decided by the Engineer-in Charge.

e) Quantity of Defective Concrete Represented by Cubes

In all cases of defective concrete as revealed by works test cubes strength failing below the specified strength the quantity of concrete thus affected and represented by the cubes shall be decided by the Engineer-in-Charge, whose decision shall be final and binding on the contractor.

f) Honeycombing:

a) Where honeycombed surfaces are noticed in the concrete the contractor shall not patch up the same until examined by the Engineer-in-Charge and decision given regarding the acceptance with rectification or rejection of the same. If the contractor patches up such defects without the knowledge of the Engineer-in-Charge, the Engineer-in-Charge will be at liberty to order demolition of the concerned concrete member to the extent he considers necessary. In such case, the contractor at his expense shall re-construct the same. Demolished work shall not be measured and paid for and the cost of cement thus wasted shall he recovered at penal rate from the contractor.

b) If in the opinion of the Engineer-in-Charge the honeycombing is harmful to the structure and where so directed by the Engineer-in-Charge the full structural members affected by honey combing as decided by the Engineer-in-Charge, shall be dismantled and reconstructed to the approval of the Engineer-in-Charge at contractor's expenses. The demolished concrete will not be measured and paid for and the cost of cement thus wasted shall he recovered at penal rate from the contractor.

c) Where in the opinion of the Engineer-in-Charge the structural member containing honeycombing can be allowed to be remained with rectification, the rectification shall be carried out as directed by the Engineer-in-Charge by guniting (with cement sand mortar 1 : 3 proportion) the areas concerned at contractor's expenses.

d) Where such honeycombed area are not severe in the opinion of the Engineer-in-Charge and where so directed shall be patched up with cement-sand mortar consisting of 1 part of cement to 3 parts of sand after removing defective concrete down to sound concrete to the satisfaction of the Engineer-in-Charge all at the expense of the contractor.

g) Other Defects

Any other defects in concrete shall be made good as directed by the Engineer-in-Charge at contractor's expenses.

K) Contractor's Rate to Include

The rate of contractor for providing and laying cement concrete in various grades or proportions shall apart from any other factors specified else, where in the tender documents include for the following :-

- a) For all factors and methods of work described in these specifications.
- b) For all materials, labour, tools and plants etc. mixing, conveying and placing concrete in position, ramming, vibrating trowelling, curing, providing necessary shoring and removing the same after the work is complete. Shuttering and staging are described as separate items in the Priced Schedule of Items / B.O.Q. being attached with the tender unless otherwise stated. As such the rates for shuttering and staging shall not be included in the rate of concrete. The rates for shuttering and staging are inclusive of all the work mentioned in specification for form work. The reinforcement in case of reinforced concrete work will be paid for separately unless otherwise stated in the particular items but the rate shall include for pouring concrete and packing around reinforcement.
- c) The measurement of concrete will be as per detailed drawings, shape and sizes based on net structural sizes as per drawings.
- d) Rates for concrete items shall cover for any shape on structural members like columns, girders, slabs, rafts etc.
- e) Testing of work test cubes shall be done as required by Specification in a laboratory approved by the Engineer-in-Charge and for tests of materials and work required in the opinion of the Engineer-in-Charge as described in these specification.
- f) Fixing all inserts like pipes, plugs, forming holes etc. as described.
- g) Weigh batching using a Mechanical weigh batcher or a batching plant except where so specified for volumetric batching.
- h) For taking out dowel bars etc. through shuttering.
- i) For work at all levels.

ii) Cleaning of Reinforcement

Before steel reinforcement is placed in position, the surface of the reinforcement shall be cleaned of rust, grease and any oilier objectionable substance.

iii) Cutting of Reinforcement

Before the reinforcement bars are cut, the contractor shall study the length of bars required as per drawings and shall care out cutting only to suit the sizes required as per drawings. Reinforcements shall be securely placed in position and firmly supported or edged by precast concrete blocks of suitable thickness at sufficiently close intervals so that they will not sag between the supports or get displaced during the placing of concrete or any other operation of the work. It is most important to maintain reinforcement in its correct position without displacement and to maintain the correct specified cover. Contractor shall be responsible to all costs for rectification required in case the bars are displaced out of their correct position.

L) Welding

Welding of bars may be carried out as per I.S. Specification and code of Practice in place of placing. However no extra payment shall be allowed for the same.

M) Bending of Reinforcement

Bends etc. on steel reinforcement shall be carefully formed. Care being taken to keep bends out of binding. Otherwise all rods shall be truly straight. If any bend shows signs of brittleness or cracking, the

rod shall be removed immediately from the site. Minimum radius of 2 times diameter of the bars shall be used unless otherwise specified in the drawing. In respect of standard hooks the radius of bend shall be 2 times the diameter of bar. Heating of reinforcement of bars to facilitate bending will not be permitted. The bars shall always be bent cold. In case of mild steel reinforcement bars of larger sizes if used, where cold bending is not possible, they may be bent by heating with written permission of the Engineer-in-Charge. Bars bent hot shall not be heated beyond cherry red colour and after bending shall be allowed to cool slowly without quenching. The bars damaged or weakened in any way in bending shall not be used on the work. High Strength deformed bars shall in no case be heated to facilitate bending.

N) Inspection of Reinforcements

No concreting shall be commenced until the Engineer-in-Charge or his authorized representative has inspected the reinforcement in position and until his approval has been obtained. A notice at least 24 hours before concreting shall be given to the Engineer-in-Charge or his authorized representative by the contractor for inspection of reinforcement. If in the opinion of the Engineer-in-Charge any material is not to accordance with the specification or the reinforcement is incorrectly spaced, bent or otherwise defective, the contractor shall immediately remove such materials from the site and replace with new ones and rectify any other defects in accordance with the instruction of the Engineer-in-Charge or his authorized representative and to his entire satisfaction.

O) Net Measurements

Reinforcement shall be placed as shown in the structural drawings and payment will be made on the net measurements from drawings. Only such laps, dowels, chairs and pins in reinforcement as approved by the Engineer-in-Charge or his authorised representative or shown in drawings shall be paid for. The contractor shall consider in his Tender for all wastage in reinforcement work which will not be paid for separately. All lap lengths shall be as per I.S. specification or drawings.

P) Cover for Reinforcements

Cover for reinforcement shall be as per IS: 21-1972 / Drawings.

Q) Rate of the Contractor for Reinforcement shall in Addition to any Factors

- a) Recoiling, straightening (coiled bars, bent bars to facilitate transporting).
- b) All cutting to lengths, labour in bending and cranking, forming hooked ends, handling, hoisting and everything necessary to fix reinforcement in work as per drawing.
- c) Cost of binding wire required as described.
- d) Cost of pre-cast concrete cover blocks to maintain cover and holding reinforcement in position.

- e) For fabrication and fixing reinforcement in any structural member irrespective of its location, dimensions and level.
- f) Removal of rust and other undesirable substances. using wire brush etc. as described.
- g) Work at all levels.

Notes :

- a) Stone metal and chips of any size as required will have to be arranged by the contractor and cost will be deemed to have been included in the rate of respective items.

Bored Piling Work

Piling work has to be done as per latest IS specification IS 2911.

6. Specifications

A) Timber

All timber shall be of best quality well-seasoned and/or well treated for preservation and protection against decay etc. It shall be uniform in substance, straight in fibre, free from large or dead knots, sap, flaws, sun-cracks, shakes or blemishes of any kind. Any damage or splits across the grain shall not be permissible. The colour of the timber shall be uniform through out, firm and shining with a silky luster when planed and shall not omit dull sound when struck.

B) Timber doors, windows etc. and their fittings

- i) Door and Window works shall be carried out as per detailed drawings or as directed by the Engineer-in-Charge. Specified timber shall be used and it shall be sawn in the direction of the grains and shall be straight and square.
- ii) Fitting shall be of Iron, brass and aluminium or as specified. These shall be well made reasonable smooth and free from sharp edges, corners flaws and other defects. Screw holes shall be counter sunk to suit the head of specified wood screws. Iron fittings shall be finished bright or black enamelled or copper oxidised. Brass fittings shall be finished bright (brass), oxidised, or chromium plated (Electro-plates) and aluminium fittings shall be finished bright or anodised or as specified. Fittings shall be got approved by the Engineer-in-Charge before fixing. In case of renewal works, the new fittings, shall as far as possible match with the existing ones. Screws shall be driven with screw driver and not hammered in.

C) 1st Class Brick works

Cement mortar shall be prepared by mixing sand and cement in specified proportion. Sand shall be measured on the basis of its dry volume. In case of damp sand, its quantity shall be increased suitable to allow for bulkage.

D) Damp Proof Course

Damp Proof Course shall be laid to specified thickness over walls for the full thickness of the superstructure walls. The surface shall be levelled and prepared before laying the cement concrete. Edges of damp proof course shall be straight even vertical side shuttering shall consist of wooden frame and shall be strong and properly fixed so that it does not get disturbed during compaction and the mortar does not lead through. The concrete mix shall be of workable consistency and shall be tamped thoroughly to make a dense mass. When the sides are removed, the surface should come out smooth without any honey-combing. The damp proof course shall be laid continuous and surface shall be double chequered. Damp proof course shall be cured for at least seven days, after which it shall be allowed to dry. Water proofing materials of approved quality shall be added to the concrete mixture in accordance with the manufacturer's specifications.

E) Cement Plaster

The proportion for mortar for exterior or interior plaster shall be specified in the items of work. The plaster shall be of thickness as specified and the surface shall be similarly cured as for cement concrete. The moulding shall be carried out as shown in the drawing and shall be separately measured in overall length unless otherwise specified in the items. Interior corners and edges of openings if so directed by the Engineer-in-Charge shall be rounded off or chamfered with the same mortar for which no extra payment will be allowed. All cement concrete surface should be chipped off properly before taking up the plastering work.

I/We have inspected the site of work and have made myself / ourselves fully acquainted with local conditions in and around the site of works. I/We have carefully gone through the Notice Inviting Tender including the Corrigendum Notices and other Tender documents mentioned therein. I/We have also carefully gone through the PWD(WB) Schedule and special terms and conditions and agreed to execute all the terms of the priced schedule as per General Conditions Specification as laid down in the said schedule. My / Our tender is offered taking due consideration of all factors and if the same are accepted I/We promise to abide by all the stipulations of the Tender Documents and carry out and complete the work to the satisfaction of the Department.

Postal Address of the Tenderer :-

**Managing Director
West Bengal State Fishermen's Co-Operative Federation
Ltd. (BENFISH)**

FORM - 1
APPLICATION FOR TENDER

To
The Managing Director
Benfish, 31, G.N. Block,
Sector – V, Salt Lake City
Kolkata – 700091

Subject

Name of Work:-

Reference:- (NIT No)

Dear Sir / Madam,

Having examined the Statutory, Non statutory & NIT documents, I / We hereby submit all the necessary information and relevant documents for evaluation.

The necessary evidence admissible by law in respect of authority assigned to us on behalf of the group of firms for Application and for completion of the contract documents is attached herewith.

I / We are interested in bidding for the work mentioned above. I / We understand that:

- (a) Tender Inviting & Accepting Authority can amend the scope & value of the contract bid under this project.
- (b) Tender Inviting & Accepting Authority reserve the right to reject any tender without assigning any reason.

The application is made by me / us on behalf of _____ in the capacity of _____
_____ duly authorized to submit the Tender.

Enclosure -
1) Technical Proposal
2) Financial Proposal

Date - _____ Signature of an authorised officer of the firm -
Title & capacity of the officer -
Name of the Firm with Seal –

NB: Application should be submitted in letter head.

FORM – 2 A
B.2. FINANCIAL STATEMENT

B.2.1. Name of applicant:-

B.2.2. Information of audited financial statements for the last year to demonstrate the current soundness of the bidder's financial position:

1. The bidder's net worth for the last year calculated on the basis of capital, profit and free reserve available to the firm should be positive
- 2 Bidders, who meet the minimum qualification criteria, will be qualified only if their available bid capacity at the expected time of bidding is more than the total estimated cost of the works. The available bid capacity will be calculated as under:

Assessed Available Bid capacity=(A×N×2- B)= _____

where,

A= Maximum value of engineering works in respect of projects executed in any one year during the last five years (updated to the price level of the year indicated in table below under note) taking into account the completed as well as works in progress. The projects include turnkey project/item rate contract/Construction works.

N= Number of years (i.e, ----- year) prescribed for completion of the works for which bids are invited. Please refer table for

List of Schemes in page 1

B= Financial liability of the bidder to be incurred for existing commitments and ongoing works during the period of the subject contract.

To calculate the value of "A"

- i)A table containing value of Engineering works in respect to projects (Turnkey projects/item rate contract /Construction works) undertaken by the Bidder during the last 5 years is as follows:

Serial No	Financial Year	Value of Engineering works undertaken w.r.t. projects (Rs in Crore)	Updation factor.	Value updated to the price level of the year
(1)	(2)	(3)	(4)	(5)= Col 3 X Col 4
1	(2022-2023) Year-1		1.00	
2	(2021-2022) Year-2		1.05	
3	(2020-2021) Year-3		1.10	
4	(2019-2020) Year-4		1.15	
5	(2018-2019) Year-5		1.20	

- ii) Maximum value of projects that have been undertaken during the F.Y----- out of the last five years and value thereof is Rs ----- Crore (Rupees -----).

- iii) Net worth for the Financial year 2022-2023 is (Rs in figure) _____

<p>.....</p> <p>.....</p> <p>Signature, name and designation of Authorised Signatory For and on behalf of</p> <p>..... (Name of the applicant)</p>	<p>.....</p> <p>.....</p> <p>Name of the Statutory Auditor's Firm/Chartered Accountant</p> <p>Signature:-</p> <p>Seal of the Audit/Chartered Accountant Firm:</p> <p>Name of signatory (in capital) :-</p> <p>Membership No.:-</p> <p>Firm Regn. No:-</p> <p>Date of Birth :- UDIN:-</p> <p>Mob:-</p>
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NB:- All information sought w.r.t. Firm/ Chartered Accountant is mandatory.

To calculate the value of “B”

3. A table # containing value of all the existing commitments and on-going workings to be completed during the next _____ years (prescribed time for completion of the works for which bids are invited) is as follows:

S l. No.	Name of the Work/ Project	Name of the Employer	Percentage of participation of Bidder in the project	Stipulated period of completion as per Work Order with the start date	Value of Contract as per Agreement/ LOA Rs._____	Value of work completed Rs._____	Balance value of work to be completed Rs._____	Anticipated date of completion	Financial liability to incurring for the said work/project during the period of the subject contract Rs._____
1	2	3	4	5	6	7	8	9	10

.....
Signature name and
designation of Authorised
Signatory
For and on behalf of
.....
.....

Note:

1. All the documents to be submitted in support of above must be duly signed and sealed by the applicant/bidder and authenticated by Statutory Auditor's Firm.
2. Financial Year 2022-2023 will be considered as year – 1.

FORM – 2 B

This is to certify that we have verified the consolidated financial statement of _____ (Name of the Firm in which application is made) having its Registered Office at _____ (address of the Firm). Based on our examination of Books and Records and other documentary evidences we certify that the financial data of the company given in the balance sheets are detailed hereunder for the Financial year(s) as mentioned below are true and correct.

Sl No	Description	Financial Data for the last 5 audited Financial Years.				
		2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
1.	Net Worth (Calculated on the basis of capital, profit and free reserve available to the firm should be positive)					
2.	Working Capital					
3.	Annual Turnover (Engineering works)					

Available Liquid Assets (2022-2023 FY):

1. Working Capital = Rs _____
2. Uncommitted Bank Guarantees =Rs _____
3. Credit facilities =Rs _____

(Certificate to be submitted in Form II C)

Total Liquid Assets = Rs _____

<p>.....</p> <p>.....</p> <p>Signature, name and designation of Authorised Signatory For and on behalf of(Name of the applicant)</p>	<p>.....</p> <p>.....</p> <p>Name of the Statutory Auditor's Firm/Chartered Accountant</p> <p>Signature:-</p> <p>Seal of the Audit/Chartered Accountant Firm:</p> <p>Name of signatory (in capital) :-</p> <p>Membership No.:-</p> <p>Firm Regn. No:-</p> <p>Date of Birth :- UDIN :-</p> <p>Mob</p>
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N.B :-THIS FORM (i.e FORM-II B) MUST BE PROPERLY MADE IN THE LETTER HEAD OF THE AUDITOR'S/ CHARTERED ACCOUNTANT FIRM, CLEARLY MENTIONING THE ADDRESS, e-mail ID, and CONTACT NUMBER OF THE FIRM & should preferably be made in a single page else to be authenticated in each page similarly.

NB:-i) All information sought w.r.t. Firm/ Chartered Accountant is mandatory.

ii) All data as mentioned in form II B shall be available through UDIN verification

Form – 3

DECLARATION AGAINST COMMON INTEREST

I/We, Sri/ Smt the
authorized signatory on behalf of..... do hereby
affirm that I/We/any of the member of
bidding against NIT No. Sl. No. do
not have any common interest either as a partner on any partnership firm / consortium as a
Proprietor / Owner of any other firm in the same serial for the work I / We want to participate.

Dated:

.....

Signature of the Bidder

FORM – 4

C. DEPLOYMENT OF MACHINERIES (in favour of owner / lessee):-

(Original document of own possession arranged through lease deed to be annexed)

(If engaged before Certificate from E.I.C. to be annexed in respect of anticipated dated of release of
Machineries.)

Name of Machine / Instrument	Make	Type	Capacity	Motor / Engine No.	Machine No.	Possession Status		Date of release If Engaged
						Idle	Engaged	
1	2	3	4	5	6	7	8	9

Signed by an authorized officer of the firm

Title of the officer

Name of the Firm with Seal

Date _____

FORM – 4 (contd...)

G. CONTRACTOR'S EQUIPMENT:

MINIMUM PLANT AND EQUIPMENT TO BE DEPLOYED BY THE CONTRACTOR FOR THE WORK. Whereas it is entirely the responsibility of the Contractor to deploy sufficient plant and mechanical equipment to ensure compliance with his obligations under the Contract, the following list is an indicative list of the minimum essential basic holding of plant and mechanical equipment which should be owned or arranged through lease hold agreement by the bidders. Initially maximum age of the plants, machineries will be 5 years as on the date of publication of NIT. It may be extended up to 7 years after getting fit certificate from the manufacturer and this certificate should be produced at the time of submission of Bid.

All other machineries and equipments should be in running condition.

All plants, machineries and equipments will be verified by the Department before execution of the work.

SL. NO.	TYPE OF EQUIPMENT	NUMBER REQUIRED
1	Dewatering Pump (5 HP. Capacity)	
2	Generator	
3	Soil excavator cum loader	
4	Tripper Truck	

Laboratory Equipment with testing arrangement as per sec. 120 of specifications of Roads and Bridge works 5th revision of MORT&H

Signature of applicant including title

and capacity in which application is made

FORM- 5**STRUCTURE AND ORGANISATION**

A.1 Name of applicant :

A.2 Office Address :

Telephone No. and Cell Phone No. :

Fax No. :

E mail ID :

A.3 Attach an organization chart showing the

structure of the company with names of

Key personnel and technical staff with

Bio-data. :

A.4 PAN No. :

A.5 G.S.T. No. :

A.6 Details of Bank Accounts :-

i) Name of Bank :

ii) Name of Branch & Addressed with :

Phone No.

iii) Account No. iv) MICR No. :

v) IFSC Code No. :

Note: Application covers Proprietary Firm, Partnership, Limited Company or Corporation.

Signed by an authorized officer of the
firm

Title of the officer

Name of the Firm with Seal

Date_____