



COCHIN PORT AUTHORITY
COCHIN-682009, KERALA, INDIA
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**TENDER DOCUMENT FOR PROVIDING ADDITIONAL STAIRCASES TO
THE FIC BAYS OF NORTH JETTY AT NAVAL BASE, KOCHI (RETENDER).**

TECHNICAL BID (e-Tendering Mode)

Website: www.tenderwizard.com/CPT
CHIEF ENGINEER'S OFFICE
COCHIN PORT AUTHORITY
COCHIN-682009

Tender No. T10/T-2108/2026-C

Cost of Bid Document: Rs.1,770/-
(Rs.1,500.00 + 18% GST)

COCHIN PORT AUTHORITY

**TENDER FOR “PROVIDING ADDITIONAL STAIRCASES TO THE FIC
BAYS OF NORTH JETTY AT NAVAL BASE, KOCHI (RETENDER).”.**

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SIGNATURE OF TENDERER

COCHIN PORT AUTHORITY



Chief Engineer's Office
Cochin Port Authority
W/Island, Cochin – 682009, KERALA
Tele: 91-0484-2666414/ 0484-258-2400
website: www.cochinport.gov.in

Tender No. T10/T-2108/2026-C

Date: 04.08.2026

SHORT NOTICE INVITING TENDER

Electronic Tenders (**e-tenders**) on percentage basis are invited by Cochin Port Authority from reputed contractors in Single Stage Two Cover bidding procedure [Technical Bid and Financial Bid], meeting the Minimum Eligibility Criteria specified below for the work of ***“Providing Additional Staircases to the FIC Bays of North Jetty at Naval Base, Kochi (Retender).”***

1. Minimum Eligibility Criteria (MEC):

a) Experience

The tenderers should have experience of having successfully completed during the last 7 (seven) years ending **31st July 2026**, at least either:

- i. Three Similar Works each costing not less than **Rs.35,45,800.00**
(OR)
- ii. Two Similar Works each costing not less than **Rs.44,32,300.00**
(OR)
- iii. One Similar Work costing not less than **Rs.70,91,600.00**

Note: In case of substantial completion, the certificate shall be produced as substantially completed. Also, ongoing works with 80% financial progress will also be considered for MEC.

b) Financial Turnover

Average Financial Turnover of the tenderer over the last three financial years ending 31st March 2025 [2022-'23, 2023-'24 & 2024-'25] shall not be less than **Rs.26,59,400.00**

Explanatory Notes to a) & b):

Note 1:- Similar work(s) means **“Construction of a structure in sea/ river/ backwater/ marine environment”**.

Note 2:- Following enhancement factors will be used for the costs of works executed for bringing the financial figures to a common base value in respect of the works completed in past years.

Table 1

Year before	Multiplying factor
One year	1.07
Two years	1.14
Three years	1.21
Four years	1.28
Five years	1.35
Six years	1.42

Note 3:- *The experience certificate of works executed in private sectors / organisations shall be considered for qualification, only on submission of TDS certificate along with work order and completion certificate, and also the details furnished in Annexure IVa & IVb, certified by Chartered Accountant (with UDIN No.).*

Note 4:- *Satisfactory Client / Owner’s Certificate or documentary proof shall be submitted in support of the assignments / works performed and claimed by the tenderer to fulfil the eligibility criteria for qualification. A statement duly certified by the Chartered Accountant with UDIN No. showing the average annual Financial Turnover over the last 3 financial years ending on 31st March 2025 and audited financial statements (Balance Sheet & Profit & Loss Account Statement) for the last three years shall be submitted.*

Note 5:- *The works reckoned for the above purpose are those executed by the tenderers as prime contractor or proportionately as member of joint venture or as a sub-contractor authorized and approved by the Employer of the work(s) against which the tenderer has claimed his experience; it will be considered for qualification only if documentary proof of such authorization / approval of the Employer are submitted.*

2. Other Eligibility Considerations

2.1 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- i) made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- ii) record of poor performance such as abandoning the works, not executing the work as per contract, not properly completing the contract, inordinate delays in completion, continuous litigation history, or financial failures, disqualifications/ black listing/ debarring by Govt. departments, PSUs, etc.
- iii) not submitted complete documents as per clause 22 of "Instructions to Bidders".

2.2 The bidders having EPF/ ESI registration certificates only shall be considered for qualification in the tender, if applicable, as per EPF /ESI Acts.

3. Pertinent information to the tender is given in the following Tables:

i) Schedule of different activities till submission of the bid are detailed as under:

Table 2

Sl. No.	Particulars	Date and Time
1	Tender e- publication date	04-08-2026
2	Download period of Bid Documents	04-08-2026 to 18-08-2026
3	Date of Pre-Bid meeting	Nil
4	Last date for seeking clarification	11-08-2026 at 15:00 hrs
5	Last date and time of submission of Bid	18-08-2026 up to 14:30 hrs
6	Date and time of opening the Bid	18-08-2026 after 15:00 hrs

ii) Bid information:

Table 3

i)	Estimated Amount put to Tender	Rs.88,64,500.00
ii)	Earnest Money Deposit	Rs.1,77,300.00 furnished either through Demand Draft / Pay Order / Banker's Cheque / Insurance Security Bond drawn in favour of the FA & CAO, CoPA from any Nationalized Bank / Scheduled Bank in India or through an irrevocable Bank Guarantee (BG) valid for a period of 165 days from the date of opening of

		tender, enforceable and encashable at Cochin, drawn from any Nationalized Bank/ Scheduled Bank operating in India, having its branch in Kochi. Payment can also be made online mode (NEFT/RTGS) as per Bank details at Annexure-XIV of Bid document.
iii)	Cost of Bid document	Rs.1770/- (Rs.1500.00+18% GST) (Non refundable) furnished either through Demand Draft / Pay Order / Banker's Cheque in favour of the FA & CAO, Cochin Port Authority (CoPA), payable at Kochi, from any Nationalised Bank/ Scheduled Bank in India, having its branch in Kochi. Payment can also be made online mode (NEFT/RTGS) as per Bank details at Annexure-XIV of Bid document.
iv)	Validity period of Tender	120 days from the Last Date of Submission of Bid.
v)	Time for Completion	6 Months from the date of commencement

4. This work essentially comprises of construction of 2 nos. additional staircases at the ends of the FIC Bay deck slab of North Naval Jetty at Naval Base, Kochi, which includes the following:
 - Erection of precast RCC piles
 - Providing RCC pile caps, capping beams, columns, deck slabs, landing slabs, beams, stairs, waist slab, wearing course for deck slab etc.
 - IPN coating on external concrete surfaces
 - Providing steel tubular fender piles.
 - Providing and fixing Stainless Steel handrails and mooring rings
 - Providing and fixing 'D' type rubber fenders
 - Providing electrical facilities
5. Tender documents can be downloaded from the e-Tendering portal www.tenderwizard.com/COPT on the dates specified in Table 2 given above by making online requisition. Bid document will also be available in Cochin Port website (www.cochinport.gov.in) as well as Govt. tender website, www.eprocure.gov.in, which can be downloaded for submission. The cost of bid document shall be furnished in any of the forms mentioned in Table 3.
6. The bidder shall submit the Originals of (i) Demand Draft / Pay Order / Banker's Cheque towards the cost of tender document (ii) *DD / Banker's Cheque / Pay Order / Insurance Security Bond / Irrevocable Bank Guarantee towards the cost of EMD* and (iii) Power of Attorney (Proforma attached as **Annexure-II**) in

favour of signatory(s) to the tender if applicable, with letter of submission (as per ***Annexure-I***) in a sealed cover to the **Chief Engineer, Cochin Port Authority, W/Island, Cochin-682009, Kerala**, on due date of Submission of bid within the prescribed time limit. **Non submission of original financial document towards cost of tender document and EMD will make the tender liable for rejection, and such tenders would not be evaluated further.**

7. The bidders need to obtain the one time User ID & password for log-in to in **e-Tendering** system from the service provider **KEONICS** by paying registration amount of **Rs.1124/-** by online Payment using Credit/Debit Card/Net banking or DD in favour of “KSEDCL, Bangalore”.
8. The intending bidder must have valid Class-II or III digital signature certificate to submit the bid. For further details and to obtain the digital signature, please contact **e-Tender Help Desk No.080-40482000 / 9746118529 / 9605557738.**
9. Tenders shall be submitted “**online**” strictly in accordance with the Instructions to Tenderers and Terms & Conditions given in the tender document.
10. The bidder is responsible to download Addenda/ Amendments/ Errata/ Replies to the queries of the bidders etc., if any, issued by the Employer, from the website before submission of the bid. **Any shortfall in uploading the said Addenda/ Amendments/ Errata/ Replies to the queries of Tenderer etc. duly signed along with the downloaded documents while uploading the Tender will render the Tender incomplete and such incomplete Tender Documents may be rejected by the employer and would not be evaluated.**
11. All Bids are to be submitted **online only** on the website **www.tenderwizard.com/COPT**. No Bids shall be accepted off-line (Hard copy).
12. Cochin Port Authority will not be held responsible for any technical snag or net work failure during online bidding. It is the bidder’s responsibility to comply with the system requirements i.e. hardware, software and internet connectivity at bidder’s premises, to access the e-Tender portal. Under any circumstances, Cochin Port Authority shall not be liable to the bidders for any direct/indirect loss or damages incurred by them arising out of incorrect use of the e-Tender system or internet connectivity failures.
13. Micro and Small Enterprises (MSE’s) Bidders who are registered with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Village Industries Board (KVIB) or Coir Board or National Small Industries Corporation (NSIC) or directorate of Handicrafts and Handlooms or Udyog Aadhaar Memorandum or any other body specified by Ministry of MSME for similar nature of Works shall be eligible for issue of Bid Document free of

cost and exemption from payment for issue of tender document & payment of EMD. They are required to submit documentary proof of such registration with QR code along with the offer, as detailed in Instructions to Bidders, for claiming the available exemptions and a scanned copy of Exemption Certificate duly notarized shall be uploaded in the e-Tender Portal. Also, a Bid Security Declaration in the format mentioned in **Annexure-VI** shall be submitted. If the Registration Certificate does not pertain to the Category of 'Similar Works' mentioned above, the Tender will be rejected.

14. The undersigned reserves the right to reject/cancel/postpone any one or all tenders at any stage of the tender, which shall be binding on all bidders.

Chief Engineer
COCHIN PORT AUTHORITY

2. INSTRUCTIONS TO BIDDERS

1. Introduction

1.1 This tender is invited for **“Providing Additional Staircases to the FIC Bays of North Jetty at Naval Base, Kochi (Retender).”**. The work essentially comprises of construction of 2 nos. additional staircases at the ends of each FIC Bay of North Naval Jetty at Naval Base, Kochi, which includes the following:

- Erection of precast RCC piles
- Providing RCC pile caps, capping beams, columns, deck slabs, landing slabs, beams, stairs, waist slab, wearing course for deck slab etc.
- IPN coating on external concrete surfaces
- Providing steel tubular fender piles.
- Providing and fixing Stainless Steel handrails and mooring rings
- Providing and fixing ‘D’ type rubber fenders
- Providing electrical facilities

2. General Instructions

2.1 The work is to be executed as described in the Bid document and in particular in the Technical Specifications, Special Conditions, Schedule of Quantities and Drawings and in general includes, but is not limited to supplying all including consumables and equipment necessary to execute the work as described in the Bid Document.

2.2 Before submitting the Bid, the bidder shall examine carefully all conditions of contract, specifications, drawings etc. supplied herewith. The bidders shall inspect the site of work with prior appointment with the concerned Section Engineer of the work to get himself acquainted with the site conditions and to assess and satisfy himself of the difficulties and constraints which may be involved in executing the work in the location. It will be deemed that prior to the submission of Tender, the tenderer has visited the site and has satisfied himself as to the nature and location of the work, general and local conditions, particularly those pertaining to transportation, handling and availability and storage of materials, availability of labour, weather conditions, tidal variations at site, working conditions, ground level, nature of soil etc. and that the tenderer has estimated his cost accordingly; the Port Authority will be in no way responsible for the lack of such knowledge and also consequences thereof to the Tenderer. Failure to visit the site will in no way relieve the successful bidder of any of the obligations in performing the work in accordance with this Bid Document including Addenda/ Corrigenda, within the quoted price. Bidders will be required to submit along with their Bid an undertaking that they have visited the site and collected all necessary details required to submit their offer.

- 2.3 A bidder shall be deemed to have full knowledge of all documents, site conditions etc. whether he has inspected them or not. The submission of a Bid by the bidder implies that he has read the notice and conditions of contract and has made himself aware of the scope and specifications and other factors bearing on the bid and that they are binding on him.
- 2.4 The bidders may please note that the EMPLOYER will not entertain any correspondence or query on the status of the offers received against this Bid. Bidders are also requested not to depute any of their personnel or agents to visit the Employer's offices for making such enquiries till finalization of the bid. Should the EMPLOYER find it necessary to seek any clarification, technical or otherwise, the concerned bidder will be duly contacted by the EMPLOYER.
- 2.5 Canvassing in any form by the bidder or by any other agency acting on behalf of the bidder after submission of the bid may disqualify the said bidder. The Employer's decision in this regard shall be final and binding on the bidder.
- 2.6 EMPLOYER will not be liable for any financial obligation in connection with the work until such time the EMPLOYER has communicated to the successful bidder in writing his decision to entrust the Work (covered by the bid document issued to him).
- 2.7 E-mail offers will not be considered. Bidders should prepare their bid themselves and submit it "online" through the e-Tendering portal. Bids submitted by agents will not be recognized.
- 2.8 Bids received after the due date and time and any change in bid after the specified date & time will be rejected. EMPLOYER will not be responsible for the loss of the bid document or for the delay in postal transit.
- 2.9 In case of an unscheduled holiday on the prescribed closing/opening day of the bid, the next working day will be treated as the scheduled prescribed day of closing/opening of the bid.
- 2.10 While evaluating the document, regard would be paid to National defense and security considerations, at the discretion of the Cochin Port Authority. Bid received from any bidder may be summarily rejected on National security consideration without any intimation thereof to the bidder.
- 2.11 If there are varying or conflicting provisions made in any document forming part of the contract, the Chief Engineer, Cochin Port Authority, Cochin – 682009, shall be the deciding authority with regard to the intention of the document which shall be binding on the Bidder.

- 2.12 In case the department desires to inspect the equipments/ machinery for confirmation of its availability and capacity etc., necessary arrangements shall be made by the contractor for such inspection at his own cost.
- 2.13 Any error in description, and any omissions there from shall not vitiate the contract or release the Contractor from the execution of whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.
- 2.14 All the Bank Guarantees (BGs) to be furnished except for EMD by the Contractors in connection with the tender shall be sent to the Chief Engineer, Cochin Port Authority directly by the issuing bank under registered post with AD. The Contractor shall take the responsibility of sending BGs directly to the Port Authority by the issuing bank.
- 2.15 ***The Contractor / approved Sub-Contractor if any, shall comply with all the provisions of the The Code on Wages (2019), The Code on Social Security (2020), The Industrial Relations Code (2020) and The Occupational Safety, Health and Working Conditions (OSH) Code (2020) etc. amended from time to time and rules framed there under and other laws affecting the contract labour that may be brought into force from time to time.***
- 2.16 ***As per EPF/ESI Acts, the Tenderer shall be registered under EPF and ESI Act and the employees employed under them shall be covered in the EPF and ESI scheme. In such cases, who are registered under EPF Organisation and ESI Corporation and furnish documentary evidence in support of valid registration shall only be considered for qualification for opening of Price Bids. In case, the Tenderer does not have the required number of employees which makes such registration mandatory, an undertaking as per Annexure –XII to the effect shall be furnished.***
- 2.17 ***The Contractor shall regularly remit the Employer and Employee contribution to the authorities and produce documentary evidence for the same, before releasing the interim/ final bill.***
- 2.18 ***The Contractor shall be registered under GST and shall furnish documentary evidence in support of valid GST registration.***
- 2.19 Micro and Small Enterprises (MSE's) Bidders who are registered with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Village Industries Board (KVIB) or Coir Board or National Small

Industries Corporation (NSIC) or directorate of Handicrafts and Handlooms or Udyog Aadhaar Memorandum or any other body specified by Ministry of MSME for similar nature of Works shall be eligible for issue of Bid Document free of cost and exemption from payment for issue of tender document & payment of EMD. They are required to submit documentary proof of such registration with QR code along with the offer, as detailed in Instructions to Bidders, for claiming the available exemptions and a scanned copy of Exemption Certificate duly notarized shall be uploaded in the e-Tender Portal. Also, a Bid Security Declaration in the format mentioned in **Annexure- VI** shall be submitted. If the Registration Certificate does not pertain to the Category of 'Similar Works' mentioned above, the Tender will be rejected.

2.20 If a bidder has already been awarded or qualified for a similar nature work with a higher value or equivalent value within the last 6 months from the date of Notice Inviting Tender, the tender of such bidder shall be evaluated / considered for qualification with the documents submitted by the bidders in those tenders **provided the Bidder clearly states the details of above such works in the Letter of Submission.**

2.21 In the Letter of submission, the Bidder shall compulsorily indicate 2 nos. of current active e-mail IDs to which further Bid related communication can be sent by CoPA. All communication from CoPA shall be deemed to have been delivered when the e-mail is sent to the specified e-mail ID and the date of sending the e-mail by CoPA shall be considered as the receipt by the Bidder. CoPA shall no way be responsible for the non-receipt of any such communication by the Bidder whatever be the reason due to which this has occurred.

3 Invitation for Bids:

The Invitation for Bids is open to all eligible bidders meeting the Minimum Eligibility Criteria.

4 Downloading of Tender Documents:

Tender documents can be downloaded from the e-Tendering portal www.tenderwizard.com/COPT on the dates specified in NIT by making online requisition. Tender document can also be downloaded from Cochin Port website www.cochinport.gov.in or Government of India (GOI) tender portal www.tenders.gov.in.

Demand Draft / Pay Order / Banker's Cheque towards cost of tender document drawn in favour of the FA & CAO, Cochin Port Authority (CoPA), payable at Kochi, from any Nationalised Bank/ Scheduled Bank in India having its branch at Cochin shall be submitted at the time of submission of bids and scanned copy

of the same shall be attached with the e-tender. Payment can also be made online mode (NEFT/RTGS) as per Bank details at ***Annexure-XIV*** of Bid document and produce documentary evidence.

In case of tender document being downloaded from the website, at the time of uploading, the tenderer shall give an undertaking that no changes have been made in the document. Port's Tender document will be treated as the authentic Tender document and if any discrepancy is noticed at any stage between the Port's Tender document and the one submitted by the Tenderer, the Port's document shall prevail. For the discrepancies found at any time, the Tenderer shall be liable for legal action.

5 One Bid per Bidder:

Each bidder shall submit only one bid. A bidder who submits or participates in more than one Bid will cause all the proposals with the Bidder's participation to be disqualified.

6 The Bidder

The Bidder shall be a single entity only.

7 Cost of Bidding:

The Bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will, in no case, be responsible and liable for those costs.

8 Site visit:

The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the work site and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for execution of the Works. The cost of visiting the site shall be at the Bidders' own expense. Bidders will be required to submit along with their Bid an undertaking as per ***Annexure-XIII*** that they have visited the site and collected all necessary details required to submit their offer.

9 Clarification of the Bidding Documents:

The Tenderers are advised to examine the Tender Document carefully and if there be or appear to be any ambiguity or discrepancy in the documents, or any clarifications needed on the Tender Documents; these shall be referred to the Chief Engineer in writing at the following address, so as to reach him at least by

11.08.2026. It is to be noted that no queries, clarifications will be answered after this date.

THE CHIEF ENGINEER,
CHIEF ENGINEER'S OFFICE,
COCHIN PORT AUTHORITY,
WILLINGDON ISLAND,
KOCHI-9,
KERALA, INDIA.
Ph:- 91-0484-2666414/2582400.
Fax:- 91-0484-2666414.
Email: ce@cochinport.gov.in

10 Pre-Bid Meeting:

There will not be any pre-bid meeting. However, the Bidders who need clarifications on any specific issue shall inform the Employer in writing latest by before **11.08.2026** at the address given in the Clause 9 above. No queries / clarifications on Bid Document shall be entertained after this date. The replies / clarifications / decisions shall be hosted at the Cochin Port Authority website www.cochinport.gov.in, e-Tendering Portal and CPP Portal.

At any time prior to the deadline for submission of Bid, CoPA may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the Bid Document by the issuance of Addenda /Corrigenda.

Any Addenda / Corrigenda / Errata / Replies to the queries of Bidder etc., if any, issued by CoPA will be hosted in Cochin Port Authority website www.cochinport.gov.in, e-Tendering Portal and CPP Portal only and the Bidder shall be responsible to check and download those Documents, if any, issued by CoPA, from the website before submission of Bid. Bids with any shortfall in uploading the said Addenda / Corrigenda / Errata / Replies to the queries of Tenderer etc. duly signed along with the downloaded documents while uploading the Tender will render the Tender incomplete and incomplete Tender Documents may be rejected. In order to afford Bidders with reasonable time to take an Addendum into account, or for any other reason, the CoPA may, at its discretion, extend the Bid Submission Date and the Bid extension notice shall be hosted in the websites only.

11 Amendment of Bidding Documents:

The Chief Engineer, Cochin Port Authority, shall have the right to omit or suspend certain items of work or revise or amend the Bid documents prior to

the due date of submission of the Bid by issuance of Addenda / Corrigenda. Any Addendum / Corrigendum thus issued shall be part of the Tender documents. The Addenda / Corrigenda, if any, shall only be hosted in the e-tender portal as well as in the website of the Cochin Port. It is the responsibility of the Bidders to download such Addenda / Corrigenda hosted in the website and submit the same duly signed along with the Bid. In order to afford the Bidders with reasonable time to take Addendum into account, or for any other reason, the Port Authority may, at its discretion, extend the due date for submission of Bid and bid extension notice shall be hosted in the web site.

12 Preparation of bids:

All documents relating to the bid shall be in the English language.

13 Minimum Eligibility Criteria:

(a) Experience

The tenderers should have experience of having successfully completed during the last 7 (seven) years ending **31st July, 2026**, at least either:

- i. Three Similar Works each costing not less than **Rs.35,45,800.00**

(OR)

- ii. Two Similar Works each costing not less than **Rs.44,32,300.00**

(OR)

- iii. One Similar Work costing not less than **Rs.70,91,600.00**

Note: In case of substantial completion, the certificate shall be produced as substantially completed. Also, ongoing works with 80% financial progress will also be considered for MEC.

(b) Financial Turnover

Average Financial Turnover of the tenderer over the last three financial years ending 31st March 2025 of the previous financial year [2022-'23, &2023-'24, 2024-25] shall not be less than **Rs.26,59,400.00**

Explanatory Notes to (a) & (b):

Note 1:- Similar work(s) means **“Construction of a structure in sea/ river/ backwater/ marine environment”**.

Note 2:- Following enhancement factors will be used for the costs of works executed for bringing the financial figures to a common base value in respect of the works completed in past years.

Table 1

Year before	Multiplying factor
One year	1.07
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Note 3:-*The experience certificate of works executed in private sectors / organisations shall be considered for qualification, only on submission of TDS certificate along with work order and completion certificate, and also the details furnished in Annexure IVa & IVb, certified by Chartered Accountant (with UDIN No.).*

Note 4:- *Satisfactory Client / Owner's Certificate or documentary proof shall be submitted in support of the assignments / works performed and claimed by the tenderer to fulfil the eligibility criteria for qualification. A statement duly certified by the Chartered Accountant with UDIN No. showing the average annual Financial Turnover over the last 3 financial years ending on 31st March 2025 and audited financial statements (Balance Sheet & Profit & Loss Account Statement) for the last three years shall be submitted.*

Note 5:- *The works reckoned for the above purpose are those executed by the tenderers as prime contractor or proportionately as member of joint venture or as a sub contractor authorized and approved by the Employer of the work(s) against which the tenderer has claimed his experience; it will be considered for qualification only if documentary proof of such authorization / approval of the Employer are submitted.*

14 Other Eligibility Considerations

14.1 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- i) made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and / or
- ii) record of poor performance such as abandoning the works, not executing the work as per contract, not properly completing the contract, inordinate delays in completion, continuous litigation history, or financial failures, black listing / debarring by Govt. departments, PSUs, etc.
- iii) not submitted complete documents as per clause 22 of “Instructions to Bidders”.

14.2 The bidders having EPF/ ESI registration certificates only shall be considered for qualification in the tenderers, if applicable, as per EPF / ESI Acts.

15 Bid Prices:

15.1 Percentage Basis Contract

The Bidder shall fill the percentage above / below in the Bidder's Quoting Area under “Percentage Quoted” in the Schedule-II (Schedule of Quantities to be done on Contract) both in **figures and words**. The Bidder shall also fill ‘Above / Below’ column.

15.2 On scrutiny, if there are differences between the percentage given in figures and in words, the following procedure shall be followed:-

- a) When there is a difference between the percentage quoted in figures and in words, the percentage in words shall be taken as correct.
- b) When the sign (+) / (-) and Above / Below does not correspond with each other, the “words” under “Above / Below” shall be taken as correct.

15.3 Rates Quoted

The rate quoted by the Tenderer shall be inclusive of the cost of provision of plant and equipment, materials, labour, execution, supervision, maintenance,

overheads and profits and every incidental and contingent cost and charges whatsoever excluding Goods and Service Tax (GST). GST as may be applicable from time to time shall be shown separately in the invoice.

- 15.4 The Contract shall be for the whole Work based on the priced Bill of Quantities (BOQ) submitted by the Bidder. The quantities of work indicated in the BOQ are only approximate and it may vary as per site requirements. **The Bidder should ensure that his tendered percentage as per Price Bid is not mentioned anywhere in any documents in Technical Bid submission, directly or indirectly. If any such mention is made, the tender will become invalid and shall become liable for rejection.**

15.5 Currencies of Bid and Payment:

The unit rates and the prices shown in Schedule II of this document are in Indian National Rupees (INR).

16 Bid Validity:

Bids shall remain valid for a period not less than One Hundred and Twenty days (120 days) from the due date for bid submission. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.

In exceptional circumstances, prior to expiry of the original time limit, the Employer may request the Bidder to extend the period of validity for an additional period. The request and bidders response shall be made in writing. A bidder agreeing to the request will not be permitted to modify his bid (ie, the extension shall be unconditional).

17 Bid Security / EMD:

- 17.1 Each tender should be accompanied by an Earnest Money amounting to **Rs.1,77,300.00 (Rupees One Lakh Seventy Seven Thousand Three Hundred only)**. EMD shall be remitted either through Demand Draft / Pay Order / Banker's Cheque / Insurance Security Bond drawn in favour of the FA & CAO, CoPA from any Nationalized Bank / Scheduled Bank in India or through an irrevocable Bank Guarantee (BG) valid for a period of 165 days from the date of opening of tender, enforceable and encashable at Cochin, drawn from any Nationalized Bank/ Scheduled Bank operating in India, having its branch in Kochi. Payment can also be made online mode (NEFT/RTGS) as per Bank details at **Annexure-XIV** of Bid document.

- 17.2 In case, Bank Guarantee is furnished directly for EMD, Bank Guarantee shall be verified independently by the Port with the bank before finalization of technical bids. In the event of lack of confirmation of issue of the BG by the bank, the bid shall stand disqualified. The EMD will not carry any interest.
- 17.3 Micro and Small Enterprises (MSE's) Bidders who are registered with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Village Industries Board (KVIB) or Coir Board or National Small Industries Corporation (NSIC) or directorate of Handicrafts and Handlooms or Udyog Aadhaar Memorandum or any other body specified by Ministry of MSME for similar nature of Works shall be eligible for issue of Bid Document free of cost and exemption from payment for issue of tender document & payment of EMD. They are required to submit documentary proof of such registration with QR code along with the offer, as detailed in Instructions to Bidders, for claiming the available exemptions and a scanned copy of Exemption Certificate duly notarized shall be uploaded in the e-Tender Portal. Also, a Bid Security Declaration in the format mentioned in **Annexure-VI** shall be submitted. If the Registration Certificate does not pertain to the Category of 'Similar Works' mentioned above, the Tender will be rejected.
- 17.4 Any Bid not accompanied by an acceptable Bid Security / Bid Security Declaration shall be treated as Non-responsive and shall be rejected by the Employer

18 Forfeiture of Bid security / EMD

Bid Security / EMD will be forfeited in the following cases:

- (a) If Bidder withdraws his bid during the period of bid validity.
- (b) The Bidder does not accept the correction of the Bid Price pursuant to any arithmetical errors.
- (c) In case of a successful bidder fails
 - (i) to take over the project site within the specified time limit
 - (ii) to commence the work, within the specified time limit
 - (iii) to sign the contract Agreement or furnish the required Performance Security within the specified time limit

19 No Alternative Proposals by Bidders:

Bidders shall submit offers that comply with the requirements of the bidding documents. Alternatives will not be considered.

20 Format and Signing of Bid:

- 20.1 The Tenderer shall prepare one set of his Tender (all Volumes), duly completed and signed, along with the set of Drawings and other documents mentioned hereinafter. The Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder with signature duly witnessed and company seal affixed. The Power of Attorney (in original) authorizing the signatory/s of the Tender shall be enclosed. All pages of the bid where entries or amendments have been made shall be signed by the person or persons signing the bid.
- 20.2 If the tender is made by an individual, it shall be signed by his full name and his address shall be given. In the event of the tender being submitted by a registered partnership firm, it must be signed individually by each partner thereof. In the event of absence of any partner, it must be signed on his behalf by person holding a proper power-of- attorney authorizing him to do so and to bind the partner in all matters pertaining to the contract including the arbitration clause, such power-of-attorney to be attached with the tender which must disclose that the firm is duly registered under Indian Partnership Act. If the tender is made by a Limited Company it shall be signed by a duly authorized person who shall produce with the tender satisfactory evidence of the authorization. In the case of a Limited Company the tender should be accompanied by the Memorandum and Articles of Association of the Company.
- 20.3 The Bid without duly signed and sealed tender document will not be considered for acceptance.

21 Bid Submission:

- 21.1 Bid shall be submitted in two parts, **Part - I: Technical Bid** and **Part - II: Price Bid** through **e- tender mode before 14.30 Hrs on 18.08.2026**.
- 21.2 The Technical Bid document and the scanned copies of the documents as detailed in clause 22 below shall be submitted through e-Tendering mode on www.tenderwizard.com/COPT.
- 21.3 Price bid (Schedule-II) in the provided format shall be submitted **only through e-tendering mode on www.tenderwizard.com/CPT before 14.30 Hrs on 18.08.2026**. In no case shall filled in Price Bid (Schedule II) be submitted in hard copy, as it shall result in rejection of the tender.
- 21.4 Tenders shall be submitted **“online”** strictly in accordance with the

Instructions to Tenderers and Terms & Conditions given in the tender document. The bidders shall submit scanned copy of all the required documents such as DD / Banker's Cheque / Bank Guarantee / Insurance Surety Bond towards the cost of tender document and EMD, proof of experience, financial details etc. through the e-tendering portal.

21.5 The Bidder shall submit **Original (i) DD / Pay Order / Bankers Cheque towards the cost of Tender document, (ii) Demand Draft / Pay Order / Banker's Cheque / Insurance Security Bond / Bank Guarantee towards EMD and (iii) Power of Attorney** along with Letter of submission in a sealed cover, super scribing there on the Tender Number, Name of Work, date notified for submission of tender and the name of the tenderer. Tenders can be brought either in person or sent by registered post/ courier to the Chief Engineer, Cochin Port Authority, W/Island, Cochin - 682009, KERALA, before opening date & time of the tender. Tenders brought in person, shall be submitted to the Chief Engineer on or before the due date and closing time specified above.

21.6 **Tenders without submitting the original documents towards (i) Cost of tender document, (ii) EMD; and (iii) Power of Attorney as above, before opening date and time of the tender will be liable for rejection.**

21.7 The successful Bidder shall submit original copy of complete Technical Bid already submitted in e-mode within 7 days of receipt of Letter of Acceptance issued for the work for execution of Contract Agreement.

22 Information Required in the Bid

22.1 **Part I -Technical Bid** shall contain the following:

- a) Letter of Submission (vide **Annexure-I**)
- b) Bid Security / EMD as described in Clause 17 above or Bid Security Declaration (vide **Annexure-VI**)
- c) Cost of Tender Document
- d) Check list as per **Schedule I** attached along with Technical Bid in the e-Tendering Portal
- e) Power of Attorney (in original) in favour of signatory/s to the Tender, duly authenticated by Notary Public. (vide **Annexure- II**)
- f) Organization Details (vide **Annexure- III**)
- g) Details of experience as per **Annexures - IVa & IVb** and Certificates in proof of experience in Similar Works as detailed under Clause 13 of

Instructions to Tenderers.

Explanatory notes:

- (1) Original or Notary certified copy of completion certificates of each work issued by the owner/ the responsible officers of the owner under whom he has executed such contracts along with work order shall be attached. The certificate shall invariably contain the following among other things.
 - (i) Details of work involved specifying the nature of work
 - (ii) The completion cost of the work & contract amount
 - (iii) Date of commencement; and
 - (iv) Date of completion of the work.
- (2) If the experience in Similar Works is as a member of joint venture, Notary attested copy of joint venture agreement in this respect shall be attached.
- (3) If the experience in Similar Works is as a subcontractor, Notary attested copy(s) of approval issued by the Employer(s) authorizing as a sub-contractor; in proof of the claim of the tenderer as a sub-contractor shall be attached.
- (4) **The works indicated in *Annexure-IVa* and *IVb* will only be considered for evaluation. Mere submission of work completion certificate will not be considered towards Eligible Assignments**
- h) A statement duly certified by Chartered Accountant with UDIN No. showing the Average Annual Financial Turnover of the tenderer over the last three financial years [2022-'23, 2023-'24, 2024-'25] (vide ***Annexure-V***) supported by Audited Financial statements (Balance Sheet & Profit & Loss Account Statement) for the last three years.
- i) Form of Bid duly signed and sealed
- j) **Bid document including all Addenda / Corrigenda duly signed and sealed**
- k) Partnership Deed or Memorandum and Articles of Association of the Company and Registration certificate of the company as the case may be.
- l) **Copies of EPF, ESI, PAN and GST registration**
- m) Documentary proof for MSE bidders, if applicable.
- n) A detailed Method Statement (Technical Note) for carrying out of the works, along with an Implementation Schedule showing sequence of operation and the time frame for various segments of temporary and

permanent works (vide **Annexure-VII**). The information provided will form part of the Work Methodology and the same shall be in line with the Specifications and Bill of quantities.

- o) A list of Plant and equipment proposed to be engaged for the work (vide **Annexure-VIII**).
- p) A declaration to the effect that (vide **Annexure-IX**):-
 - i) All details regarding construction plant and machinery, temporary work and personnel for site organization considered necessary and sufficient for the work have been furnished in the **Annexure-VII** and that such plant, temporary works and personnel for site organization will be available at appropriate time of relevant works for which the equipment have been proposed at site till the completion of the respective work.
 - ii) No conditions are incorporated in the Price Bid. In case any conditions are specified in the Price Bid, the tender will be rejected summarily without making any further reference to the bidder.
 - iii) We have not made any payment or illegal gratification to any persons/ authority connected with the bid process so as to influence the bid process and have not committed any offence under PC Act in connection with the bid.
 - iv) We disclose with that we have made / not made (strike out whichever is not applicable) payments or propose to be made to any intermediaries (agents) etc in connection with the bid.
 - v) We do hereby confirm that no changes have been made in the Tender document uploaded by us for the above bid. Port Tender document will be treated as the authentic Tender Document and if any discrepancy is noticed at any stage between the Port's tender document and the one submitted by the tenderer, the Port's document shall prevail.
- q) Bank information for e- Payment system as per **Annexure-X**.
- r) Details of litigation history, blacklisting etc. of the Bidder as per **Annexure-XI**.
- s) Undertaking regarding EPF & ESI Registration as per **Annexure-XII** (if required).
- t) Declaration of site visit by Bidder as per **Annexure-XIII**.

Scanned copy of all the above documents, duly signed and sealed, shall be uploaded for on line submission of Technical Bid.

NOTE: If a bidder has already been awarded or qualified for a similar nature work with a higher value or equivalent value within the last 6 months from the date of notice inviting tender, the tender of such bidder shall be evaluated / considered for qualification with the documents submitted by the bidders in those tenders, provided the Bidder clearly states the details of above such works in the Letter of Submission.

22.2 List of Documents to be Submitted in Original.

- i) DD / Pay Order / Bankers Cheque, as applicable, towards Cost of Tender document
- ii) Demand Draft / Pay Order / Banker's Cheque / Insurance Security Bond Bank Guarantee (BG), as applicable, towards Bid Security / EMD.
- iii) Letter of Submission (vide ***Annexure-I***)
- iv) Power of Attorney, duly authenticated by Notary Public (vide ***Annexure-II***)

22.3 Part II: "Price Bid" shall contain only the "Schedule II – Schedule of Quantities", which shall be duly filled in and shall be submitted only in e-tendering mode.

23 Deadline for Submission of the Bids:

E-tenders attaching all documents shall be submitted 'online' through the e-tender portal strictly in accordance with the terms and conditions of tender document before the time and the day notified in Table 2 of NIT.

The (i) Originals of Demand Draft / Pay Order / Bankers Cheque towards the Cost of Tender document, (ii) Demand Draft / Pay Order / Banker's Cheque / Insurance Security Bond/Bank Guarantee (BG) towards Bid Security / EMD, (iii) Power of Attorney along with letter of submission in a sealed cover in original superscribed with the Tender Number, Name of Work, date notified for submission of tender and the Name of the Tenderer and (iv) Letter of Submission as per ***Annexure-I*** should reach the office of the Chief Engineer, Cochin Port Authority, Cochin-9, on or before the time and the day notified in Table 2 of NIT.

24 Late Bids:

Any Bid received by the Employer after the Bid Due Date will be returned unopened to the bidder.

25 Bid Opening

- 25.1 The Officer inviting the tender or his duly authorized representative will open the tenders through the e-Tendering portal in the presence of intending tenderers who may be present at the time in person or through their authorized representative. In the case of the tenders invited under Two Cover System, the technical bids of the tenders received will be opened first.
- 25.2 **Technical Bid:** Technical Bid shall be opened in the office of the **Chief Engineer, Cochin Port Authority** after **15.00** Hours on **18.08.2026**. Submission of EMD and Cost of Tender Document is verified initially. In case the Earnest Money and Cost of Bid Document are not deposited/ submitted or is not in order, the Bid will not be opened further and hard copy submitted will be returned.
- 25.3 If all Bidders have submitted unconditional Bids together with requisite Bid Security / EMD then all Bidders will be so informed then and there. If any Bid contains any deviation from the Bid documents and / or if the same does not contain Bid Security Declaration in the manner prescribed in the Bid documents, then that Bid will be rejected and the Bidder will be informed accordingly. The Price Bid submitted in e- mode will not be opened, along with opening of Technical Bid.
- 25.4 In the event of a tender being rejected, the EMD paid with such unaccepted tender shall be refunded to the tenderer.

26 Bid Opening – Price Bid:

Price Bid of those Tenderers found responsive on evaluation of Technical Bids, will be opened later. **Short listed bidders will be communicated about the date and time of opening of the Price Bid through e-tender portal notification / communication and there will be no direct communication from department in this regard.** The Bidder's name, the Bid percentages, the total amount of each Bid, any discounts, Bid modifications and withdrawals, and such other details as the Employer may consider appropriate, will be announced by the Employer at the time of opening.

27 Clarification of Bids:

To assist in the examination and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdown of unit rates. The request for clarification and the response shall be in writing,

but no change in the price or substance of the Bid shall be sought, offered, or permitted.

No Bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, he should do so in writing.

Any effort by the Bidder to influence the Employer's bid evaluation, bid comparison or contract award decisions, may result in the rejection of his bid.

28 Examination of Bids and Determination of Responsiveness:

28.1 Prior to detailed evaluation of Bids, Cochin Port Authority will determine whether each Bid

- (a) meets the Minimum Eligibility Criteria defined in Clause 13.
- (b) has been properly signed by an authorised signatory (accredited representative) holding Power of Attorney in his favour. The Power of Attorney shall inter alia include a provision to bind the Bidder to settlement of disputes clause;
- (c) is accompanied by the required Bid Security / Bid Security Declaration and cost of bid document.
- (d) undertaking in the Technical Bid that he has not incorporated any conditions in the Price Bid.
- (e) is responsive to the requirements of the Bidding documents.

28.2 A responsive Bid is one which conforms to all the terms, conditions and specification of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one;

- (a) which affects in any substantial way the scope, quality or performance of the Works;
- (b) which limits in any substantial way, the Employer's rights or the Bidder's obligations under the Contract; or
- (c) whose rectification would affect unfairly the competitive position of other Bidders presenting responsive Bids.

28.3 If a Bid is not substantially responsive, it shall be rejected by the Employer, and shall not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

29 Correction of Errors:

Bids determined to be responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as detailed in Clause 15.2. The amount stated in the Bid will be adjusted by the Employer in accordance with the above stated procedure for the correction of errors and shall be considered as binding upon the bidder. If the Bidder does not accept the corrected amount, the Bid shall be rejected and the Bid security shall be forfeited in accordance with Clause 18.

30 Evaluation and Comparison of Bids:

The Employer will evaluate and compare only the Bids determined to be responsive in accordance with Clause 28. In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:

- (a) making any correction for errors pursuant to Clause 29;
- (b) making appropriate adjustments to reflect discounts or other price modifications offered.

31 Alteration of tender documents:

No alteration shall be made in any of the tender documents or in the Bill of Quantities and the tender shall comply strictly with the terms and conditions of the tender document. The Employer may however ask any tenderer for clarifications of his tender if required. Nevertheless, no tenderer will be permitted to alter his tender price after opening of the tender.

32 Alternative Conditions and Proposals:

The Tenderer shall note that alternative or qualifying tender conditions, or alternative design proposal for whole or part of the work will not be acceptable. Tenders containing any qualifying conditions or even Tenderer's clarifications in any form will be treated as non-responsive and will run the risk of rejection. Price Bid of such Tenderer's will not be opened.

33 Award of Contract:

The Employer will award the Contract to the bidder whose bid has been determined to be responsive to the bidding documents and who has offered

the lowest evaluated bid price, provided that such bidder has been determined to be

- (a) Eligible in accordance with the provisions of Clause 13 and 14, and
- (b) Qualified in accordance with the provisions of Clause 13 and 14.

34 Release of Bid Security / EMD

The Bid Security / EMD of unsuccessful bidder other than L1 and L2 will be refunded immediately after ranking of the Bids. The Bid Security of L2 bidder shall be refunded immediately after entering into agreement with L1 bidder and acceptance of the Performance Security. The Bid Security of the successful bidder will be discharged after he has signed the Agreement and furnished the required Performance Security.

35 Securities

35.1 Security Deposit (SD) shall be at 10% of the contract value or value of the work done whichever is higher and it shall consist of two parts:

35.2 Retention Money to be recovered from Running Bills as detailed below:

- a) The Employer shall retain from each payment due to the Contractor the proportion stated in the Contract Data until Completion of the whole of the Works.
- b) Retention Money shall be deducted at 5% of the gross amount of the bill from the first Running Account bill onwards till the recovered sum amounts to 5% of the contract value or the value of the work done whichever is higher. Retention money shall be refunded to the Contractor within 14days from the date of payment of final bill.
- c) The total amount thus deposited towards SD will be retained as security for the due and proper fulfilment of the contract and will not carry any interest. Such deposit shall be forfeited on failure to perform or non-fulfilment by the Contractor of the terms and conditions of the contract.

35.3 Performance Security to be submitted on award of the work as detailed below:

- a) Performance Security shall be 5% of the Contract value.
- b) The Performance Security shall be provided by the Contractor to the

Employer within not later than 21 days for domestic bids and 28 days for international bids from the date of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security for an amount equivalent to 5% of the Contract price rounded off to the nearest Rs.1,000/- in the following forms;

- (i) Banker's Cheque/Demand Draft/Pay Order of a Scheduled Bank.
 - (ii) An irrevocable Bank Guarantee (BG) enforceable and encashable at Cochin, drawn from any scheduled bank operating in India as per the proforma at **Annexure-A**.
 - (iii) Insurance Security Bond drawn in favour of the FA & CAO, CoPA from any Nationalized Bank / Scheduled Bank in India as per the proforma at **Annexure-C**.
- c) The BG furnished towards the Performance Security shall be valid for a period until a date 30days from the day of expiry of the defect liability period stipulated as per the terms of the contract.
 - d) Unless performance Security is furnished within the period as specified in clause above or such extension of that period as may be permitted by the Engineer in writing, the Earnest Money will be liable to forfeiture and the contract to cancellation.
 - e) Performance Security will be released / refunded to the Contractor not later than 30 days from the date of completion of Defect Liability / warranty period of the work.
 - f) If the Cost of Work done exceeds the Contract Value, the total amount retained as Security Deposit considering the Performance Security initially submitted together with the Retention Money recovered from the running account bills, shall amount to 10% of the Cost of Work done.

35.4 In cases where cost of Work done exceeds the Contract Value while releasing the Retention Money after payment of Final Bill, only 5% cost of Work Done is released, instead of the entire Retention Money recovered from the bills. The balance amount shall be retained; to make up for the shortage in the Performance Security, up to the completion of Defects Liability Period. The BG shall be issued in favour of Cochin Port Authority in the format enclosed in **Annexure-A** of **GCC**.

36 Signing of Agreement

- 36.1 The Successful Tenderer will be required to execute an Agreement at his expense within 28 (twenty eight) days from the date of Letter of Acceptance / Work Order, on proper value Kerala State Stamp Paper in the prescribed form. The agreement as finally executed will include the Employer's Bid Documents and the Bidder's offer as finally accepted by the EMPLOYER together with Addendum / Corrigenda, bid clarification and all correspondences exchanged between EMPLOYER and the bidder, if any. Till the formal agreement is executed, the Letter of Acceptance together with the offer as finally accepted along with correspondence shall form a binding contract between the two parties.
- 36.2 The Contractor shall make 13 copies of the Agreement and submit to the Employer within 7 days following the date of signing of Agreement.
- 36.3 In the event of the tenderer, after the issue of the communication of acceptance of offer by the Board, failing /refusing to execute the agreement as hereinafter provided, the tenderer shall be deemed to have abandoned the contract and such an act shall amount to and be construed as the contractor's calculated and the wilful breach of the contract, the cost and consequence of which shall be to the sole account of the tenderer and upon such an event the Board shall have full right to claim damages therefore.

37 Fraud and Corrupt Practices:

- 37.1 The bidder and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this document, the Port shall reject the tender without being liable in any manner whatsoever to the bidder, if it determines that the bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice (collectively the "Prohibited Practices") in the Selection Process. In such an event, the Port shall, without prejudice to its any other rights or remedies, forfeit and appropriate the Bid Security or Performance Security, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the Port for, inter alia, time, cost and effort of the Authority, in regard to the Tender, including consideration and evaluation of such Bidder's Proposal. Such Bidder shall not be eligible to participate in any tender or RFP issued by the Authority during a period of **2 (two)** years from the date such Bidder is found by the Authority to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.

37.2 For the purposes of this Clause, the following terms shall have the meaning hereinafter respectively assigned to them:

(a) “corrupt practice” means

- (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Authority who is or has been associated in any manner, directly or indirectly with the Selection Process or the LOA or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Authority, shall be deemed to constitute influencing the actions of a person connected with the Selection Process; or
- (ii) engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LOA or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Agreement, who at any time has been or is a legal, financial or technical consultant/ adviser of the Authority in relation to any matter concerning the Project;

(b) “fraudulent practice” means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;

(c) “coercive practice” means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person’s participation or action in the Selection Process;

(d) “undesirable practice” means

- (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or
- (ii) having a Conflict of Interest; and

- (e) “restrictive practice” means forming a cartel or arriving at any understanding or arrangement among Applicants with the objective of restricting or manipulating a full and fair competition in the Selection Process.

38 Rejection of Tender:

Any Tender not conforming to the foregoing instructions will not be considered. The Employer does not bind himself to accept the lowest or any tender and has the right to reject any tender without assigning any reason thereof. No representation whatsoever will be entertained on this account.

SIGNATURE OF TENDERER

3. FORM OF BID

To

**The Board of
Major Port Authority
for Cochin Port
Through
The Chief Engineer
Cochin Port Authority, Cochin-9**

I/ We hereby tender for the execution of the work specified in the underwritten memorandum within the time specified in such memorandum at the rates specified in the schedule attached hereto and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in 'clause 16' of the General Conditions of Contract and with such materials as are provided for, by and in all other respects in accordance with such conditions so far as applicable.

M E M O R A N D U M

- | | |
|--|--|
| a) General description of work | : Providing Additional Staircases to the FIC Bays of North Jetty at Naval Base, Kochi (Retender). |
| b) Estimated cost Put to Tender | : Rs.88,64,500.00 |
| c) Earnest Money | : Rs.1,77,300.00 |
| d) Security Deposit | : 10% of the value of the Contract awarded or value of the work done whichever is higher. (Performance Security @ 5% of contract value payable on award of the work and Retention Money @ 5% of the gross amount of each bill) |
| e) Percentage, if any, to be deducted from the bills | : The Retention Money will be recovered from the first running bill onwards at the rate of 5% of the gross amount of each bill. |
| f) Time allowed for commencement of work from the date of receipt of Letter of Acceptance/work order through email | : 7 days |
| g) Time allowed for the work from the date of commencement of work | : 6 Months |

- i) Schedule, specifications, : As per “Contents” sheet attached.
conditions, drawings etc.

Should this tender be accepted, I/We hereby agree to abide by and fulfill all the terms and provisions of the tender and conditions of Contract annexed hereto and in default to execute an agreement with CoPA in the prescribed form within prescribed period, or submission of Performance Security within the prescribed period, agree to forfeit the Earnest Money deposited by me/us, in addition to any other remedy available with Cochin Port against me/us. The sum of Rs..... which will be deposited with Financial Adviser and Chief Accounts Officer of the Port Authority as Performance Security (a) the full value of which is to be absolutely forfeited to CoPA without prejudice to any other rights or remedies of CoPA should I/We fail to commence the work specified in the Contract Data or should I/We make any delay in progress of the work or if the contract is terminated on my/our default. ; or (b) the full value of which shall be retained by the Board on account of the security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Contract Data and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 40.3 of the General Conditions of Contract.

Dated the day of 2026

Signature of the Tenderer

Address :

Witness :

Address :

Occupation :

ACCEPTANCE

The above tender is hereby accepted by me for and on behalf of the Board.
Dated the day of 2026.

**Chief Engineer
COCHIN PORT AUTHORITY**

4. FORM OF AGREEMENT

AGREEMENT No.....of 20.....

AGREEMENT FOR THE WORK OF

**PROVIDING ADDITIONAL STAIRCASES TO THE FIC BAYS OF NORTH
JETTY AT NAVAL BASE, KOCHI (RETENDER).**

THIS AGREEMENT IS MADE on this day..... of 2026 BETWEEN THE BOARD OF MAJOR PORT AUTHORITY OF COCHIN PORT AUTHORITY, a body corporate under the Major Port Authority Act, 2021 having office on Willingdon Island, Cochin-682009 represented by its Chief Engineer Sri., S/o., aged years residing at, Village, ... Taluk, ...District (hereinafter referred to as the Employer which expression shall include his successors, assignees and administrators in the office) of the one part and M/s. represented by Shri. aged S/o residing at Village Taluk District (hereinafter referred as "Contractors" which expression shall include their successors, assignees and administrators) of the other part.

WHEREAS the Employer invited tenders for
..... vide Tender Notice Date
..... and the Contractor submitted a tender for the same giving rates subject to the terms and conditions etc. of the tender document.

AND WHEREAS the said tender submitted by the Contractor has been accepted by the Employer vide work order No dated, issued to the Contractor while accepting their tender.

NOW THESE PRESENTS WITNESSETH and the parties hereby agree as follows.

1. The tender submitted by the Contractor for execution for the Board, of the work specified in the underwritten memorandum within the time specified in such memorandum at the rates specified in the schedule attached hereto and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Clause 16 of the "General Conditions of Contract" and with such materials as are provided for, by and in all other respects in accordance with such conditions is accepted.
2. It is mutually understood and agreed that, notwithstanding that the works has been sectioned, every part of it shall be deemed to be supplementary to and complementary of every other part and shall be read with it or into it.

3. The Contractor agreed to abide by and fulfill all the terms and provisions of the said Conditions of Contract or in default thereof forfeit and pay to the Board the sum of money mentioned in the said conditions.
4. The sum of Rs...../- [Rupees.....only) has been deposited by the Contractor with Financial Adviser and Chief Accounts Officer of the Port Authority as Performance Security (a) the full value of which is to be absolutely forfeited to the Board in office without prejudice to any other rights or remedies of the said Board in office should the Contractor fail to commence the work specified in underwritten memorandum or should the Contractor not deposit the full amount of security deposit specified in underwritten memorandum otherwise the said sum of Rs...../- shall be retained by the Board as on account of such security deposit as aforesaid or (b) the full value of which shall be retained by the Board on account of the security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Clause 40.1 of the Conditions of Contract and those in excess of that limit at the rates to be determined in accordance with the provisions contained in Clause 40.3 of the Conditions of Contract.
5. It is mutually agreed that the tender submitted in its entirety shall form part of this agreement. Apart from the tender the following shall also form part of the agreement
 - (a) The Letter of Acceptance ;
 - (b) Bill of Quantities and
 - (c) Letters exchanged between the Employer and the Tenderer upto the issue of Letter of Acceptance as separately listed and annexed here to.
 - (d) Replies to Prebid queries and amendments issued, if any.

M E M O R A N D U M

- | | |
|--------------------------------|---|
| a) General description of work | : Providing Additional Staircases to the FIC Bays of North Jetty at Naval Base, Kochi (Retender). |
| b) Estimated cost | : Rs.88,64,500.00 |
| c) Tendered cost | : Rs..... |
| d) Earnest Money | : Rs.1,77,300.00 |

- e) Security Deposit : Rs.....(10% of the value of the Contract awarded or value of the work done whichever is higher. (Performance Security @ 5% of contract value and Retention Money @ 5% of the gross amount of each bill)
- f) Percentage, if any, to be deducted from the bills : The Retention Money will be recovered from the first running bill onwards at the rate of 5% of the gross amount of each bill.
- g) Time allowed for commencement of work from the date of receipt of work order through email : 7 days
- h) Time allowed for the work from the date of commencement of work. : **Six Months**
- i) Schedule, specifications, conditions, drawings etc. as per contents sheet attached. :

IN WITNESS WHEREOF THE CONTRACTOR hereunto set his hand and seal on behalf of M/s..... and on behalf of **The Board of Major Port Authority** of COCHIN PORT AUTHORITY, the CHIEF ENGINEER has set his hand and seal and common seal of Cochin Port authority has been hereunto affixed the day and year first written above.

CONTRACTOR

- (Retain only the authority signing the agreement)

Signed, sealed and delivered by

Shri..... of M/s.....

(Common Seal of the Firm)

Signed and affixed seal in the presence of :

1) Signature with address :

2) Signature with address :

EMPLOYER

Signed, sealed and delivered by the

CHIEF ENGINEER

Cochin Port Authority

On behalf of The Board of

Major Port Authority of Cochin.

Signed and affixed the common seal of

Board of Major Port Authority of Cochin Port Authority

In the presence of

1)

2)

5. CONTRACT DATA

Items marked “N/A” do not apply in this Contract.

Sl. No.	Description				Reference Clause No. in GCC
1	The following documents are also part of the Contract				
	The Schedule of other Contractors				(8.2)
	The Schedule of Key personnel – As per Tender				(9)
	Qualification of Staff	No	Min. Experience (Years)	Rate of recovery in case of non-compliance	
	Project / Site Engineer – Graduate Engineer or Diploma Engineer	1	5 10	Rs.25,000/- per month	
2	The Employer is:				(1)
	The Board of Major Port Authority for Cochin Port, COCHIN PORT AUTHORITY, Cochin -9.				
	Name of Authorized Representative:				
	Name: Dr. M. Angamuthu, IAS, Chairperson (i/c), Cochin Port Authority, Cochin -9.				
3	The Engineer is				
	Name: Col Jassar S M, Chief Engineer, Cochin Port Authority, Cochin-9.				
	Name of Nominee/Engineer-in-Charge: Will be notified in LoA/ Lol or subsequently				
4	Name of Contract: Providing Additional Staircases to the FIC Bays of North Jetty at Naval Base, Kochi (Retender). Tender No. T10/T-2108/2026-C				(1)
5	13 copies of Contract Agreement shall be furnished by the Contractor				(7.1)

Sl. No.	Description	Reference Clause No. in GCC
6	Tender document and other data are available at Cochin Port web site, Government of India CPP Portal and e – tendering portal. www.cochinport.gov.in www.eprocure.gov.in www.tenderwizard.com/CPT	(7.2)
7	The Intended completion date for the whole of the Work is 6 Months with the following milestones:	(17,28)
8	Milestone dates:	
	Physical works to be completed	
	Period from the date of receipt of LoA through email to commence and proceed with the work	
	6 Months	
9	The following shall form part of the Contract Document: (1) Agreement (2) Letter of Acceptance (3) Bill of Quantities submitted (4) Contractor's Bid (5) Correspondence exchanged after the opening of the Bid and before the issue of Letter of Acceptance by which the Condition of Contract are amended, varied or modified in any way by mutual consent (to be enumerated). (6) Contract Data (7) General Conditions of Contract (8) General Description and Special Conditions of Contract (9) Technical Specifications (10) Drawings if any and (11) Any other documents listed in the Contract Data as forming part of the Contract.	(2.3)
10	The Contractor shall submit a Program for the Works within 21 days of date of the Letter of Acceptance/Lol.	(27)
11	The site possession date The site will be handed over in phases within 7 days after issue of LoA without affecting the progress of work, and failure to take over the same within such period shall be attributable to contractor alone.	(21)

Sl. No.	Description			Reference Clause No. in GCC
12	The start date shall be 7 days from the date of the Letter of Acceptance (LoA) / Lol by the Contractor through email.			(1)
13	The site is located at Naval Base, Willingdon Island, Kochi.			
14	The Defects Liability Period: One year from the date of completion of the work.			(36)
15	The minimum insurance cover for physical property, injury and death is 10 Lakhs (Rupees Ten Lakhs) per occurrence with the number of occurrences unlimited. After each occurrence, Contractor will pay additional premium necessary to make insurance valid always.			(13)
16	The following events shall also be Compensation Events: NIL			(44)
17	The period between Programme updates shall be 60 days.			(27)
18	The amount to be withheld for late submission of an updated programme shall be Rs.25,000/- .			(27)
19	The language of the Contract documents is English.			(3)
20	The law, which applies to the Contract, is the law of Union of India.			(3)
21	The currency of the Contract is Indian Rupees.			(46)
22	The proportion of payments retained (Retention Money) shall be 5% from each bill subject to a maximum of 5% of the contract price.			(48)
23	The maximum amount of Liquidated Damages for the whole of the works is 10% of the Contract Price.			(49)
24	The amounts of the advance payments:			(51)
	Nature of Advance	Amount (Rs)	Conditions to be fulfilled	
	1.Secured Advance for non-perishable Materials brought to site	75% of Invoice value or Market value whichever is Lower.	a) The non perishable materials, in accordance with Tender	
			b) Such materials have been delivered to site and are properly	

Sl. No.	Description			Reference Clause No. in GCC
			stored and protected against damage or deterioration to the satisfaction of the Engineer or his nominee. The contractor shall store the bulk material in measurable stacks.	
			c) The Contractor's records of the requirements, orders, receipt and use of materials are kept in a form approved by the Engineer or his nominee and such records shall be available for inspection by the Engineer or his nominee.	
25	Repayment of advance payment for mobilization: NA			(51)
26	Repayment of advance payment for Construction and equipment: NA			(51)
27	Repayment of Secured Advance:			(51)
	The advance shall be repaid from each succeeding monthly payment to the extent materials for which advance was previously paid pursuant to Clause 51.6 of Conditions of Contract on being incorporated into the Works.			

Sl. No.	Description	Reference Clause No. in GCC
28	The date by which “as-built” drawings (in hard & soft copy) are required is within 60 days of issue of certificate of completion of whole or section of the work, as the case may be.	(58)
29	The amount to be withheld for failing to supply “as built” drawings and/or operating and maintenance manuals by the date required is Rs.1,00,000/-	(58)
30	(a) Schedule of Rates Applicable for Civil works: (CPWD DSR 2023 + 35% Cost Index) multiplied by 0.8246 for deducting GST. (b) Schedule of Rates Applicable for Electrical works: (CPWD DSR 2022 + 31.32% Cost Index) multiplied by 0.9011 for deducting GST.	
31	Base Rate for materials to be considered for price variation NA	(47)
32	Permissible wastage on theoretical quantities of (a) Cement : (+) 2% (b) Steel Reinforcement and structural steel sections for each diameter, section and category : (+) 5.99 % (c) Bitumen/Bitumen emulsion : (+) 2.5%	(47)

6. ANNEXURES

Annexure No.	Description	Page No.
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II	Proforma of Power- of-Attorney/ Letter of Authority	47
III	Organization Details	48-49
IV a	Details to Fulfil the “Minimum Eligibility Criteria” and Certificates	50-51
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V	Financial Capability	53
VI	Format for Bid Security / Earnest Money Deposit Declaration	54
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COCHIN PORT AUTHORITY
PROVIDING ADDITIONAL STAIRCASES TO THE FIC BAYS OF NORTH
JETTY AT NAVAL BASE, KOCHI (RETENDER).
LETTER OF SUBMISSION- COVERING LETTER

(On the Letter Head of the Bidder)

No.....

Date:.....

To

The Chief Engineer,
Cochin Port Authority.

Sir,

Sub: Tender for “**Providing Additional Staircases to the FIC Bays of North Jetty at Naval Base, Kochi (Retender).**”

~~~~~

Being duly authorized to represent and act on behalf of .....  
(Hereinafter referred to as “the Bidder”) and having reviewed and fully understood all of the requirements of the bid document and information provided, the undersigned hereby apply for the project referred above.

We are submitting our Bid enclosing the following, with the details as per the requirements of the Bid Document, for your evaluation.

- (i) EMD / Bid Security Declaration (***Annexure-VI***)
- (ii) Power of Attorney / Letter of Authority (***Annexure-II***)
- (iii) Cost of Tender Document

We have also uploaded the following documents for online submission of Technical Bid.

- (i) Organization Details (***Annexure- III***)
- (ii) Details to fulfil the “Minimum Eligibility Criteria” and certificates (***Annexure-IVa***)
- (iii) Details of Past Experience of Contractor for Similar works (***Annexure-IVb***)
- (iv) Average Financial Turnover over the last three financial years

**(Annexure-V)**

- (v) Detailed Method Statement (Technical Note) **(Annexure-VII)**
- (vi) List of Plant and Equipment proposed for the work **(Annexure-VIII)**
- (vii) Declaration **(Annexure -IX)**
- (viii) Bankers Details for e-payment **(Annexure-X)**
- (ix) Details of litigation history / blacklisting of the bidder **(Annexure- XI)**
- (x) Undertaking regarding EPF & ESI registration. **(Annexure-XII)** (if required)
- (xi) Tender Document along with Addenda Nos ----,
- (xii) Copies of EPF, ESI, PAN & GST Registration.
- (xiii) Checklist as per Schedule-I
- (xiv) Partnership deed or Memorandum and Articles of Association of the company and Registration Certificate of the company (as the case may be)
- (xv) Document proof for NSIC Registration,(if applicable)
- (xvi) Declaration of site visit by bidder **(Annexure-XIII)**

We also certify that further Bid related communication, if any, will be sent to the following e-mail IDs by CoPA.

(i).....

Name: ....., Designation: ....., Mobile no.: .....

(ii).....

Name: ....., Designation: ....., Mobile no.: .....

(Furnish 2 nos. current active e-mail IDs)

**Signature of Bidder**

(Authorized Signatory)

**PROFORMA OF POWER-OF-ATTORNEY/ LETTER OF AUTHORITY**

*(To be submitted on Non-judicial Stamp Paper of appropriate value)*

To

The Chief Engineer  
Cochin Port Authority,  
Cochin 682009.  
Kerala, India.

Dear Sir,

We \_\_\_\_\_  
do hereby confirm that Mr./Ms./Messrs \_\_\_\_\_ **[INSERT  
NAME AND ADDRESS]**, whose signature is given below, is /are authorized to  
represent us to bid, negotiate and conclude the agreement on our behalf with you  
against Tender for “**PROVIDING ADDITIONAL STAIRCASES TO THE FIC BAYS OF  
NORTH JETTY AT NAVAL BASE, KOCHI (RETENDER)**”.

We confirm that we shall be bound by all and whatsoever our said agents shall commit.

Signature of the authorized person:

Name & Designation :

Yours faithfully,

Signature, name and seal of the certifying Authority

**COCHIN PORT AUTHORITY**  
**PROVIDING ADDITIONAL STAIRCASES TO THE FIC BAYS OF NORTH JETTY**  
**AT NAVAL BASE, KOCHI (RETENDER).**

**ORGANIZATION DETAILS**

CONTRACT No.:

NAME OF APPLICANT:

1. Name of the Owner:

2. Address:

Telephone No. :

E-mail:

Fax No.

3. Description of Applicant  
(For e.g. General, Civil Engineering  
Contract or Joint Venture/Consortium etc.)

4. Registration and Classification  
of Contractors

5. Name and address of bankers

6. Number of years of experience  
as a general contractor :-

In own Country:

Internationally:

7. Number of years of experience  
as a sub contractor

8. Name and Address of partners or  
associated companies to be involved

in the project and whether Parent/  
Subsidiary/other

6. Name and address of any associates knowledgeable in the procedures of customs, immigration and local experience in various aspect of the project etc.
10. Name and address of the companies/ Sub-contractors who will be involved in the execution of works, namely:
11. Name and address of companies who will be involved in the supply of bought out items
  - a) Fenders, stainless chains and accessories
  - b) Bollards, Capstan, Remote control Quick release Mooring systems
12. Attach organization chart showing the structure of the company including names of Directors/ Key Personnel at Head Office who would be responsible for the project and a separate chart showing proposed Site Construction Organization.

**Signature of Bidder**

(Authorized Signatory)

**COCHIN PORT AUTHORITY**

**PROVIDING ADDITIONAL STAIRCASES TO THE FIC BAYS OF NORTH  
JETTY AT NAVAL BASE, KOCHI (RETENDER).**

Tenderer shall furnish Details of “Eligibility Works Experience” as per Clause 13 of Minimum Eligible Criteria (MEC) of Instruction to Tenderer and certificates in the following format (Client Certificates/ work completion certificates or any other documentary evidences with respect to the eligibility work)

***ELIGIBLE WORK DETAILS FOR MEC***

Work Number:

| <i>Description</i>                                                                                                                             | <b>Bidder to fill up the details<br/>here</b> |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Name and Address of the Client                                                                                                                 |                                               |
| Title of the Eligible Work                                                                                                                     |                                               |
| Date of completion of the Eligible Work                                                                                                        |                                               |
| Project Completion Cost                                                                                                                        |                                               |
| Reference No. of the enclosed Client<br>Completion Certificate/ Documentary<br>Evidence for having successfully completed<br>the Eligible work |                                               |
| Name, telephone no, telefax no and email<br>address of the client's representative for<br>contacting                                           |                                               |
| Description and Scope of Work                                                                                                                  |                                               |

Instructions:

- i) Bidders are expected to provide information in respect of each Eligible Assignment in this Section. The works cited must comply with the criteria specified Clause No. 13 Minimum Eligibility of the “Instructions to Tenderers”.

- ii) A separate sheet should be filled for each of the eligible works.
- iii) The details are to be supplemented by documentary proof from the respective client /owner for having carried out such assignment duly certified by clients/ owner.
- iv) The works indicated in this **Annexure-IVa** will be only being considered for evaluation. Mere submission of work completion certificate will not be considered as Eligible Works.
- v) Original or Notary certified copy of completion certificates of each work issued by the owner/ the responsible officers of the owner under whom he has executed such contracts shall be attached. The certificate shall invariably contain the following among other things.
  - a) Details of work involved specifying the nature of work
  - b) The actual completion cost of the work and
  - c) Date of commencement; and
  - d) Date of completion of the work.
- vi) If the experience in Similar Works is as a member of joint venture, Notary attested copy of joint venture agreement in this respect shall be attached.
- vii) If the experience in Similar Works is as a subcontractor, Notary attested copy(s) of approval issued by the Employer(s) authorizing as a sub-contractor; in proof of the claim of the tenderer as a sub-contractor shall be attached.
- viii) If the experience in Similar Work is in works executed in private sectors/ organizations, the TDS certificate along with Notary attested copy(s) of work order and completion certificate shall be attached.
- ix) In case of bid submitted by JV/ Consortium, the Minimum Eligibility Criteria EXCEPT Financial Turnover can be fulfilled collectively by the Partners of the JV/ Consortium.
- x) The tenderer is also obliged to produce the original of the certified copy(s) on request by the department.

**Signature of Bidder**

(Authorized Signatory)

**COCHIN PORT AUTHORITY****PROVIDING ADDITIONAL STAIRCASES TO THE FIC BAYS OF NORTH JETTY AT NAVAL BASE, KOCHI (RETENDER).****DETAILS OF PAST EXPERIENCE OF CONTRACTORS FOR SIMILAR WORKS**

| Sl. No. | Name & Location of Project | Owner's Complete address including Tele Fax No. with contact Person | Value of Contract | Duration of Contract |                           |                        | Details of work including major items of work involved | Reference No. & Date of letter of intent & completion certificate enclosed | Details of Payment Received |
|---------|----------------------------|---------------------------------------------------------------------|-------------------|----------------------|---------------------------|------------------------|--------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------|
|         |                            |                                                                     |                   | Commen- cement date  | Scheduled completion date | Actual completion date |                                                        |                                                                            |                             |
| 1       | 2                          | 3                                                                   | 4                 | 5                    | 6                         | 7                      | 8                                                      | 9                                                                          | 10                          |
|         |                            |                                                                     |                   |                      |                           |                        |                                                        |                                                                            |                             |
|         |                            |                                                                     |                   |                      |                           |                        |                                                        |                                                                            |                             |
|         |                            |                                                                     |                   |                      |                           |                        |                                                        |                                                                            |                             |

**Note:** Bidder to enclose completion certificate issued by owner, certified by a Notary Public or equivalent certifying authority.

Signature

Certified by the Chartered Accountant

(With UDIN and QR Code, if available)

**Signature of Bidder**

(Authorized Signatory)

**COCHIN PORT AUTHORITY**  
**PROVIDING ADDITIONAL STAIRCASES TO THE FIC BAYS OF NORTH**  
**JETTY AT NAVAL BASE, KOCHI (RETENDER).**

**FINANCIAL CAPABILITY**

(A) Average Annual Turnover of the Bidder

| Turnover (Rs.)      |                     |                     |         |
|---------------------|---------------------|---------------------|---------|
| Year 1<br>(2024-25) | Year 2<br>(2023-24) | Year 3<br>(2022-23) | Average |
|                     |                     |                     |         |

**Instructions:**

- (i). The Bidder shall provide audited Annual Reports / Audited financial statements such as balance sheets and profit & loss account statements as required under this Bid Document.
- (ii). Annual Turnover of the bidder shall be submitted duly verified by Chartered Accountant or Competent Authority.

**Certified by Chartered Accountant**  
**UDIN No. ....**

**Signature of Bidder**  
(Authorized Signatory)

**FORMAT FOR BID SECURITY / EARNEST MONEY DEPOSIT**  
**DECLARATION**

**(To be submitted on the Bidder's Letter Head)**

**I / We** .....(Insert Name and Address of Bidder) am/are submitting this declaration in lieu of Bid Security / Earnest Money Deposit for the Tender for .....(Insert Title of the Tender) (Tender No. ....), thereby fully accepting that **I / We** will be suspended and shall not be eligible to participate in the Tenders invited by Cochin Port Authority, for a period of **Two years from the date of such Suspension Order**, under the following circumstances:

- (1) If after the opening of Tender, **I / We** withdraw or modify **my / our** Tender during the period of validity specified in the Bid Documents (including extended validity, if any), or do not accept the correction of the Tender Price pursuant to any arithmetical errors.
- (2) If, after the award of work, **I / We** fail to furnish the required Performance Security or sign the Contract, within the time limits specified in the Departmental Tender Document.

**Signature of Bidder**

(Authorized Signatory)

**COCHIN PORT AUTHORITY**

**PROVIDING ADDITIONAL STAIRCASES TO THE FIC BAYS OF NORTH  
JETTY AT NAVAL BASE, KOCHI (RETENDER).**

**DETAILS OF PROPOSED APPROACH & METHODOLOGY**

Bidder shall furnish a detailed Method Statement (Technical Note) for carrying out of the works, along with a construction programme [ Preferably in MS project / Primavera] showing sequence of operation and the time frame for various segments of temporary and permanent works showing critical path of activities.

**Signature of Bidder**

(Authorized Signatory)

**COCHIN PORT AUTHORITY**

**Providing Additional Staircases to the FIC Bays of North Jetty at Naval Base, Kochi (Retender).**

**PLANT AND EQUIPMENT PROPOSED FOR THE WORK**

Please indicate the main plant and equipments considered to be necessary and proposed to be deployed for undertaking this work and whether this plant is ready in ownership or will be purchased or hired.

| Sl. No. | Description of Equipment | Requirement No./ Capacity | Owned/ leased/ to be procured | Nos/ Capacity | Age/ Condition | Remarks (From whom to be purchased) | At what Stage of contract period the Equipment will be available |
|---------|--------------------------|---------------------------|-------------------------------|---------------|----------------|-------------------------------------|------------------------------------------------------------------|
|         |                          |                           |                               |               |                |                                     |                                                                  |
|         |                          |                           |                               |               |                |                                     |                                                                  |
|         |                          |                           |                               |               |                |                                     |                                                                  |
|         |                          |                           |                               |               |                |                                     |                                                                  |

**Note:**

- (1) The bidder shall indicate details of suitable equipments for piling
- (2) The equipment indicated in the above statement will form part of contract agreement and as such the bidders are requested to indicate the availability of the equipment at site and at what stage of the construction period in a separate column.

**Signature of Bidder**

(Authorized Signatory)

**COCHIN PORT AUTHORITY**  
**PROVIDING ADDITIONAL STAIRCASES TO THE FIC BAYS OF NORTH JETTY AT**  
**NAVAL BASE, KOCHI (RETENDER).**

**DECLARATION**

We M/s *(Name & address of the bidder)* hereby declare that:-

1. All details regarding construction plant, temporary work and personnel for site organization considered necessary and sufficient for the work have been furnished in the **Annexure-VIII** and that such plant, temporary works and personnel for site organization will be available at the site till the completion of the respective work.
2. No conditions are incorporated in the Financial/ Price bid. In case any conditions are specified in the financial bid, the tender will be rejected summarily without making any further reference to the bidder.
3. We have not made any payment or illegal gratification to any persons/ authority connected with the bid process so as to influence the bid process and have not committed any offence under PC Act in connection with the bid.
4. We disclose with that we have \* made / not made payments or propose to be made to any intermediaries (agents) etc in connection with the bid.
5. We do hereby confirm that no changes have been made in the tender document downloaded and uploaded by us for the above bid. Port Tender document will be treated as authentic tender and if any discrepancy is noticed at any stage between the Port's tender document and the one uploaded by the tenderer, the Port's document shall prevail.

**Signature of Bidder**

(Authorized Signatory)

**\* Notes:**

***(i) Delete whichever is not applicable.***

***(ii) The above Declaration shall be submitted in the Letter head***

**FORMAT FOR FURNISHING BANK INFORMATION FOR e-PAYMENT**

|   |                                                 |                                 |
|---|-------------------------------------------------|---------------------------------|
| 1 | Name and full address of the beneficiary        |                                 |
| 2 | Credit Account No.<br>(Should be full 14 digit) |                                 |
| 3 | Account Type<br>(SB or CA or OD)                |                                 |
| 4 | Name of the Bank                                |                                 |
| 5 | Branch<br>(Full address with telephone No.)     |                                 |
| 6 | MICR code<br>(Should be 9 digit)                |                                 |
| 7 | Telephone/Mobile/Fax No. of the beneficiary     | Telephone:<br>Mobile :<br>Fax : |
| 8 | Cancelled Cheque                                |                                 |

**Signature of Bidder**  
(Authorized Signatory)

## LITIGATION HISTORY AND DETAILS OF BLACK LISTING

**(A).** Details of Litigation History till 31<sup>st</sup> March, 2026 in accordance with clause 22.1(r) of Instruction to Bidders are as follows:

| SI No | Date, month & Year of award | Amount of Award, INR | Contract Identification                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Total Contract Amount INR |
|-------|-----------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 1     | [insert date]               | [insert amount ]     | <p>Contract Identification: [indicate complete contract name, number, date and any other identification]</p> <p>Name of Employer: [insert full name]</p> <p>Address of Employer: [insert street/city/country]</p> <p>Matter in dispute: [indicate main issues in dispute]</p> <p>Party who initiated the dispute: [indicate “Employer” or “Contractor”]</p> <p>Status of dispute: [Indicate if it is being treated by the Adjudicator, under Arbitration or being dealt with by the Judiciary]</p> | [insert amount]           |
| 2     |                             |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                           |
| 3     |                             |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                           |

**(B).** Details of Black listing/ debarring by the Govt. departments/ PSUs/ major Private organisations for last 5 years till 31<sup>st</sup> March, 2026:

| Sl. No. | Date, month & year of Black listing / de barring | Name of Agency Black listed / de barred  | Period of Black listing / de barring        | Ending date of Black listing / de barring |
|---------|--------------------------------------------------|------------------------------------------|---------------------------------------------|-------------------------------------------|
| 1       | <i>[insert date, month &amp; year]</i>           | <i>[insert name and place of agency]</i> | <i>[insert period in years&amp; months]</i> | <i>[insert date, month &amp; year]</i>    |
| 2       |                                                  |                                          |                                             |                                           |

**(C).** Details of Pending Litigation upto 31<sup>st</sup> March, 2026:

| Sl. No. | Date, month & Year of award | Amount of Award, INR    | Contract Identification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Total Contract Amount INR |
|---------|-----------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 1       | <i>[insert date]</i>        | <i>[insert amount ]</i> | <i>Contract Identification: [indicate complete contract name, number, date and any other identification]</i><br><i>Name of Employer: [insert full name]</i><br><i>Address of Employer: [insert street/city/country]</i><br><i>Matter in dispute: [indicate main issues in dispute]</i><br><i>Party who initiated the dispute: [indicate “Employer” or “Contractor”]</i><br><i>Status of dispute: [Indicate if it is being treated by the Adjudicator, under Arbitration or being dealt with by the Judiciary]</i> | <i>[insert amount]</i>    |
| 2       |                             |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                           |

**Certified that the above information is correct as per records and nothing has been omitted / concealed.**

.....(*Signature of the Statutory Auditor*)

..... (*Full Name of the Statutory Auditor*)

..... (*Name of the Statutory Auditor's Firm*)

..... (*Complete Address of the Statutory Auditor's Firm*)

..... (*Telephone/fax numbers, including country and city codes*)

..... (*E-mail of the Statutory Auditor*)

..... (*Seal of the Statutory Auditor*)

**Membership (UDIN) No. of the Statutory Auditor: .....**

**Notes:**

- (i) The Tenderer shall provide accurate information about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last three years.
- (ii) This may be noted that under this category only cases of arbitration /litigation finally settled against the Tenderer should be listed. If the case is pending at any level of arbitration or judiciary, the same should be listed in Pending Litigation and NOT under Litigation History. A consistent history of awards against the Tenderer may result in failure of the Application/Tender.

Date:

**Signature of Bidder**

(Authorized Signatory)

**COCHIN PORT AUTHORITY**

**PROVISION OF ACCESS STAIRCASES TO THE FIC BAYS OF NORTH JETTY AT  
NAVAL BASE, KOCHI.**

**UNDERTAKING REGARDING EPF AND ESI REGISTRATION**

I/ We, M/s..... (Name & Address of the tenderer) solemnly affirm and undertake that I/ We do not have the required number of employees for taking registration under EPF Organisation and ESI Corporation. I/ We also undertake that I/ We take the full responsibility for all the consequences arising due to the above and indemnify CoPA officials for any actions taken in this regard.

**Signature of Bidder**

(Authorized Signatory)

**DECLARATION OF SITE VISIT BY TENDERER**

From

.....

To

The Chief Engineer,  
Chief Engineer's Office,  
Cochin Port Authority,  
W/Island, Cochin,  
Kerala, India.

Sir,

Sub: Providing Additional Staircases to the FIC Bays of North Jetty at Naval Base,  
Kochi (Retender).

We hereby declare that we have visited the said site of work and have acquainted and satisfied thoroughly with the existing site condition.

**Signature of Bidder**

(Authorized Signatory)

**Annexure-XIV**

| National Electronic Fund Transfer (NEFT/RTGS) Mandate Form of Cochin Port Authority |                                          |                                                                    |
|-------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------|
| 1                                                                                   | Vendor Name/Beneficiary Name             | <b>COCHIN PORT AUTHORITY</b>                                       |
| 2                                                                                   | Vendor code                              |                                                                    |
| 3                                                                                   | <b>Permanent Account Number (PAN)</b>    | <b>AAALC - 1134F</b>                                               |
| 4                                                                                   | <b>TAN NO</b>                            | <b>CHNC04095A</b>                                                  |
| 5                                                                                   | <b>GST NO:</b>                           | <b>32AAALC1134F1ZZ</b>                                             |
| 6                                                                                   | Particulars of Bank Account              | Savings Account                                                    |
|                                                                                     | A. Name of Bank                          | <b>STATE BANK OF INDIA</b>                                         |
|                                                                                     | B. Name of Branch                        | Cochin Port Authority                                              |
|                                                                                     | C. Branch Code                           | 6367                                                               |
|                                                                                     | D. Address                               | Cochin Port Authority, Willingdon Island - 682009                  |
|                                                                                     | E. City Name                             | Cochin                                                             |
|                                                                                     | F. Telephone No                          | 2582614                                                            |
|                                                                                     | G. NEFT/IFSC Code                        | <b>SBIN0006367</b>                                                 |
|                                                                                     | H. SWIFT Code:                           | <b>SBININBB</b>                                                    |
|                                                                                     | I. 9.digit MICR code on the Cheque Book. | 682002021                                                          |
|                                                                                     | J. Type of Account                       | Savings Account                                                    |
|                                                                                     | K. Account No.                           | <b>41401802288</b>                                                 |
| 5                                                                                   | Vendor Email-id                          | <a href="mailto:cash@cochinport.gov.in">cash@cochinport.gov.in</a> |

**7.     GENERAL CONDITIONS OF CONTRACT (GCC) - PART A - G**

| <b>Part</b> | <b>DESCRIPTION</b>                                                                                      | <b>Page No.</b> |
|-------------|---------------------------------------------------------------------------------------------------------|-----------------|
| A           | Part A – General                                                                                        | CC 6            |
| B           | Part B - Time Control                                                                                   | CC 18           |
| C           | Part C - Quality Control                                                                                | CC 22           |
| D           | Part D - Cost Control                                                                                   | CC 24           |
| E           | Part E - Finishing the Contract                                                                         | CC 37           |
| F           | Part F - Labour Laws and Miscellaneous Clauses                                                          | CC 42           |
| G           | Part G - Salient features of some major laws applicable to establishments engaged in construction work. | CC 59           |

**(GCC ATTACHED AS SEPARATE VOLUME)**

**8. FORM OF SECURITIES (ANNEXURE A, B & C)**

| <b>Annexure</b> | <b>Description</b>                                                     | <b>Page No.</b> |
|-----------------|------------------------------------------------------------------------|-----------------|
| A               | Proforma of Bank Guarantee for Performance Guarantee/ Security Deposit | 63-65           |
| B               | Proforma of Bank Guarantee for Secured Advance                         | 66-69           |
| C               | Format for Insurance Surety Bond towards Performance Security          | 70-72           |

**PROFORMA OF BANK GUARANTEE FOR PERFORMANCE GUARANTEE/  
SECURITY DEPOSIT**

*(To be executed on non-judicial Stamp Paper of appropriate value)*

*[The bank, as requested by the successful Tenderer, shall fill in this form in accordance with the instructions indicated]*

In consideration of the Board of Trustees of the Port of **[insert name of Port]** incorporated by **The Board of Major Port Authority** Act, 1963 as amended by Major Port Authority (Amendment) Act 1974 (hereinafter called "The Board" which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include the Board of Trustees of the Port of **[insert name of Port]**, its successors and assigns) having agreed to exempt \_\_\_\_\_ (hereinafter called the "Contractor")

(Name of the Contractor/s)

from the demand under the terms and conditions of the Contract, vide \_\_\_\_\_ 's letter No. \_\_\_\_\_

(Name of the Department)

date \_\_\_\_\_ made between the Contractors and the Board for execution of \_\_\_\_\_ covered under Tender No. \_\_\_\_\_ dated \_\_\_\_\_ (hereinafter called "the said contract") for the payment of Security Deposit in cash or Lodgement of Government Promissory Loan Notes for the due fulfilment by the said Contractors of the terms and conditions of the said Contract, on production of a Bank Guarantee for Rs. \_\_\_\_\_

(Rupees \_\_\_\_\_) only we, the (Name of the Bank and Address) \_\_\_\_\_

\_\_\_\_\_ (hereinafter referred to as "the Bank") at the request of the Contractors do hereby undertake to pay to the Board an amount not exceeding Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) only against any loss or damage caused to or suffered or which would be caused to or suffered by the Board by reason of any breach by the Contractors of any of the terms and conditions of the said contract.

2. We, \_\_\_\_\_, \_\_\_\_\_, do hereby

(Name of Bank)

(Name of Branch)

undertake to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Board stating that the amount claimed is due by

way of loss or damage caused to or which would be caused to or suffered by the Board by reason of any breach by the Contractors of any of the terms and conditions of the said contract or by reason of the Contractors failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to any amount not exceeding Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) only.

3. We, \_\_\_\_\_ (Name of Bank and Branch) \_\_\_\_\_, undertake to pay to the

Board any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

4. We, \_\_\_\_\_ (Name of Bank and Branch) further agree with the Board that the guarantee herein contained shall remain in full force and effect during the period that would be taken for performance of the said contract and that it shall continue to be enforceable till all the dues of the Board under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the

\_\_\_\_\_  
(Name of the user department)

of the said certifies that the terms and conditions of the said contract have been fully and properly carried out by the said Contractors and accordingly discharge this guarantee. PROVIDED HOWEVER that the Bank shall be the request of the Board but at the cost of the Contractors, renew or extend this guarantee for such further period or periods as the Board may require from time to time.

5. We, \_\_\_\_\_ further agree with the Board

(Name of Bank and Branch)

that the Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend the time of performance by the said contract or to extend the time of performance by the said Contractors from time to time or to postpone for any time or from time to time any of the powers exercisable by the Board against the said Contractors and to forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extensions being granted to be Contractors or for any forbearance, act or omission on the part of the Board or any indulgence shown by the Board to the

Contractors or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. It is also hereby agreed that the Courts in **[insert city]** would have exclusive jurisdiction in respect of claims, if any, under this Guarantee.

8. We, \_\_\_\_\_ Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

9. Notwithstanding anything contained herein :

a) Our liability under this Bank Guarantee shall not exceed Rs. \_\_\_\_\_  
(Rupees \_\_\_\_\_ only);

b) this Bank Guarantee shall be valid upto \_\_\_\_ \* \_\_\_\_\_; and

c) we are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before \_\_\_\_\_ (date of expiry of Guarantee)."

Date \_\_\_\_\_ day of \_\_\_\_\_ 20

For (Name of Bank)

(Name)

Signature

\* The date will be thirty (30) days after the end of the period of Defect Liability as specified in the Contract.

**PROFORMA OF BANK GUARANTEE FOR SECURED ADVANCE**

(To be executed on Non-judicial stamp paper of appropriate value)

THIS INDENTURE made BETWEEN (Name and address of the contractor . . . . .

. . . . . (hereinafter called the contractor which expression shall where the context so admits or implies be deemed to include his executors, administrators and assigns) of the one part and THE CHIEF ENGINEER, COCHIN PORT AUTHORITY (hereinafter called the Chief Engineer which expression shall where the context so admit or implies be deemed to include his successors in office and assigns) of the other part.

WHEREAS by an arrangement No. . . . . dated . . . . . (hereinafter called the agreement) the contractor has agreed for execution of the work of (Name of the work).

AND WHEREAS the contractor has applied to the Chief Engineer that he may be allowed advances on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labour and other charges)

AND WHEREAS the Chief Engineer has agreed to advance to the Contractor the sum of Rupees . . . . . on the security of materials the quantities and other particulars of which are detailed in the Schedule-A, signed both by the contractor and the Chief Engineer has reserved to herself the option of making any further advance or advances on the security of other materials brought by the Contractor to the site of the said works.

Now THIS INDENTURE WITNESSETH THAT in pursuance of the said agreement and consideration of the sum of Rupees . . . . . on or before the execution of these presents paid to the Contractor by the Chief Engineer (the receipt of whereof the contractor doth hereby acknowledge) and of such further advance (if any) as may be made to him as aforesaid the Contractor doth hereby covenant and agree with the Chief Engineer and declare as follows:

That the said sum of Rupees . . . . . advanced by the Chief to the contractor as aforesaid and all or any further sum or advanced as aforesaid shall be employed by the contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.

That the materials detailed in Schedule –A which have been offered to and accepted by the Chief Engineer as security are absolutely the Contractor's own property and free from encumbrances of any kind and the contractor will not make any application

for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnifies the Chief Engineer against all claims to any material in respect of which advances has been made to him as aforesaid.

That the materials detailed in the said Schedule –A and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Executive Engineer (hereinafter called the Divisional Officer) and in the terms of the said agreement.

That the contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractors custody and his own responsibility and shall at all times be open to inspection by the Divisional Officer or any Officer authorised by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Divisional Officer.

That the said materials shall not on any account be removed from the site of the said works except with the written permission of the divisional Officer authorised by him on that behalf

That the advance shall be repayable in full when or before the contractor receives the payment from the Chief Engineer of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments made to the contractor on account of the work done than on occasion of each such payment the Chief Engineer will be at liberty to make a recovery from the contractor's bill for such payment by deducting there from the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amount of the advance made under these presents were calculated.

That if the contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement of these presents the total amount of the advance or advances that may still be owing to the Chief Engineer shall immediately on the happening of such default be repayable by the Contractor to the Chief Engineer together with interest thereon at twelve percent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages, and expenses incurred by the Chief Engineer in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby

covenants and agrees with the Chief Engineer to repay and pay the same respectively to him/her accordingly.

That the contractor hereby charges all the said materials with the repayment to the Chief Engineer of the said sum of Rupees. . . . . and any further sum or sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the powers contained therein if and whenever the covenant for payment and repayment herein before contained shall become enforceable and the money owing shall not be paid in accordance therewith the Chief Engineer may at anytime thereafter adopt all or any of the following courses as she may deem best.

a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions in that behalf contained in the said agreement debiting the contractor with actual cost of affecting such completion and the amount due in respect of advances under these presents and crediting the contractor with the value of work done as if he has carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor he is to pay same to the Chief Engineer on demand.

b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable to the Chief Engineer under these presents and pay over the surplus, (if any) to the contractor.

c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the contractor under the said agreement.

That expect in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.

That in the event of any conflict between the provision of these presents and the said agreement the provisions of these shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been herein before expressly provided for the same shall be referred to the Chief Engineer whose decision shall be final and the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.

In witness whereof the said Contractor and the Chief Engineer have hereunto set their respective hands the day and year first above written.

Signed, sealed and delivered by

the said Contractor in presence of

SIGNATURE

WITNESS

NAME

ADDRESS

Signed, sealed and delivered by

The Chief Engineer in presence of

SIGNATURE

WITNESS

NAME

ADDRESS

**PROFORMA FOR INSURANCE SURETY BOND TOWARDS PERFORMANCE**  
**SECURITY**

[From the Insurance Company duly approved by Insurance Regulatory and  
Development Authority of India]

**(To be stamped in accordance with Stamp Act of India)**

Insurance Surety Bond No.:

Date:

Amount of Insurance Security Bond: Rs.....

Security Bond cover period from.....to..... upto claim period .....

THIS INSURANCE SURETY BOND executed on.....at ..... by ....(Name and  
Address of the Insurer) (hereinafter called “the Insurer”, which expression shall  
unless it be repugnant to the subject or context thereof, include its executors,  
successors administrators, and assigns;

IN FAVOUR OF

The Board of Trustees of the Cochin Port Authority constituted under the Major Port  
Authorities Act, 2021 (hereinafter called “the Employer” which expression shall unless  
excluded by or repugnant to the context or meaning thereof be deemed to include its  
successors, administrators, executors and assigns;

WHEREAS ..... (Usual wordings used in case of Bank Guarantees)

WHEREAS..... – do-

WHEREAS..... -do-

In consideration of the Authority having awarded to M/s..... [Contractor's  
Name]..... with its Registered/Head Office at .....  
(Hereinafter referred to as the ‘Contractor’, which expression shall unless repugnant to  
the context or meaning thereof, include its successors administrators, executors and  
assigns), a Contract by issue of Authority’s Work Order No..... dated..... and  
the same having been unequivocally accepted by the Contractor, resulting into a  
Contract bearing No..... dated ....., valued at ..... for and the  
Contractor having agreed to provide a Contract Performance Guarantee for the faithful  
performance of the entire Contract equivalent to .....(amount ).....% (percent) of  
the said value of the Contract to the Authority.

We .....[Name & Address of the Insurer] ..... having its Head Office at ..... (hereinafter referred to as the 'Insurer' do hereby guarantee and undertake to pay the Authority, on demand any and all amount payable by the Contractor to the extent of .....(\*)..... as aforesaid at any time up to ..... [days/month/year] without any condition, demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the Authority on the Insurer shall be conclusive and binding notwithstanding any difference between the Authority and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Insurer undertakes not to revoke this Insurance Surety Bond during its currency and or any period extended under the contract, without prior consent of the Authority and further agrees that the guarantee herein contained shall be enforceable till the Employer discharges this guarantee.

The Employer shall have the fullest liberty, without affecting in any way the liability of the Insurer under this Insurance Surety Bond, from time to time to extend the performance of the Contract by the Contractor for the purpose of which, the Insurer shall be liable to extend the validity of the present Insurance Surety Bond without any demur, condition, protest and the Insurer shall at no point in time have an option of revoking the same, The Employer shall have the fullest liberty, without affecting this Insurance Surety Bond, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Employer and the Contractor or any other course or remedy or security available to the Employer. The Insurer shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to the aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Insurer.

The Insurer also agrees and undertakes that the Employer at its option shall be entitled to enforce this Insurance Surety Bond against the Insurer as a Surety, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

This Surety Bond will not be discharged due to the change in the constitution of the Insurer or the Contractor. It is also hereby agreed that only Courts at Kochi in Kerala shall have exclusive jurisdiction in respect of all matters, including any demands claims, under this Surety Bond.

Notwithstanding anything contained hereinabove:

- (a) Our liability under this Insurance Surety Bond shall not exceed Rs....  
(Rupees..... Only)

- (b) This Insurance Security Bond shall remain in force upto and including ..... and encashable at .....(address of Insurer)....
- (c) We are liable to pay the Surety Bond amount or any part thereof under this Surety Bond only and only if you serve upon us a written claim or demand on or before .....(3 months from validity date.)

IN WITNESS WHEREOF the Insurer has set its hands hereunto on the day, month and year first hereinabove written.

Dated this ..... day of ..... 20.....  
at.....

WITNESS :

1. ....  
.....  
(Signature) ..... (Signature)  
.....  
(Name) ..... (Name)  
.....  
(Official Address) ..... (Designation with Insurer  
Stamp)  
Authorised Vide Power of Attorney  
No.....Date.....
2. ....  
(Signature) .....  
(Name) .....  
(Official Address)

Notes :

1. The Insurance Surety Bond shall be from an Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI).
2. The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher

## **9. GENERAL DESCRIPTION OF WORK**

### **9.1 GENERAL**

It is proposed to construct two additional staircases at the end of each FIC Bay of the North Naval Jetty, vis-à-vis the FIC Bay North and the FIC Bay South. The proposed staircase is intended to provide safe access from the FIC vessels to the FIC Bay.

Where it is mentioned in the Specifications that the Contractor shall perform certain Work or provide certain facilities, it is understood that the Contractor shall do so at his own Cost.

The materials, design and workmanship shall satisfy the relevant Bureau of Indian Standard Specification and conditions herein referred to. Where the Specifications stipulate requirement in addition to those contained in the Standard codes and Specifications, these additional requirements shall also be satisfied.

### **9.2 SCOPE OF WORK**

9.2.1 The Civil work under this tender mainly consists of the construction of two staircases at the end of each FIC Bay of North Naval Jetty, which includes the following items:

- (i) Casting and installation of 22m long RCC precast piles of size 450mm x 450mm,
- (ii) Providing RCC pile caps, capping beams, beams, columns, deck slab, landing slab, stairs, waist slab, wearing course for deck slab etc.,
- (iii) Providing and fixing SS handrails,
- (iv) IPNet coating on external concrete surfaces,
- (v) Fabrication and installation steel tubular fender piles including painting,
- (vi) Providing and fixing SS mooring rings & 'D' type rubber fenders,
- (vii) Other miscellaneous works.

9.2.2 The scope of work for electrical items are as follows:

- (i) SITC of outdoor Foot Light 9W IP 65 Decorative / Ornamental LED Luminaires with all the accessories and wirings required.
- (ii) Supply of Materials and Wiring of Wiring for group controlled (looped) light point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated

copper conductor single core cable etc. as required.

- (iii) SITC of Hensel Poly carbonate Box without mounting plate (with transparent lid) (136mm x 253mm x 115mm) IP 65 with metric knockouts for cable entry, cable glands (2 nos), din rail, 6A SP MCB, supports for taking foot light connection.
- (iv) Supply and laying of 3C x 2.5 sq mm Copper Cable PVC sheathed and clamping the cable along the walls.

### **9.3 SITE CONDITIONS**

#### **9.3.1 Location**

The location of work is at the North Jetty, Naval Base, Kochi. The location of work is accessible through the Naval Base gates. Access through the backwaters; subject to the approval of the Naval Base Authorities.

The contractor shall strictly comply with all rules and regulations of the Naval Base, including security protocols, access restrictions, obtaining work passes, and escort requirements, if any. The worksite falls within a restricted defence area, and hence all personnel, equipment and material movement shall adhere to security clearance procedures stipulated by the Naval Base Authorities. The contractor shall ensure uninterrupted Naval Base activities and Port Operations during the execution of work.

#### **9.3.2 Reference Level**

All the levels indicated in the drawings and/or specifications are with reference to Port Chart Datum, which is at 0.582 m below Mean Sea Level. The contractor shall establish reference benchmarks at suitable spots. The maintenance of these reference benchmarks will be the responsibility of the contractor for which no payment will be made.

The tenderers shall make their own arrangements for inspecting the area and satisfying themselves regarding the water depth available in this area. However, the sounding chart in the location of the berth is enclosed for reference.

#### **9.3.3 Tide and Flood Levels**

The tides at Cochin are semi-diurnal with a marked daily inequality. The contractor shall carefully investigate the records of all past states of tides and flood and shall be held to have satisfied himself on all the tide and flood levels likely to prevail during the period of contract so far as it may affect the work.

The various tidal levels in the area are as indicated below for the general guidance to the tenderer.

| <u>Tide</u>                   |   | <u>Levels with reference to Port<br/>Chart datum (in metres)</u> |
|-------------------------------|---|------------------------------------------------------------------|
| Highest High Water Level      | : | +1.20m                                                           |
| Mean High Water Spring (MHWS) | : | +0.92m                                                           |
| Mean Low Water Spring (MLWS)  | : | +0.80m                                                           |
| Mean Sea Level (MSL)          | : | +0.582m                                                          |
| Mean High Water Neap (MHWN)   | : | +0.60m                                                           |
| Mean Low Water Neap (MLWN)    | : | +0.30m                                                           |
| Lowest Low Water Level        | : | +0.20m                                                           |

#### 9.3.4 **Current**

The maximum current expected in the inner harbour is about 0.5 meter/sec.

#### 9.3.5 **Waves**

The work site is in the inner harbour area where generally calm conditions prevail throughout the year.

#### 9.3.6 **Wind**

Wind at Cochin is highly influenced by the land and sea breezes. Wind direction changes from North-East during morning hours to west during evening for the period of October to May. During peak of South-West monsoon, especially from June to September, predominant wind direction remains South-West both during morning and evening hours. Due to strong monsoon winds, effect of land winds is not dominant during South-West monsoon. During the non-monsoon periods, the predominant wind direction is from North East during the morning and West during the evening which shows influence of land breeze.

#### 9.3.7 **Rainfall**

The climate is characterized by dry and wet seasons. The wet seasons starts in late May and ends in November. During this period, two monsoons pass by one after another. The major monsoon is South-West monsoon which lasts from June to September. This is followed by north-east monsoon during October and November. The average annual rainfall is about 3000mm; and the major portion is during South-West monsoon.

### **9.3.8 Temperature**

Cochin experiences moderate temperatures throughout the year. The temperature varies from 22°C to 34°C. The low temperature occurs during the South West monsoon, December and January. Daytime temperature goes upto 30°C even during this period. The hot months are from March to May.

## **9.4 DRAWINGS**

The drawings enclosed with the tender document are to provide some idea of the job only and are preliminary and for tender purpose and are by no means complete and final and do not show the full range of the work under the scope of the contract. Work shall be carried out only on the basis of drawings marked "Issued for Construction" with addition, alteration, modifications, if any made to aforesaid drawings as required from time to time and also according to other drawings that would be supplied to the contractor from time to time as per the progress of work at site.

## **9.5 TIME SCHEDULE AND MONITORING OF PROGRESS**

9.5.1 Tenderer shall prepare and attach with the tender a detailed work schedule [preferably in MS Project/ Primavera] indicating key activities and critical items showing critical path of activities for completing the work within the stipulated contract period. This time schedule forms the basis for monitoring the progress of work. Issue of working drawings by the department will be regulated as per the time schedule approved by the department.

9.5.2 The contractor shall furnish to the Engineer-in-Charge weekly progress reports of the work during execution in the approved proforma indicating delay, if any, its reason and proposal to cover up the delay.

## **9.6 FACILITIES TO BE PROVIDED BY THE PORT**

### **9.6.1 Contractor's Work Area:**

A land area of about 1000 square meters (20m x 50m) will be made available to the Contractor free of rent for storing materials and equipments etc., adjacent to the work site for the duration of the Contract. After the work is over, Contractor shall at his cost, reinstate the area by clearing the temporary works, debris etc. as decided by the Engineer's Nominee.

## **9.7 CONTRACTOR'S RESPONSIBILITY**

9.7.1 The tenderer shall visit the area before tendering. It will be deemed that the tenderer has visited the site and studied the site conditions before submitting

the tender. The tenderer should get himself acquainted with the nature and extent of the work. No claim whatsoever will be entertained on the plea of ignorance of difficulties involved in execution of work or carriage of materials etc. The Bidder shall be required to submit an undertaking that they have visited the site and collected all necessary details required to submit their offer.

- 9.7.2 All materials, plants and equipments, required for the work shall be provided by the Contractor at his own cost, and shall conform to relevant I.S. specification unless otherwise specified.
- 9.7.3 Samples of all materials to be incorporated in the work shall be approved by the Engineer-in-Charge before procurement.
- 9.7.4 The Contractor shall thoroughly study the specifications and errors/ omissions/modifications if any shall be brought to the notice of the Engineer-in-Charge well in advance so that a final decision in the matter could be given in time.
- 9.7.5 All labour, skilled or unskilled shall be provided by the Contractor. Settling any dispute with the labour will be Contractor's responsibility. Insurance as per Indian Workmen's Compensation Act for the Contractors' workmen and Public Liability Policy shall be provided by the Contractor at his own cost.
- 9.7.6 The Contractor shall be solely responsible for any damage or injury to the persons or things caused or suffered during the execution of the work and these shall be made good or compensated at his own risk & cost.
- 9.7.7 The Contractor shall take all care and precautionary measures for avoiding any kind of damage/accident in the work site on any account. The department shall not entertain any claim from the contractor whatsoever towards compensation for any damage/accidents at the site due to negligence from his part, during the execution of work. The Contractor shall indemnify the Port against any compensation whatsoever payable to the workmen for accident or loss arising out of and in the course of their employment under this Contract.
- 9.7.8 The contractor shall prior to commencement of the work insure in the joint names of the Employer and the contractor against all loss or damage from whatever cause arising for which he is responsible under the terms of contract.
- 9.7.9 The work shall be arranged by the Contractor without causing any damage to Port's/ Navy's/ any other structures. Any damage or accident caused by the Contractor's operation shall be compensated / made good at Contractor's risk and cost to the satisfaction of the Engineer's Nominee of the works, failing which department will do the rectification work and the cost incurred will be recovered from his bill or from security deposit.

- 9.7.10 All plants and equipments and consumables required for the whole work shall be provided by the contractor at his own cost.
- 9.7.11 The Contractor shall not construct any structure, even of temporary nature, for any purpose at site, except with the written permission of the Engineer's Nominee of the work and any construction so put up shall be removed by the Contractor whenever the Engineer's Nominee calls upon the Contractor to do so.
- 9.7.12 The Contractor shall remove all materials brought to work site / stacked at the work site or anywhere else within the Port area and clear the site at his cost to the full satisfaction of the Engineer's Nominee before the site is returned to the Port Authority. All such materials including debris, tools & plants etc. shall be disposed off to any place as pointed out by the Engineer's Nominee or be taken away from the location and shall be cleared in every respect and to reinstate to its original condition at no extra cost to the Port Authority immediately after completion of the work. In case, any such material is found left in the work site or anywhere in the Port area, rent for the storage space occupied by the Contractor, either for stacking the materials /debris or for areas used for such purpose but not cleared thereafter, will be recovered as per the prevailing Scale of Rate of Cochin Port Authority, for the rent applicable for open storage space for commercial purpose, for the period for which the area had been occupied by the Contractor. In addition to the above, in case the Port requires the area immediately for its use, Port will repossess the land after restoring it to its original condition, material will be confiscated and disposed off at the risk and cost of the Contractor, after issuing two notices giving 15 days' time each for removing the material. All expenses incurred in this shall be recovered by disposing off the material if any confiscated. If any balance amount still remains to be realized that will be recovered from the Contractor by appropriate means.
- 9.7.13 The Contractor shall be responsible for the true and proper setting out of the works in relation to original points, lines and levels of reference given by the Engineer-in-charge and for the correctness of the position, levels, dimensions and alignment of all parts of the works and for the provision of all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of work any error shall appear or arrive in the position, levels, dimensions or alignment of any part of the works, the contractor on being required to do so by the Engineer-in-Charge shall, at his own cost, rectify such error to the satisfaction of the Engineer-in-Charge, unless such error is based on incorrect data supplied by the Engineer-in-Charge, in which case the expense of rectifying the same shall be borne by the department. The checking of any setting out or of any line or level by the Engineer-in-charge shall not in any way relieve the contractor of his responsibility for the correctness thereof

and the contractor shall carefully protect and preserve all bench marks, pegs, other things used in setting out the work and measurement purpose.

9.7.14 All debris and waste materials shall be conveyed and deposited at Southend Reclamation Area at about a distance of 6-8 km from the project site as pointed out by the Engineer-in-charge and leveled properly as per his directions.

9.7.15 Qualified Engineers with sufficient experience in works of similar nature as indicated in "Contract Data" shall be available at site throughout the contract period during working hours in order to receive instructions from department and to implement them properly and in time.

9.7.16 The work shall be arranged by the contractor without causing any hindrance to the ship and other water craft operating in the area. No damage shall be caused to the structures in the area, water crafts operating in the area or otherwise by the contractor's operations. Any damage or accident caused by the contractor's operations shall be compensated / made good at the contractor's risk and cost.

9.7.17 The Contractor shall arrange at his own cost monthly or at intervals directed by the Engineer-in-charge, with the approval of Naval Authority well executed photographs in standard size (approximately 24cm x 18cm), along with soft copy showing the progress of work and also such other particular item of the work.

9.7.18 No information or photograph concerning the works shall be published without the prior permission of the Chief Engineer and drafts of all such proposal/ publication shall be submitted for approval.

9.7.19 The information and data shown in the drawing and detailed elsewhere in the tender document are furnished for general information and guidance only and the Port Authority/ the Indian Navy in no case will be held responsible for the strict accuracy thereof or any deduction, interpretation or conclusion drawn by the tenderer.

9.9.20 The contractor shall observe the conservancy rules relating to the Port and Indian Navy, and shall always take necessary steps to keep the Port water free of noxious or unhygienic matter due to the work, as are required by the Engineer-in-Charge. Under no circumstances, inflammable materials are allowed to spill into Port waters.

9.7.21 The site for the proposed work is a protected area and hence security rules and regulations including obtaining entry / exit passes including photo passes if any for vehicles, men and materials etc. for entering the jetty shall be observed by the contractor at his own cost.

9.7.22 The contractor will have to provide a site office accommodation using air-

conditioned container with a cabin & a toilet on 30cm high raised platform and all around concrete hard-standing near the contractor's work area or other location as approved by the Engineer-in-charge, for the use of departmental staff, within 30 days of the work order which shall be maintained till completion of work with the following facilities as per detailed specifications and directions of Engineer-in-charge. Arrangements for fresh water supply and power supply to the office building shall be made by the contractor. Necessary fans and lights shall be provided.

The following minimum facilities shall be provided in the site office accommodation.

| Sl. No. | Item Details   | No.         |
|---------|----------------|-------------|
| (i)     | Office Tables  | 1 Nos.      |
| (ii)    | Office chair   | 1 Nos.      |
| (iii)   | Visitors chair | 3 Nos.      |
| (iv)    | Fan            | As required |

9.7.23 No separate payment shall be made for providing the office as said above and it shall be included in the rate quoted for the work. In case the contractor fails to hand over the furnished office within the above period and / or fails to maintain the office for the stipulated period, an amount of Rs.50,000/- per month or part thereof shall be deducted from the contractor's running bills, for the period of delay/ lapse. In case the contractor is proposed to provide Porta cabins for site office accommodation it shall be air-conditioned. On completion of the work, the office accommodation provided by the contractor shall be disposed off by the contractor.

9.7.24 The contractor shall provide necessary arrangements as desired by the Engineer-in-Charge for inspection of work without any extra cost from commencement till completion of work.

9.7.25 The Contractor shall observe all safety regulations during the execution of the work. Safety measures, precautions, warning signals etc. shall be taken / provided at the Contractor's cost, as directed by the Engineer-in-Charge of the work. The Contractor shall provide all necessary personnel protection equipments such as helmet, lifeguard, goggles, boots, safety belts etc. to the workmen at his own cost and it shall be the Contractor's responsibility to ensure that they use it while on the work site.

9.7.26 The Contractor shall ensure that no labourers with criminal background are engaged for the work.

- 9.7.27 All fossils, coins, articles of value or antiques and structures and other remains or things of geological or archaeological interest discovered in the site of work shall be deemed to be the absolute property of the Cochin Port Authority and the contractor shall take responsible precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal, acquaint the departmental officers of such recovery and carry out at the expense of the department, the Engineer-in-Charge's orders as to the disposal of the same.
- 9.7.28 The contractor shall remove any plant (floating or otherwise) belonging to him or to any person employed by him which might have sunk in the course of work or otherwise deal with the same as directed by the Engineer-in-Charge and until the same is raised and removed, the contractor shall set on such buoys and display at night such lights for avoiding any mishaps.
- 9.7.29 *Water required for the construction works including curing work shall be arranged by the contractor at his own cost.***
- 9.7.30 The contractor shall take all precautions for not to damage any cables/pipes etc. passing through the area of work. Damages, if any, caused to electrical cables/ water lines/ telephone lines shall be rectified by the Contractor at his cost and risk.
- 9.7.31 The contractor shall extend all the facilitations and cooperation for other contractors for simultaneous execution of other works in the area entrusted by Cochin Port Authority/ Indian Navy.**
- 9.7.32 The Contractor shall comply with all the provisions of the Indian Workmen's Compensations Act, Public Liability Policy, Provident Fund Regulations, Employees Provident Fund and ESI Act etc. amended from time to time and rules framed there under and other laws affecting the contract labour that may be brought in to force from time to time.
- 9.7.33 The bidders having EPF/ ESI registration certificates only shall be considered for qualification in the tenderers, if applicable, as per EPF /ESI Acts. In case, the tenderer does not have the required number of employees which makes such registration mandatory, an Undertaking as per Annexure-XII to the effect shall be furnished.**
- 9.7.34 The Contractor shall provide, at every work place, at which 20 or more women workers are ordinarily employed, crèches of reasonable size and with adequate facility for the use of their children under the age of six years at his risk and cost.
- 9.7.35 Defect Liability period of the work is one year from the date of completion of the work.**

9.7.36 The Contractor shall remove all temporary works, clear and make good the site, at his cost to the satisfaction of the Engineer-in-charge before the site is returned to the Port Authority. All materials shall be disposed to any place as pointed out by the Engineer's Nominee of the work and site shall be cleared in every respect at no extra cost after completion of work.

## **9.8 TEMPORARY UTILITIES**

9.8.1 It is the responsibility of the Contractor to arrange and obtain permission from the relevant Authorities for the installation, connection and disconnection of temporary services and utilities such as power, water, and any other services the Contractor deems necessary to execute the Works. The Contractor shall be responsible for all costs associated with the supply of these services.

9.8.2 The Contractor shall install, maintain and pay for such services like water and power and any other facility/ service required for the construction of Works. The Contractor shall lay cables/ pipelines from nearest connection points up to the Site at his own cost. In case of the realignment of utilities due to the construction constraints, the same shall be carried out by the Contractor at this own cost and nothing extra shall be payable on this account.

9.8.3 The Employer / Indian Navy at its own discretion may provide LT power supply and drinking water provision (for running offices), at one location near the vicinity of the Project Site, which are chargeable as per MES rates. The Contractor shall arrange to have suitable metering devices towards quantifying consumption.

## **9.9 WORKMANSHIP**

9.9.1 All the works shall be done strictly according to relevant B.I.S. specifications unless otherwise specified.

9.9.2 The whole work shall be completed in a diligent manner within the Contract period and defect or imperfection if any, observed during the Defect Liability Period/ guarantee period the same shall be rectified at contractor's cost to the full satisfaction of the Engineer-in-Charge within the time allowed.

9.9.3 Precautions shall be taken for not to damage the existing cables/ pipe lines etc.

**9.9.4 The work shall be arranged in the order of preference as directed by the Engineer-in-Charge of work. In addition to above, contractor shall submit a Quality Assurance Plan (QAP) for the entire works under this contract and it shall be approved by the Engineer-in-Charge before commencing the work and shall be ensured strict compliance of the same. The QAP shall contain the details of tests to be conducted for each material to be**

**used in the work and work.**

## **9.10 TEMPORARY WORKS**

9.10.1 All scaffolding, staging, bracing and other temporary works required for proper execution of the works, shall be provided by the Contractor at his own cost, unless stated otherwise and that should be inclusive of all materials, labour, supervision and other facilities. The layout and details of such temporary works shall have prior approval of the Engineer-in-Charge, but the Contractor shall be responsible for proper strength and safety of the same. All temporary works shall be so constructed as not to interfere with any permanent work or with the work of other agencies. If it is necessary to remove any of the temporary works at any time to facilitate execution of works or work by other agencies, such removal and re erection, if required, shall be carried out by the Contractor at the direction of Engineer's Nominee without any delay and any extra cost on this account shall be borne by the Contractor.

9.10.2 On completion of the works, temporary works if any provided by the Contractor shall be removed from the site and the area shall be reinstated to the original condition at his own risk and cost.

## **9.11 TIME FOR COMPLETION**

9.11.1 The time allowed for carrying out the work as mentioned in the memorandum shall be strictly observed by the Contractor. The work shall throughout the time period, be proceeded with diligence, time, being deemed to be the essence of the Contract.

9.11.2 The completion of work may entail working in monsoon period/rainy season without any extra cost. The contractor shall take such an eventuality into consideration while quoting for the work. Normally, no extension of time will be admissible for work in monsoon.

9.11.3 The whole work shall be completed in the stipulated time, accordance with the provisions under Memorandum included under "Form of Tender" or such extended time as may be allowed under clause 29 of Conditions of Contract included in the GCC.

## **9.12 WORKING TIME**

The normal working time of the Port is from 8 a.m. to 4.00 p.m. on all working days. If the Contractor wishes to carry out the work beyond normal working hours and/or on holidays, he should get specific approval from the Engineer-in-Charge for the same. Necessary supervision will be arranged by the department

and the expenditure to be incurred in this connection will be borne by the department.

### **9.13 METHOD OF EXECUTION**

The contractor shall clearly indicate in their tender, the method proposed by them for executing the various items of works. During the actual execution of the works if modifications or changes in the method of execution of work are found necessary the contractor shall obtain approval from the Engineer-in-charge of work for such modifications or changes in the method. No claim from the contractor for additional payment shall be entertained by the department on the above account.

The detailed list of equipment/machineries/tools & plants proposed to be mobilized for the deployment in the work as furnished as per **Annexure-VIII** and method of execution furnished under clause above, are considered only for the technical appreciation of the proposal of the contractors and it shall not relieve the contractor of his responsibility of executing the work with the quality specified in the tender and any discrepancy occurs, the construction procedures detailed/specified in the tender will prevail. In case, any additional equipment are required to be mobilized than those listed in the tender for deployment in the work, it shall be arranged and the work executed as per the tender specifications without any extra cost to the Department.

### **9.14 ALTERATIONS AND ADDITIONS**

The Employer shall have power and authority from time to time and at all times to make amendments or additions or alternations or changes in the scope of the work, and specifications, drawings and bill of quantities and give such further instructions and directions as may appear to the Employer necessary and proper for the guidance of the Contractor and the good and efficient execution of the works and the contractor shall receive, obey and be bound by the same according to the true intent and meaning thereof as if the same had been mentioned or referred to in the scope of the work, specifications, Bill of Quantities and Schedules and drawings. The Employer may also vary or alter the lines, levels or positions of any of the works contemplated or may order any of the works contemplated thereby to be omitted, with or without the substitution of any other works in lieu thereof, or may order any work or any portion of works executed or partially executed to be removed, changed or altered, if required, and may order that other work shall be substituted in lieu thereof and any difference in the cost occasioned by any such diminution or alteration so ordered and directed shall be added to or deducted from the Contract Price based on rates available in the contract

or where the rates are not specified a suitable rate backed up by rate analysis shall be submitted by the contractor and agreed upon between the contractor and the Employer. In the event of disagreement, the Employer shall fix such rates or prices as shall in their opinion, be reasonable and proper having regard to the circumstances. The contractor shall give to the Employer before the tenth day of every month, a statement in writing of any extra work which he may have performed during the preceding month, failing which any claim for which he may afterwards make for payment on account of any such extra work will not be allowed.

**SIGNATURE OF TENDERER**

## **10. SPECIAL CONDITIONS OF CONTRACT**

### **10.1 GENERAL**

Special Conditions shall be read in conjunction with the General Conditions of Contract, Specifications, Drawings and any other document forming part of this Contract wherever the context so requires.

Notwithstanding the Sub-division of the documents into these separate section and volume every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Contract so far as it may be practicable to do so.

Where any portion of the General Conditions of Contract is repugnant to or at variance with any provision of the Special Conditions, the provisions of the Special Conditions shall be deemed to over-ride the provisions of the General Conditions of Contract and shall to the extent of such repugnancy of variations, prevail.

### **10.2 RATES FOR VARIOUS ITEMS**

10.2.1 The percentage as applicable shall except in so far as the contract otherwise provides, cover all obligations of the contractor under this contract and all matters and things necessary for the proper completion and maintenance of the works. The percentage quoted for the work shall be all inclusive value of the finished work as per drawings and specifications and shall cover the cost of all constructional plants, temporary works, appliances, materials, both for the works and temporary works, labour and all other matter in connection with each item quoted for and shall be in multiples of ten paise.

10.2.2 The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices stated in the Schedule of Quantities.

10.2.3 The contractor's rates and prices shall include all taxes, duties and fees including Port charges like wharfage, Port dues, berth hire, pilotage etc. if any applicable, all charges and taxes whatsoever excluding Goods and Service Tax (GST) in respect of materials, labour and plant and all other things obtained or used by the contractor for the execution and maintenance of the works or any temporary works.

### **10.3 WORKS EXECUTED THROUGH SUBLETTING**

10.3.1 The contractor may sublet any portion of the contract, as per clause 8 of Conditions of Contract of GCC.

10.3.2 Notwithstanding any subletting with such approval as required under above and notwithstanding that the Engineer-in-Charge shall have received copies of any sub-contract, the contractor shall be solely responsible for the quality and proper execution of the works, performance of all conditions of contract in all respects as if such subletting had not taken place and as if such work has been done directly by the contractor.

10.3.3 If any sub-contractor engaged upon the works at the site executes, any work which, in the opinion of the Engineer-in-Charge, is not in accordance with the contract condition, written notice may be given to the contractor requesting him to terminate such sub contract and the contractor upon receipt of such notice shall terminate such sub contract and the said sub contractor shall forthwith leave the works, failing which the department shall have right to remove such sub contractors from site. No action taken by the department under this clause shall relieve the contractor of any of his liabilities under the contract or give rise to any compensation, extension of time or otherwise.

### **10.4 MEASUREMENTS OF WORK DONE**

10.4.1 In addition to the Clause-26 of GCC- 'Computerized Measurement Book', measurement of the work can also be done as detailed below.

10.4.2 Dy. Chief Engineer/ Superintending Engineer/ Executive Engineer (hereinafter called the Engineer's Nominee) shall, except as otherwise provided, ascertain and determine by measurement the value in accordance with the Contract of work done.

10.4.3 All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the Contract.

10.4.4 All measurements and levels shall be taken jointly by the Engineer's Nominee or his authorized representative and by the Contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer's Nominee and the Contractor or their representatives in token of their acceptance. If the Contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

10.4.5 Department shall not entertain any claim from Contractor for any loss or

damages on this account. If the Contractor or his authorized representative does not remain present at the time of such measurements after the Contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer's Nominee or his representative shall be deemed to be accepted by the Contractor.

10.4.6 The Contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.

10.4.7 Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.

10.4.8 The Contractor shall give not less than seven days' notice to the Engineer's Nominee or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer's Nominee or his authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer's Nominee's consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

10.4.9 Engineer's Nominee or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

10.4.10 It is also a term of this Contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency

of any work or material to which it relates nor shall it relieve the Contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

## **10.5 BASIC RATES AND ADJUSTMENT FOR SUBSEQUENT PRICE VARIATION**

10.5.1 Price adjustment is not applicable

## **10.6 LIQUIDATED DAMAGES**

For levying compensation as per Clause-49 of General Conditions of Contract, the employer is not required to have documentary evidence to quantify or prove the losses suffered by the Employer due to delay in completion of work by the contractor, as per agreement conditions.

## **10.7 ADVANCE**

No Mobilization Advance and Construction/Installation equipment Advance will be given. Secured Advance shall be given for non - perishable materials as provided in clause 51.6 of General Conditions of Contract. Cement is not considered as a non - perishable item.

## **10.8 CARE OF WORKS**

From the commencement to the completion of the work the contractor shall take full responsibility for the care of the work and his employees in connection with the work thereof and in case any damage, loss or injury shall happen to the works or any part thereof or to any temporary work from any cause whatsoever (save and except the excepted risks as defined in clause 9 given below shall at his own cost repair and make good the same so that the work shall be completed in good order and in conformity in every respect with requirement of the contract. In the event of any such damage, loss or injury happening from any of the excepted risks, the Contractor shall if and to the extent required by the Engineer-in-Charge, make good the same as aforesaid and it will be to the account of the Board.

## **10.9 EXCEPTED RISKS**

The excepted risks are riot (in so far as it is uninsurable) war, invasion, act of foreign enemies, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection or military usurped power or a cause solely due to use of occupation by the Board of any portion of the work, any operation of the forces of nature that the contractor could not have foreseen or reasonably provided against. (All of such are herein collectively referred to as the excepted risks).

## **10.10 INSURANCE OF WORKS**

10.10.1 The insurance cover for the loss of or damage to the Works, plant, materials and equipment stated in the clause 13 of GCC shall be as follows:

- a) The insurance cover for the Works for the time being executed to the estimated current contract value thereof plus 10 (ten) percent thereon to allow any additional costs and professional fees resulting from the loss or damage.
- b) The constructional plant and other things brought on to the site by the Contractor to the replacement value of such constructional plant and other things.

10.10.2 It shall be the responsibility of the Contractor to notify the insurer of any change in the nature and extent of the Works and to ensure the adequacy of the insurance cover at all times in accordance with the provisions of this clause.

## **10.11 PAYMENTS OF SALARY / WAGES AND OTHER BENEFITS etc. TO CONTRACT / CASUAL WORKERS**

10.11.1 The Contractors shall make all payments of salary/wages and other benefits etc. to the contract / casual workers deployed for the work through Bank / Cheque only.

10.11.2 All the payments to the contractors would be released only on submission of undertaking to comply with the clause 10.10.1 above.

## **10.12 MODIFICATIONS TO GCC**

The following clauses of General Conditions of Contract (GCC) shall be replaced and modified as below.

### **1. DEFINITIONS**

Following Definitions stands replaced as:

The **Completion Date** is the date of completion of the Works as certified by the Engineer or his Nominee in accordance with Sub Clause **56.1**

**Market Rate** is the rate as decided by the Engineer on the basis of the cost of materials and labour at the site where the work is to be executed plus **15%** to cover all overheads and profits.

## **21. POSSESSION OF THE SITE**

Clause 21.1 of GCC stands replaced as:

The Employer shall give possession of all parts of the Site to the Contractor, free from encumbrances. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be a Compensation Event.

## **25 SETTLEMENT OF DISPUTES AND ARBITRATION**

Clauses 25 stands replaced as:

### **DISPUTE RESOLUTION**

25.1 The Parties agree to use their best efforts for amicably resolving all Disputes arising under or in respect of this Agreement by mutual discussions.

25.2 Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:-

- (i) If the Contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-charge on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Engineer in writing for written instruction or decision. Thereupon, the Engineer shall give his written instructions or decision within 30 days of receipt of the Contractor's letter.
- (ii) If the Engineer fails to give his instructions or decision in writing within the aforesaid period or if the Contractor is dissatisfied with the instructions or decision of the Engineer, the Contractor may, within 15 days of the receipt of Engineer's decision, appeal to the Chairperson who shall afford an opportunity to the Contractor to be heard, if the latter so desires, and to offer evidence in support of his

appeal. The Chairperson shall give his decision within 30 days of receipt of Contractor's appeal.

- (iii) If the Contractor is dissatisfied with this decision, the Contractor shall within a period of 30 days from receipt of the said decision, shall take further action in accordance with the conciliation procedure set forth in Clause 25.3.

### **25.3 Conciliation**

In the event of any dispute or differences between the parties which could not be resolved amicably, the Chairperson of Cochin Port Authority may refer such unresolved disputes or differences to a Conciliation Committee comprising of independent subject experts, set up by the Port Authority to enable speedy disposal of pending / new cases. The conciliation proceedings shall be subject to guidelines in this regard, issued by the Port Authority from time to time. Recourse to such Conciliation shall also be open before, during or after the arbitration or litigation proceedings. The award of the Conciliation Committee, if agreed by both the Parties, shall then be placed for consideration of the Board of the Port Authority subject to the Delegation of Powers.

### **25.4 Arbitration**

- (i) Any disputes of a total value less than Rs. 10 crores shall be resolved through arbitration by a Sole Arbitrator appointed by mutual consent of the parties.
- (ii) Either party shall within a period of 30 days from the date of termination of conciliation proceedings, give notice to other party for appointment of arbitrator.
- (iii) If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed jointly by both parties. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.
- (iv) It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Chairperson of the appeal.
- (v) It is also a term of this contract that if the Contractor does not make any demand for appointment of arbitrator in respect of any claims in writing

as aforesaid within 120 days of receiving the intimation from the Engineer that the final bill is ready for payment, any claim of the Contractor shall be deemed to have been abandoned and absolutely barred and the Employer or his authorized representative shall be discharged and released of all liabilities under the contract in respect of these claims.

- (vi) The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.
- (vii) It is also a term of this contract that the Arbitrator / Arbitral Tribunal shall adjudicate only on such disputes as are referred to him and give separate award against each dispute and claim referred to.
- (viii) It is also a term of the contract that if any fees are payable to the arbitrator the same shall be paid equally by both the parties.
- (ix) It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he / they issues notice to both the parties calling them to submit their statement of claims and counter statement of claims.
- (x) The seat and venue of the arbitration shall be at Cochin.
- (xi) The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any party by whom and in what manner, such costs or any part thereof shall be paid.

## **25.5 Litigation**

- (i) Any disputes of total value above Rs.10 crores not covered in the aforesaid arbitration clause shall be adjudicated by the courts.
- (ii) Only Courts in Cochin alone shall have jurisdiction to adjudicate any disputes between the parties.

## **25.6. Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD)**

Notwithstanding anything contained above, in the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contracts between Central Public Sector Enterprises (CPSEs / Port Authorities inter se and also between CPSEs and Government Departments / Organizations, such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22/05/2018.

## **26. Computerized Measurement Book**

5<sup>th</sup> para of Clause 26 stands replaced:

The Contractor shall also submit to the department separately his computerized Abstract of Cost and the bill based on these measurements, duly bound, and its pages machine numbered along with **three** spare copies of the bill. Thereafter, this bill will be processed by the Division Office and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements

## **40. PAYMENTS FOR VARIATIONS**

Clauses 40.2 and 40.3 stands replaced as:

40.2 For items not existing in the Bill of Quantities or substitution to items in the Bill of Quantities, rate payable should be determined by methods given below and in the order given below:

- (i) Rates and prices derived from the rate of similar items in Contract.
- (ii) Rates and prices in the Schedule of Rates applicable to the Contract plus Ruling percentage.
- (iii) Market rates of materials and labour, hire charges of plant and machinery used, plus **15%** for overheads and profits of Contractor.

40.3 For items in the Bill of Quantities but where quantities have increased beyond the variation limits, the rate payable for quantity in excess of the quantity in the Bill of Quantity plus the permissible variation shall be as determined by methods given below:

- (i) Rates and prices in the Schedule of Rates applicable to the Contract plus Ruling percentage.
- (ii) Market rates of materials and labour, hire charges of plant and machinery used plus **15%** for overheads and profits of Contractor.

whichever is lower, but not less than the rate in the Bill of Quantities

### **43. PAYMENTS**

Clause 43.2 stands replaced as:

43.2 Payment of bills for Civil Works shall be regulated as detailed hereunder:

43.2.1 Any Interim/Final bill which is **incomplete in any respect** shall be returned to the Contractor within 4 days of date of submission of bill to the Engineer or his Nominee.

43.2.2 Interim bills shall be paid within 21 days of date of submission of bills in full shape, by the Contractor, as detailed below:

43.2.2.1 Clarifications/corrections if any required on an Interim bill submitted, shall be sought from the Contractor within 4 days of submission of the bill and also, all such clarifications/corrections required shall be sought at one go except in exceptional circumstances. The Contractor shall submit the clarifications including carrying out corrections in the bill, if required, within 4 days thereafter. The clarified / corrected bill shall be verified and forwarded to Finance Department within the next 4 days. Clarifications if any required by the Finance Department shall be sought within 3 days and the Engineer/Nominee shall clear it on top priority within the next 3 days and, finally, the bill shall be paid to the Contractor within 3 days thereafter, i.e., within a total 21 days of date of submission of bills in full shape, as indicated above.

43.2.2.2 However, on request by the Contractor, 75% of the bill amount shall be paid within 7 days of submission of the bill. Balance amount of the verified bill shall be paid within 21 days of the submission of the bill, on completion of all contractual requirements as brought out at sub clause 43.2.3. below.

43.2.3 Final bill shall be paid within 3 months of issue of Taking Over Certificate by the Engineer / Nominee, as detailed below:

43.2.3.1 The Contractor shall submit the Final bill to the Engineer / Nominee within 20 days of issue of Taking Over Certificate by the Engineer / Nominee. The bill shall be checked and all

clarifications/corrections required on the bill submitted, shall be sought from the Contractor within 15 days thereafter. The Contractor shall submit the clarifications including carrying out corrections in the bill, if required, within the next 10 days. The clarified / corrected bill shall be verified and forwarded to Finance Department within the next 15 days. Thereafter, clarifications if any required by the Finance Department shall be sought within 10 days and the Engineer/Nominee shall clear it on top priority within the next 10 days and, finally, the bill shall be paid to the Contractor within 10 days thereafter, i.e., within a total 3 months of issue of Taking Over Certificate by the Engineer / Nominee, as indicated above.

- 43.2.3.2 However, on request by the Contractor, 50 % of the final bill amount shall be paid within 7 days of submission of the bill, which will be adjusted against the final bill payment, on completion of all contractual requirements as brought out at sub clause 43.2.6. above.

(b) All other sub clauses under Clause 43 remain the same.

#### **44. COMPENSATION EVENTS**

##### **44.1 (c) to (e) - Deleted.**

All other clauses under clause 44 remains the same.

#### **45. RATES FOR ITEMS TO BE INCLUSIVE OF TAXES**

##### **Clause 45 stands replaced as:**

- 45.1 The rate quoted by the Contractor shall be inclusive of the cost of provision of plant and equipment, materials, labour, execution, supervision, maintenance, overheads and profits and every incidental and contingent cost and charges whatsoever excluding Goods and Service Tax (GST). GST as may be applicable from time to time shall be shown separately in the invoice. The Employer will perform such duties in regard to the deduction of such taxes at sources as per applicable law. Any new Taxes, levies, duties imposed after signing the Contract shall be reimbursed by the Employer on production of documentary evidence.
- 45.2 The invoice to be submitted by the Contractor should include the GST Registration Number of the Contractor as well as the Employer.

## **47. PRICE ADJUSTMENTS**

### **Deleted**

(No Price Adjustment applicable to this work.)

## **48. RETENTION**

Clause **48.2** stands replaced as:

48.2 Retention Money shall be deducted at 5% of the gross amount of the bill from the first Running Account bill onwards till the recovered sum amounts to 5% of the contract value or the value of the work done whichever is higher. Retention money shall be refunded to the Contractor within 14 days from the date of payment of final bill.

## **48 & 52 RETENTION MONEY AND SECURITY DEPOSIT**

Clause 48 & 52 of the GCC stands replaced as:

- (i) In all cases, the Performance Guarantee retained till end of Defect Liability Period shall be 5 % of the Contract Value or Cost of Work Done, whichever is higher.
- (ii) Wherever the cost of work done exceeds the contract value, the total amount retained as Security deposit, considering the Performance Guarantee initially submitted together with the Retention Money recovered from the running accounts bills, shall amount to 10 % of the Cost of Work Done, at all times.
- (iii) In such cases, while releasing the retention money after payment of Final Bill as per the contract conditions, care shall be taken that only 5 % of the Cost of Work Done is released, instead of the entire retention money recovered from the bills. The balance amount shall be retained to make up for the shortage in the Performance Guarantee and shall be released along with the Performance Guarantee, upon completion of the Defects Liability Period.

## **55. COMPLETION**

(a) Clause 55.4 stands added as:

**55.4** The Completion Report / Certificate to the Contractor will be issued only after obtaining 'No Claim Certificate' from the

Contractor in the format approved by the department stating that they have no further claims against CoPA in respect of the Work.

(b) All other sub clauses under Clause 55 remain the same.

## **82. TAXES and Duties**

### **80.1 Deleted**

### **80.2 Deleted**

### **80.3 Income Tax**

The Contractor and his staff shall be responsible for payment of all personal income taxes to the concerned authorities as per the law in force from time to time. Deduction of Income Tax shall be made by the Employer from each certificate of payment to the Contractor at the rate as per prevailing rates or such other rates as may be specified by the Central Government from time to time, on the gross amount of the Contractor's bill for payment. The Contractor shall comply with all the GST Regulations, viz. timely uploading of bills, issue of debit/ credit notes etc.

### **80.4 GST - TDS Under GST Law shall be deducted as per Prevailing Rate.**

## **G. Salient Features of Some Major Laws Applicable To Establishments Engaged In Construction Work.**

Clauses [d] & [(i)] stands replaced as follows:

(d) Maternity Benefit Act 1961 or Maternity Benefit Amendment Act 2017:-  
The Acts provide for leave and some other benefits to workmen/ employees in case of confinement or miscarriage etc.

(l) ESI Act, 1948:-

(i) As per the Govt. Notification dt. 20.7.09, Cochin Port Authority has registered under the ESI Act with ESI Corporation and provision of ESI Act, 1948 are applicable to contract/casual employees drawing wages/Salary upto **Rs.20,000/-** per month and working in Cochin Port Authority. Workers covered under ESI Act, are entitled for full medical care for self and family, besides, cash benefit in the event of sickness, maternity and employment injury. Accordingly, the contractual/casual employees drawing wages upto **Rs.20,000/-** per month employed either directly by Port Authority or through contractor are covered under ESI Act, 1948. It is obligatory on the part of the Employer to calculate and remit ESI

contribution comprising of Employers' share of 4.75% plus Employees' share of 1.75% which is payable on or before 21st of the following month, to which the salary relates.

**SIGNATURE OF TENDERER**

## **11 DETAILED SPECIFICATIONS FOR MATERIALS TO BE USED IN CIVIL WORKS**

### **11.1 GENERAL**

- 11.1.1 Except where otherwise specified or authorized by the Engineer-in-Charge, materials supplied by the contractor shall conform to the latest edition of the Indian Standard Specifications and code of practices published by the Indian Standard Institution. Samples of materials to be supplied by the contractor shall be shown to the Engineer-in-Charge sufficiently in advance for approval of its quality for use on the work.
- 11.1.2 All materials supplied shall be stored appropriately to prevent deterioration/ damage from any cause what so ever and to the entire satisfaction of the Engineer-in Charge.
- 11.1.3 The materials required for the work shall be brought to the site and stacked at the places shown by the Engineer-in-Charge and the same shall be got approved for use in work sufficiently advance so that the progress of the work is not affected by the supply of materials.
- 11.1.4 Payment for the materials supplied, shall be given only after they are used on the work.
- 11.1.5 Tolls are payable by the Contractor as per rules for vehicles using the Port's road for supplying the materials.

### **11.2 AGGREGATES FOR CONCRETE**

- 11.2.1 Aggregates (fine and coarse) for concrete shall comply with the requirements of IS:383 – 'Specifications for coarse and fine aggregate from natural sources for concrete'. Aggregate shall be obtained from sources approved by the Engineer-in-Charge. Aggregates, which are not perfectly clean, shall be washed in clean water to the entire satisfaction of the Engineer-in-Charge.
- 11.2.2 The fine aggregate shall be clean, hard, durable, uncoated, dry and free from injurious, soft or flaky pieces and organic or other deleterious substances.
- 11.2.3 Each type of aggregate shall be stored separately for the approval of Engineer-in-Charge. Wet aggregate delivered at the site shall be kept in storage for at least 24 hours to ensure adequate drainage before being used for concreting.

- 11.2.4 Contractor shall maintain at site at all times such quantities of each type of aggregate as are considered by the Engineer-in-Charge to be sufficient to ensure continuity of work.

### **11.3 CEMENT**

- 11.3.1 Quality of cement for the work shall be 43 grade ordinary Portland cement conforming to IS:8112 or 53 grade ordinary Portland cement conforming to IS:12269 or Pozzolona cement conforming to I.S. 1489 unless otherwise approved by the Engineer-in-Charge.
- 11.3.2 The cement required for the work will have to be procured by the contractor and shall comply with the relevant IS code. If possible, the cement required for the work will have to be procured from the government agencies. The cement shall, if required by the Chief Engineer / Engineer-in-Charge, be tested and analyzed by an independent analyst at the Contractor's cost and result produced to the Engineer-in-Charge.
- 11.3.3 Supply of cement shall be taken in 50kg bags bearing manufacture's name and BIS marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS codes. In case, test results indicate that the cement arranged by the Contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-Charge to do so.
- 11.3.4 A cement godown of adequate capacity as directed by the Engineer-in-Charge shall be constructed by the contractors at the site of the work for which no extra payment shall be made. Double lock provision shall be made to the door of the cement godown. The key of one lock shall remain with the Engineer-in-Charge or his authorized representative and the key of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge.
- 11.3.5 The cement brought to the site and cement remaining unused after completion of work shall not be removed from the site without written permission from /of the Engineer-in-Charge.
- 11.3.6 The cement shall be stored in a weather proof building with facilities for inspection.

11.3.7 The contractor shall maintain a cement register showing dates of receipt and issue, quantities used daily and balance which shall be accessible to the Engineer-in-Charge.

11.3.8 For cement stored in silo, clauses 11.3.3 and 11.3.4 are not applicable.

#### **11.4 STEEL REINFORCEMENT**

11.4.1 The reinforcement steel used for the work will have to be procured by the contractor and shall be of Corrosion Resistant (CR) Grade Fe500D / Fe550D bars conforming to IS: 1786 unless otherwise approved by the Engineer-in-Charge.

11.4.2 As far as possible, the reinforcement steel required for the work shall be procured from Steel Authority of India or Rashtriya Ispat Nigam Ltd or TATA / JSW / JSPL / Shyam Steel with production of valid license certificate from BIS. In case steel is not available from the above sources, the contractor shall obtain specific approval from the Engineer-in-Charge well in advance for purchase of steel from other sources.

11.4.3 The contractor shall have to obtain and furnish test certificates to the Engineer-in-Charge in respect of all supplies of steel brought by him to the site of work. Samples shall also be taken and got tested by the Engineer-in-Charge as per provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the Contractor does not conform to BIS codes, the same shall stand rejected and shall be removed from the site of work by the Contractor at his cost within a week's time of written orders from the Engineer-in-Charge to do so.

11.4.4 The steel reinforcement shall be brought to the site in bulk supply of 10 tonnes or more or as decided by the Engineer-in-Charge.

11.4.5 The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.

11.4.6 For checking nominal mass, tensile strength, bend test etc., specimen of sufficient length as per I.S. 432/ I.S. 1608/ I.S. 1599 or as specified by the Engineer-in-Charge shall be cut from each size of the bar at random at frequency not less than the specified below:

| Size of bar        | For consignment below 100 tonnes              | For consignment over 100 tonnes               |
|--------------------|-----------------------------------------------|-----------------------------------------------|
| Under 10 mm dia    | One sample for each 25 tonnes or part thereof | One sample for each 40 tonnes or part thereof |
| 10 mm to 16 mm dia | One sample for each 35 tonnes or part thereof | One sample for each 45 tonnes or part thereof |
| Over 16 mm dia     | One sample for each 45 tonnes or part thereof | One sample for each 50 tonnes or part thereof |

11.4.7 The contractor shall supply free of charge the steel required for testing. The cost of tests shall be borne by the Contractor.

11.4.8 Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-Charge.

## **11.5 MILD STEEL PLATES**

11.5.1 Mild steel plate used for fabrication of tubes shall conform to IS: 226 and shall be in single piece.

## **11.6 WATER**

11.6.1 Clean fresh water free from oils, acids, alkalies, salt, sugar, organic materials or other harmful materials shall be used for washing aggregates, mixing and curing of concrete. The water used shall comply with clause 5.4 of I.S. 456-2000. Potable water is generally considered good for mixing concrete.

11.6.2 **Cochin Port Authority will not provide/ supply water for the work.** Water has to be arranged by the contractor himself for the construction works including curing work at his own risk and cost.

11.6.3 Samples of water arranged by the contractor shall be taken by the Engineer in Charge and got tested in accordance with the provisions of relevant BIS codes. In case test results indicate that the water arranged by the contractor does not conform to the relevant BIS codes, the same shall not be used for any works. The cost of tests shall be borne by the contractor.

## **11.7 ADMIXTURES IN CONCRETE**

11.7.1 Admixture in concrete will be allowed only with prior approval of the Engineer-in-Charge. The contractor shall produce test certificates from recognized laboratories before use, if so desired by the Engineer-in-Charge.

11.7.2 Secondary reinforcement material used in wearing course of jetty shall be Recron 3S Fibre or its equivalent product as approved by the Engineer-in-Charge. Its quantity to be used and mixing procedures shall be as per the manufacturer's recommendations.

11.7.3 Admixture for corrosion protection- Wherever specified in BoQ, concrete used shall be mixed with "Bipolar Concrete Penetrating Corrosion inhibiting Admixture " approved by RDSO (RDSO specification No. M&C /PCN/126-2008) or any fourth generation polydentate bipolar concrete penetrating corrosion inhibiting admixture approved by IRC, to protect the reinforcement bars against corrosion

## **11.8 PRECAST CEMENT CONCRETE TILES FOR FLOORING**

11.8.1 The precast cement concrete tiles shall be of approved premium quality, and of approved colour and shade. The tiles shall generally conform to IS:13801. They shall be flat, true to shape and free from cracks, crazing spots, clipped edged and corners. The flooring tiles shall be of antiskid type.

11.8.2 The top surface of the tiles shall be antiskid as specified in the Schedule of quantities and as approved by the Engineer-in-Charge. The underside of the tiles shall be completely free from glazing in order to adhere properly to the base.

11.8.3 Manufactures test Certificate for water absorption, breaking strength, abrasion resistance and crazing has to be produced by the contractor.

## **11.9 STAINLESS STEEL SECTIONS FOR VARIOUS WORKS**

The stainless sections to be used for various works specified in BoQ shall be of marine grade 316. The size and pattern shall be as specified in the Schedule of Quantities and drawings. The stainless-steel sections shall be of brush finish.

## **11.10 MATERIALS NOT SPECIFIED**

11.10.1 All materials not herein detailed and fully specified but which may be required for use on works, shall be subjected to the approval of the Engineer-in-Charge without which they shall not be used anywhere in the permanent works

## **11.11 SAMPLING AND TESTING OF MATERIALS**

11.11.1 Sampling and testing of the material supplied by the contractor for use on the Work shall be done as per the provisions of the relevant BIS codes/specifications. In the absence of BIS specification in a particular case,

the sampling and testing shall be done as directed by the Engineer-in-Charge as per sound engineering practice. Material conforming to the specifications and approved by the Engineer-in-Charge shall only be used by the Contractor.

11.11.2 All the sampling and testing shall be done at the Contractor's cost.

## **11.12 LIST OF APPROVED MATERIALS/ MAKES**

11.12.1 Specification/brand names of materials (Refer materials, whichever are applicable for the scope of work) and finishes approved are listed below. However, approved equivalent material and finishes of any other specialized firms may be used with the approval of the alternate brand by the Engineer-in-Charge.

| Sl. No.                                                                                                                                                                                                                                                                                                                                            | Materials                                                           | Approved Make                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 1.                                                                                                                                                                                                                                                                                                                                                 | Cement                                                              | Ultratech, Birla, Coromandal, Malabar Cement, Ambuja, Zuari, Penna, Bharath, Dalmia or equivalent |
| 2.                                                                                                                                                                                                                                                                                                                                                 | Reinforcement Bars                                                  | TATA, SAIL, RINL, JSW, JSPL, Shyam Steel or equivalent                                            |
| 3.                                                                                                                                                                                                                                                                                                                                                 | Structural Steel                                                    | TATA, SAIL, RINL, JSW, JSPL or equivalent                                                         |
| 4.                                                                                                                                                                                                                                                                                                                                                 | Admixtures for Concrete                                             | BASF, FOSROC, SUNANDA, CERA CHEM, SIKA or its equivalent                                          |
| 5.                                                                                                                                                                                                                                                                                                                                                 | Concrete Penetrating Corrosion Inhibiting Admixture                 | POLYALK CP-293, PCO KP-200 or equivalent                                                          |
| 6.                                                                                                                                                                                                                                                                                                                                                 | Protective coat for Concrete Surface - Exposed to UV                | Licensed suppliers of Interpenetrating Polymer Network Coating System (IPNet)                     |
| 7.                                                                                                                                                                                                                                                                                                                                                 | Polypropylene fibres for secondary reinforcement in Screed Concrete | Recron 3s or its equivalent                                                                       |
| <p>Note:<br/>For all other materials where the make is not specified, the samples shall be got approved by the Engineer-in-charge before procurement.<br/>In the cases where products of specified manufacturers are approved, their standard accessories are also acceptable, subject to obtaining prior sanction from the Engineer-in-charge</p> |                                                                     |                                                                                                   |

**SIGNATURE OF TENDERER**

## **12. DETAILED SPECIFICATIONS FOR ITEMS OF CIVIL WORKS**

### **12.1 GENERAL**

12.1.1 Except where otherwise specified or authorized by the Engineer-in-Charge, all items of works executed by the contractor shall conform to the latest edition of the Bureau of Indian Standard Specifications and code of practices published by the B.I.S. Where no such specifications or code of practice exists the latest B.S.S. codes of practice or any other equivalent / standard code of practice shall also be considered for adoption. The tenderer while indicating any such specifications shall enclose the full set of the publication so referred and not in extracts. Photostats / Xerox copies in duplicate shall be forwarded which shall not be returned to the contractor. In absence of any specification, the department deserves the right to adopt trade specifications and/or sound engineering practices for the specialized work as may be decided by the Engineer-in-Charge which shall be final, conclusive and binding on the contractor.

### **12.2 PLAIN AND REINFORCED CEMENT CONCRETE**

#### **12.2.1 General**

12.2.1.1 The concrete used for all works, concreting procedure etc. shall be in accordance with IS: 456-2000. The concrete mix shall be of M-40 grade using 20mm size graded aggregate metal with a cement content of not less than 450 kg/m<sup>3</sup> and water cement ratio not exceeding 0.40

12.2.1.2 Designed concrete mix, as per IS: 10262 shall be used for the work. For this purpose, the contractor shall make calculations and carry out all the tests at his cost to determine the proportion by weight of cement, aggregates, admixtures and water necessary to produce concrete having required strength, prior to commencement of works. The contractor shall submit all the particulars of the design mix to be used for the work to the Engineer-in-Charge for approval. The quality of concrete shall be assured by conducting the required tests so as to meet the requirements as per BIS.

#### **12.2.2 Design Mix**

12.2.2.1 For design mix concrete of following grades of concrete the minimum cement content per cubic metre and maximum water cement ratio are as given below.

| Sl. No. | Grade of Concrete         | Minimum cement content (in Kg / m <sup>3</sup> ) | Maximum free water cement ratio |
|---------|---------------------------|--------------------------------------------------|---------------------------------|
| 1       | M40 (for pile foundation) | 450                                              | 0.40                            |
| 2       | M40 (for deck structure)  | 450                                              | 0.40                            |

12.2.2.2 For design mix concrete, the contractor shall make calculations jointly with Engineer-in-Charge and carryout all necessary tests at contractor's cost to determine the proportion by weight of cement, aggregates (coarse and fine), admixture if required and water necessary to produce concrete of required grade having the desired workability and, water cement ratio not exceeding the allowable limit, prior to commencement of work. The contractor shall submit the following for the approval of Engineer-in-Charge.

- i. The proportion of cement, coarse aggregate, fine aggregate and water so determined.
- ii. The sieve analysis of aggregates which he proposes to use in the works.
- iii. Full details of the tests conducted.
- iv. All calculations relevant to mix design.

12.2.2.3 When the proportions are submitted to the Engineer-in-Charge which he considers will produce concrete having the required properties, it shall become the declared proportions to be used for the work. The agreement by the Engineer-in-Charge to such declared proportions shall not relieve the contractor of any of his responsibilities to use in the work at all times concrete having the required properties. No deviation from the declared proportions shall be allowed unless and until the Engineer-in-Charge shall have given his written authorization for the adoption of revised proportions for the concrete.

12.2.2.4 Sampling, testing and acceptance criteria for designed mix concrete shall be as per clause 15, 16 & 17 of IS: 456: 2000 unless otherwise specified. Sampling and testing shall be done at contractor's own cost. Testing shall be done in a laboratory approved by the Engineer-in-Charge.

### 12.2.3 Size of Coarse Aggregate

For all concrete, plain or reinforced of M20 and higher grades, 20 mm size graded aggregate conforming to IS: 383 shall be used unless otherwise specified. If 20 mm graded aggregates as per IS:383 are not readily available,

graded 20 mm aggregate shall be obtained by blending 20 mm and 12.5/ 10 mm aggregates in the proportion arrived based on the combined sieving of aggregates.

#### **12.2.4 Mixing of Concrete**

12.2.4.1 Concrete shall be mixed in a drum or pan type batch mixer, the type and capacity of which is to be approved by the Engineer-in-Charge. Time allowed for mixing, after all ingredients have been placed in the mixers shall not be less than two minutes. If there is segregation after unloading from the mixer, the concrete should be remixed.

12.2.4.2 Ready mix concrete from outside source shall be allowed for use on the work subject to the conditions that: (1) written permission shall be obtained from the Engineer-in-Charge, (ii) all quality control measures as stipulated by the Engineer-in-Charge are strictly adhered to by the contractor at his cost, (iii) all design mix calculations shall be submitted by the contractor for approval of the Engineer-in-Charge & approval obtained; and (iv) all expenses towards conveyance and incidentals of providing departmental supervision at the mixing plant shall be borne by the contractor.

#### **12.2.5 Assembly of Reinforcement for Reinforced Cement Concrete**

12.2.5.1 The contractor shall, when ordered, submit to the Engineer-in-Charge the detailed bar bending schedule for his scrutiny and approval sufficiently in advance of the due date of commencement of the relevant items of works. While working out the bar bending schedule, the contractor shall ascertain the length of bars likely to be made available to him and the schedule shall be so made, keeping the wastage/ cut bits of bars to bare minimum without hampering technical requirements. If the size of the steel bars specified in the drawing or schedule is not available, the nearest size available shall be used. Revised drawing shall be issued to the contractor substituting the new size of reinforcement and bar bending schedule shall be prepared by the contractor accordingly. No extra payment shall be made to the contractor for making this substitution. The fabrication of reinforcement shall commence only after the bar bending schedule is approved by the Engineer-in-Charge.

12.2.5.2 Reinforcement shall be cut to the exact length and made truly straight and then bent to the exact shape and dimensions as indicated in the drawings. The bending and fixing of bars shall be done in accordance with I.S. 2502 unless otherwise specified.

12.2.5.3 The reinforcement shall be cleaned by wire brush etc. to remove oil, grease, loose mill scale, loose rust or other deleterious matter that may reduce or

destroy bond etc. before tying in position and also immediately before placing the concrete.

12.2.5.4 All reinforcement shall be placed and maintained in accordance with the drawings. Tolerance on placing of reinforcement shall be in accordance with clause 12.3 of I.S. 456-2000. Bolts, nuts, washers and rivets, etc. required for complete erection of reinforcement and keeping in position shall be supplied by the contractor at his own cost.

#### **12.2.6 Formwork**

12.2.6.1 The steel formwork shall only be used for concrete work. The form work shall be designed and constructed to the shape, lines and dimensions shown in the drawings within the tolerance limit and specified in clause 11.1 of I.S. 456-2000. Joints of the form works shall be made water tight by providing suitable beadings /gasket as approved by the Engineer-in-Charge. All rubbish, particularly chippings, shall be removed from the interior of the forms before the concrete is placed and the form work in contact with the concrete shall be cleaned and thoroughly wetted or treated with an approved composition. Care shall be taken that such approved composition is kept out of contact with the reinforcement.

#### **12.2.7 Cover to Reinforcement**

12.2.7.1 Cover as specified in drawing shall be provided by using cement concrete block made from concrete of same grade as that of main work unless otherwise directed by the Engineer-in-Charge.

#### **12.2.8 Transporting, Placing, Compacting and Curing of Concrete**

12.2.8.1 Transporting placing, compacting and curing of concrete shall be as per clause 13 of IS: 456: 2000.

12.2.8.2 Concrete shall be transported from the mixer to the worksite as rapidly as possible which will prevent the segregation or loss of any ingredient, and for maintaining the workability.

12.2.8.3 The concrete shall be placed and compacted before setting commences and should not be subsequently disturbed. Care should be taken to avoid displacement of reinforcement or movement of formwork.

12.2.8.4 All concrete shall be vibrated unless otherwise specified or approved by the Engineer-in-Charge and such vibrating shall be as required by the Engineer-in-Charge. The mechanical vibrators complying with IS: 2505, IS: 2506 or IS: 4656 shall be used for compacting concrete. All vibrations shall be carried

out to a plan approved by the Engineer-in-Charge. No workman shall be allowed to operate the vibrator without having received instructions and training in its use. Care must be taken to avoid segregation and excessive vibration.

12.2.8.5 Concreting shall be carried out continuously up to construction joints, the positions and arrangement of which shall be as directed by the Engineer-in-Charge. When the work has to be resumed the construction joints shall be prepared in accordance with clause 13.4 of IS: 456:2000.

12.2.8.6 Unless otherwise specified, all concrete shall be kept continuously in a damp condition by ponding or by covering with a layer of sacking, canvas, hessian or similar materials with fresh water for not less than 7 days after laying the concrete. If curing is not done properly the department will be at liberty to engage labour for curing and the expenditure incurred will be recovered from the contractor's bill. The decision of the Engineer-in-Charge will be final on this.

12.2.8.7 Stripping time for the form work shall be as stipulated in clause 11.3 of IS: 456-2000. Any impression, fins etc. that may occur from the form work shall be removed and treated with cement mortar 1:1.5 (1 cement: 1.5 sand).

12.2.8.8 Contractor shall arrange to fix any fixtures wherever necessary while doing concreting work without any extra cost. Cost of fixtures will be paid separately, if it is provided by the contractor.

12.2.8.9 The unit rate quoted by the tenderer shall be for the finished work and deemed to include cost of all materials and labour, form work, provision of holes, recess, other contingent items etc. required for the completion of work as specified etc.

### **12.3 WELDING OF MAIN REINFORCEMENT OF PILES**

#### **12.3.1 Specification for Welding**

12.3.1.1 Welding of mild steel bars shall be done in accordance with the recommendations of IS: 2751-1979.

12.3.1.2 Welding of cold twisted bar shall be done in accordance with specifications given below to the entire satisfaction of the Engineer-in-charge.

#### **12.3.2 Welding Methods**

- (i) Electric Arc weld can be used for all bars equal to or greater than 20 mm diameter

- (ii) Flash butt weld can be used for bars of all diameters
- (iii) Oxyacetylene welding should not be used in any case.

### 12.3.3 Preparation of Bars and General Precautions

- (i) Untwisted ends, if any, at weld junctions should be cut (10-15cms) and removed prior to welding.
- (ii) Bars should be free of rust at the joints to be welded.
- (iii) The bar ends to be welded, should be shaped as directed by the Engineer-in-charge by a power saw or grinder.
- (iv) Bars should be aligned and kept at proper axis in order to minimize crookedness in bars after welding. While welding, the bars may be supported for about one metre on each side of the joints.
- (v) Slag produced in welding after alternate run shall be chipped and removed by brush.
- (vi) Electrode shall not be lighted by touching the hot bar in order to avoid notch effect.

### 12.3.4 Electrodes

Ordinary mild steel grade electrode shall be used. Electrode size shall be as specified below for electric arc weld.

| Bar size in millimetre | Electrode size in millimetres |            |
|------------------------|-------------------------------|------------|
|                        | Root run                      | Other runs |
| 20 to 30               | 2 to 2.50                     | 3 maximum  |
| 32 to 40               | 2 to 2.50                     | 5 maximum  |

### 12.3.5 Electric Arc Weld

Electric arc weld shall be completed in ten runs as directed by the Engineer-in-charge. After four runs on one side the bar shall be turned 180 degree and welding continued on the other side. When the final run is deposited, the bar is gradually rotated by a full circle. After every alternate run the bar is allowed to cool before weld is deposited. The diameter of the weld should be 1.20 times the bar diameter. The angle between bevel faces should not be greater than 60 degree and a small gap of 2 to 3 millimetres shall be given between bevel faces for root run.

### 12.3.6 Flash Butt Weld

The capacity of the welding machine used should be 8 K.V.A. per square centimetre of bar area and pressure required is 6 kg/ sq.m.

### 12.3.7 Sampling, Strength Test and Acceptance Criteria

12.3.7.1 Tension test on samples of the welded bars not exceeding 5% of the total number of welded joints shall be conducted to ascertain and ensure the strength of the weld. Sampling and testing shall be done at contractor's cost. Testing shall be done in a laboratory approved by the Engineer-in-charge.

12.3.7.2 The tested samples shall conform to the following strength requirements:

| Sl. No. | Type of bar                     | Ultimate tensile stress in kg/ sq. cm. | Yield stress in kg/ sq. cm. |
|---------|---------------------------------|----------------------------------------|-----------------------------|
| 1.      | Mild steel bar                  | 4410                                   | 3150                        |
| 2.      | Cold twisted bar under 10mm dia | 5650                                   | 4950                        |
| 3.      | Cold twisted bar over 10mm dia  | 4950                                   | 4250                        |

12.3.7.3 Welding of the reinforcement shall be done sufficiently in advance so as to enable the department to conduct sampling and testing of welded bars for according approval for the use of the same on work. No welded bar shall be used on the work before the quality of the weld is approved by the Engineer-in-charge. In stray cases, if the welded bars are found necessary to be used on work before the test results of samples are obtained and approval to the welded bars are accorded by the Engineer-in-charge, it shall be done at contractor's risk. In such cases, the test results falling short up to 10% of the values indicated under clause 9.3.7.2 above, the reinforcement represented by such samples shall be accepted after making a deduction of 10% in the rate quoted for reinforcement. The decision to accept the reinforcement represented by such samples whose test strength falls short by more than 10% shall rest with the Chief Engineer and the allowable rate for this reinforcement shall be decided by the Chief Engineer. The decision of the Chief Engineer on these aspects shall be final, conclusive and binding on the contractor.

### 12.4 FABRICATING MILD STEEL TUBES FOR FENDER PILES

12.4.1 The plates used for fabrication of tubes shall conform to IS: 226

12.4.2 All tubes shall be fabricated to the length shown in the drawings or as directed by the Engineer-in-charge. The tubes shall be fabricated to full lengths as ordered by the Engineer-in-charge at the fabrication yard itself and no field joints shall be permitted.

12.4.3 The cutting of plates to exact sizes to suit the diameter of piles may be carried out by any method acceptable to the Engineer-in-charge. Bevelling may be

done by mechanical grinding or sawing. The use of mechanically guided frame cutting may be permitted. The external diameter of the tube shall be 500mm/300mm. The Engineer-in-charge may modify the tube requirement if found necessary during the execution of work.

12.4.4 The edges to be welded shall be properly cleaned. All paints, oil, grease, rust oxides in general shall be removed, as well as foreign matter which could be detrimental to the welding. Ends shall be totally dry when welded.

12.4.5 The rolling of pipes shall be carried out by any recognised method of rolling which shall be acceptable to the Engineer-in-charge. The plates shall be cut, edges prepared for welding and rolled into shells equal to the outside diameter of the pipes. The opposite edges of plates after rolling shall meet in perfect alignment to form a true reduced joint longitudinally without any sudden change in the radius at the junction.

12.4.6 Welding of joints may be done either by manual metal arc welding process or by automatic submerged arc welding process as approved by the Engineer-in-charge. Welding shall conform to the standard code of practice as adopted to India. Metal arc welding of steel in general shall be in accordance with IS 816 "Code of practice for use of metal arc welding for general construction in mild steel. Filler materials shall be of A type and make approved by the Engineer-in-charge. The contractor shall submit manufacturers test certificates for each batch of filler materials supplied by them.

12.4.7 Only equipments and plants approved by the Engineer-in-charge shall be employed for the work. Payment for supply of MS tube shall be made on weight basis. The weight of tube shall be calculated at the rate of 7.85 grams per cubic centimetre of tube wall. No allowance shall be given for the projection of weld material.

12.4.8 The tubes fabricated in the contractor's fabrication yard at the site or readymade tubes supplied by the reputed fabricators may be used on the work. In case the contractor proposes to use tubes supplied by the reputed fabricators, the details of such fabricators shall be made available to the Engineer-in-charge to access about the capacity of the firm and the quality of their products and tubes shall be procured only from these fabricators who are approved by the Engineer-in-charge for the purposes.

## **12.5 PAINTING OF STEEL TUBES**

12.5.1 The protective coat of steel tubes will consist of a single coat of heavy duty primer plus two top coats of coal tar Epoxy paint.

12.5.2 Zinc Anode 304 supplied by the Berger paints or equivalent Zinc filled self curing

inorganic heavy duty primer based on Ethyl Silicate supplied by other manufacturers approved by the Engineer-in-charge shall be used for the primer coat.

12.5.3 For top coat coal tar Epoxy as approved by the Engineer-in-charge shall be used for the top coat.

12.5.4 A thinner may be used only where permitted by the Engineer-in-charge.

12.5.5 The primer coat shall have finished dry film thickness of not less than 75 microns. Top coats shall have dry film thickness of not less than 150 microns.

12.5.6 All exterior surfaces of tube to be painted shall be well cleaned to remove dust, mill scale etc. to provide a finish to the approval of the Engineer-in-charge or his representatives.

12.5.7 All surfaces shall be cleaned and made free from oil, grease and deleterious materials and dried before applying primer coat or subsequent top coat.

12.5.8 Cleaned surfaces shall be painted with approved primer as soon as possible but no longer than three hours after cleaning.

12.5.9 All paints shall be applied by an approved painting method proposed by the material supplier and as approved by the Engineer-in-charge employing specialized labour. The contractor shall carefully supervise and be responsible for all stages of painting works, including surface preparation, protection against weather etc.

12.5.10 Coating shall not be carried out when the level of humidity exceeds the limit above which it could have detrimental effect on the coating.

12.5.11 All paints shall be applied in as many coats and at such intervals as necessary to provide the specified minimum finished dry film thickness without runs, sags or other blemishes and to ensure the proper curing, drying hardening of the coats.

12.5.12 Any painted surface damaged at any stages of the work shall be repeated as specified here in for the main coating work.

12.5.13 Tests to determine the adhesion will be carried out by the Engineer-in-charge by driving a sharp wood chisel laid almost flat on the coating through the coating and steel surface. A coating will be considered acceptably bonded, if considerable force is required to lift the film and if the portion of the coating remains in the valley of the sand blast pattern. Areas tested in this manner are to be made good by the contractor without charge.

12.5.14 The finished coating shall be generally smooth glossy.

12.5.15 Tubes shall not be removed from the coating area until 5 days after the final coating has been applied or authorized by the Engineer-in-charge.

12.5.16 The rate of painting shall be included in the fabrication.

## **12.6 TRANSPORTATION AND DRIVING OF MS TUBE PILES**

12.6.1 All plants, machineries, cranes, equipments other accessories, platform floaters, temporary works etc. including consumables required for transporting pitching and driving of piles shall be arranged by the contractor at his cost. After completing transporting pitching and driving of piles, all the plants, machineries etc. including temporary works shall be removed from the site and cleared as directed by the Engineer-in-charge.

12.6.2 The area of installation of piles including shallow area the contractor shall arrange dredging, if required for producing necessary water depth for the floatation of pile driver and facilitating pitching the pile without extra cost.

12.6.3 The number of days that the piles will have to be kept in casting yard before they are removed from the casting bed for driving shall be as decided by the Engineer-in-charge. In case any dispute arises on this point, the decision of the Chief Engineer shall be final.

12.6.4 When the piles are lifted for transportation, they should be suspended or supported only at the toggle holes provided for the purpose. The lifting and transporting should be done only with suitable sling attached to the bolts to be placed in the toggle holes (at the time of lifting). If necessary additional supports between the toggle holes may also be provided in consultation with the Engineer-in-charge to avoid cracking and other damages, bumping and other heavy blows should be avoided at all cost.

12.6.5 For transporting piles to the site of pitching and driving, the contractor shall bring his own floats and other equipments required for the purposes.

12.6.6 To prevent the top of the piles from being damaged during driving a cushion of soft packing should be interposed between the helmet and the top of the pile. The packing shall be felt coir mats, coir ropes, sacks, asbestos fiber or saw dusting bags. It is important that the cushion should be placed with truly over the top of the pile in order that the force from the hammer blow may be evenly distributed.

12.6.7 All piles shall be driven in correct position and alignment. All additional works that may become necessary due to defective driving of pile etc. should be done

at the expense of the contractor. If any pile is broken or damaged while driving the contractor should remove such piles and drive another at the same place without any extra cost.

12.6.8 The entire operations of transporting pitching and driving of piles shall be measured under one item for payment purpose. The pile shall be transported, pitched and driven to required depth as directed by the Engineer-in-charge.

## **12.7 FENDERS**

### **12.7.1 General**

The layout of the facilities and the proposed fender points are shown in the drawings. The arrangement and the shape of fenders shown in the drawings are only tentative and shall be altered/changed, based on detailed designs.

The fenders may be indigenous or imported. The contractor shall procure the rubber dock fenders only from reputed manufactures, approved by the department. The department shall approve only those manufactures who shall produce certificate for the satisfactory performance of the fenders.

### **12.7.2 Type and size of fenders**

'D' type rubber fender to be used on work shall be of sizes 150mm H x 150mm W (overall) as per drawings and schedule of quantities, manufactured by approved manufacturer. The rubber used for manufacturing rubber fender shall be as per ASTM-D-2000-98c. Necessary test certificates, chemical composition of rubber tested in a NABL approved laboratory shall be produced by the contractor.

### **12.7.3 Performance Details of Fenders**

Performance requirements of the fenders are as given in Table below.

| Description of the fendering system | Max. Permissible Deflection (%) | Min. Energy Absorption (Tonne metre) | Max. Permissible Reaction Force (t) | Max. Permissible Hull Pressure (t/m <sup>2</sup> ) |
|-------------------------------------|---------------------------------|--------------------------------------|-------------------------------------|----------------------------------------------------|
| 'D' type fender 150mm x150mm        | 45%                             | 0.25 /m                              | 9.60/m                              | ....                                               |

### **12.7.4 Rubber Compound for Fender Body**

The material used for the fender body shall be natural or synthetic rubber of high quality having sufficient resilience, anti-aging weather and wear resistance

properties to meet all normal service conditions. Natural rubber /Synthetic rubber content shall not be less than 40%. The material shall be homogeneous, and shall not have any defective impurities, pores or cracks etc. and shall satisfy the physical test requirements as given in the following table based on the standards set by ASTM 2000-77a or its equivalent.

#### **12.7.5 Installation**

While submitting the tender, tenderer shall specify the method by which the fender is installed. The installation work shall be carried out in accordance with the requirements of the Engineer-in-charge, employing sound engineering techniques and modern methods with the approval of the Engineer-in-charge

#### **12.7.6 Rate**

The rates quoted for the item of providing and fixing fenders shall be inclusive of all charges such as packing and forwarding charges, freight, transit/risk insurance charges, taxes, duties including customs duty if applicable, all fixtures and accessories etc., making necessary holes in the concrete structure for providing anchor bolts etc. complete. The fixtures shall include all materials required for the installation of the fenders to the RCC frontage and bolts, nuts, washers etc. Any fittings or accessories which may not be specifically mentioned in the specification but which are used or necessary are to be provided by the contractor without extra charge and the fender fixed must be complete in all respects.

### **12.8 PROTECTIVE COATING OF CONCRETE SURFACES**

#### **12.8.1 Surface Preparation**

It shall be ensured that the concrete is cured for a minimum of 21days. The surface is to be made rough and free from Laitance and other contaminants by sweep blasting/ manual scraping, wire brushing.

#### **12.8.2 Application**

Shall follow the procedure mentioned in the Technical Data Sheet of the Manufacturer, the Schedule of Quantities and directions of Engineer-in-Charge. The specification of the protective coating system is given below:-

|      | First Coat                 | Second Coat & Third Coat | Finishing Coat                  |
|------|----------------------------|--------------------------|---------------------------------|
| Type | Two Pack Epoxy, cured cold | Two pack, Top Coat       | Two pack Aliphatic Polyurethane |

|                 |                                                                                    |                                                                           |                                    |
|-----------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------|
| Composition     | Two pack, Interpenetrating Polymer Network technology based Epoxy Coating / sealer | Two pack, Interpenetrating Polymer Network technology based Epoxy Coating | Aliphatic Isocyanate with pigments |
| Mixing Ratio    | Base: Catalyst; 1:1 by volume                                                      | Base: Catalyst; 1:1 by volume                                             | Base: Catalyst; 1:1 by volume      |
| Application     | Brush, Roller or Airless and conventional spray                                    | Brush, Airless spray                                                      | Air/ Airless spray , Brush         |
| Recommended DFT | 50 microns per coat                                                                | 100 microns per coat                                                      | 50 microns per coat                |
| Colour          | Clear/ Grey                                                                        | Assorted shades                                                           | Assorted                           |
| Finish          | Matt                                                                               | Smooth and Semi Glossy                                                    | Semi Glossy / Glossy               |

## 12.9 PROVIDING FLOORING WITH ANTISKID FLOOR TILES

12.9.1 The tiles shall be set in cement mortar 1:4 (1 cement: 4 sand) of average 20 mm thick laid to required level/ slope. Before laying cement mortar, the concrete surface shall be scrubbed with wire brush, all loose particles, foreign matters etc. shall be removed and the surface shall be made clean. Any undulations in the concrete shall be chipped off or made good with additional concrete of the same grade used for the under layer. The surface thus prepared shall be wetted and smeared with a coat of cement slurry using cement at the rate of 2.2 kg/m<sup>2</sup> of area just before the application of the mortar, so as to get good bond between base course concrete and plastering. For fixing tiles to mortar, neat cement slurry of honey like consistency using cement at the rate of 3.3 kg/m<sup>2</sup> shall be smeared on top of mortar bed. The joints between the tiles shall be uniform and of minimum thickness.

12.9.2 After laying the tiles, the surplus cement grout along the joints shall be cleaned off. The day after the tiles are laid, all joints shall be cleaned with wire brush to a depth of 5mm and pointed with tile jointing powder, of same colour as tiles, of approved make.

12.9.3 When the floor is ready to use the same shall be washed clean and dried with soft cloth or linen. If any tile is disturbed or damaged it shall be refitted or replaced and properly jointed and pointed.

12.9.4 Measurement of the work under this head including cement mortar bed shall be made on the basis of the area of work done and rate quoted shall include the

cost of all labour, materials, scaffolding etc required for completion of work.

#### **12.10 STAINLESS STEEL MOORING RINGS**

Mooring rings shall be made from 25mm dia 316 grade stainless steel bars with an outer diameter of 200mm. Suitable eyebolts shall be supplied with the mooring rings for fixing to the deck face in accordance with the drawings.

## **13.0 CASTING AND DRIVING OF R.C.C. PRECAST PILES**

### **13.1 GENERAL**

These specifications shall be read in conjunction with the detailed specifications for materials to be used on the works and detailed specifications of items of work and if these specifications contradict with the provisions under detailed specification for materials and detailed specifications of items of works, the former shall prevail.

### **13.2 CASTING OF R.C.C. PILES**

13.2.1 The R.C.C. piles are to be cast as per dimensions and details shown in the drawing.

13.2.2 The piles are to be cast on casting platform prepared by the contractor at his own cost at the casting yard. The casting yard and casting piles should be arranged in such a manner that the piles cast earlier are available for driving immediately after the curing period is over and test results of all concrete cubes are obtained. The contractor should arrange for all materials required for casting platform, side shuttering and its side supports and other sundry works.

13.2.3 The casting platform or the base on which the moulds rest for casting piles shall be sufficiently strong to take the weight of piles etc. coming over it safely without any settlement or sinkage and the same shall be always at perfect level. The mould should be accurate in dimension, if made of timber they should be strong and rigid. All joints should be watertight to retain the liquid cement concrete at the time of concreting. In order that they may be easily removed the sides should be fixed with wedges and not nailed.

13.2.4 The reinforcement must be fabricated strictly in accordance with the relevant drawings and in accordance with specifications laid down. For the splicing the main reinforcement of piles only butt welding shall be used. Butt welding of steel bars shall be done in accordance with specifications attached separately and as directed by the Engineer-in-charge. Sampling, strength test and acceptance criteria for the butt welded reinforcement bars shall be in accordance with the details given in specifications for butt welding of main reinforcement.

13.2.5 Before the reinforcement is placed in the moulds the base should be cleaned by a jet of compressed air or by brushing. The top surface of the casting platform should be provided with craft paper before casting the pile. As regards the sides, all the joints must be made even and waterproof and the surface applied with form oil or grease.

13.2.6 The reinforcement should be placed in the mould in perfect alignment and the

same should be maintained in the same position with suitable cement cover blocks. No displacement of the grills shall be allowed at the time of concreting.

13.2.7 Proper cover for the reinforcement of the piles must be ensured by providing adequate number of space blocks in cement concrete fixed between the sides of the mould and the reinforcement.

13.2.8 Toggle holes for lifting the piles shall be provided as per the drawing with G.L. sheet sleeves at no extra cost.

13.2.9 The concrete shall be of mix M40 grade using 20 mm graded granite metal with cement content not less than 450kg/m<sup>3</sup>, the water cement ratio not exceeding 0.45. The concreting procedure, preparation of formwork, curing etc. shall be in accordance with the specifications detailed in IS 456.

13.2.10 Mixing should be done only in Mechanical mixers and concrete should be mechanically vibrated. Mixing should proceed for not less than 2 minutes from the time when all materials including water are in the drum. The water should enter the drum at the same time as the dry materials to ensure even distribution. When the materials and water have been mixed for the required period the entire contents shall be discharged in one operation for delivery to the moulds.

13.2.11 The concrete shall be deposited in two layers, in each mould working from the top to the point of the piles and no time should be lost between placing of concrete in the mould and mechanically vibrating it.

13.2.12 The pile should be cast in one operation. No construction joints will under any circumstances be allowed.

13.2.13 Concrete shall be well vibrated with a suitable needle type immersion vibrator. Care must be taken to avoid segregation by excessive vibration.

13.2.14 The vibrator must be operated only by experienced men and care should be taken to vibrate the concrete evenly until it becomes uniformly plastic and not vibrated excessively in any one part to the extent that the cement grout separates from the mixture. Care must also be taken to avoid contact with moulds or reinforcement.

13.2.15 After the piles are cast they should be cured with water for at least 21 days. This may be ensured by covering the sides and top of piles with damp sack or by putting small clay bunds on top of piles and making water to stagnate inside the bund.

13.2.16 As the concreting work progresses a minimum of one sample from each pile shall be collected and 6 cubes are made from this sample for testing at 28 days

as directed by the Engineer-in-charge. The cost of sampling, making cubes, curing and testing shall be borne by the contractor. Test results in approved proforma shall be submitted to the department. At first only 3 cubes from each pile shall be tested.

13.2.17 In case the above results reveal that the sample tested fail to meet the acceptance criteria laid down in I.S. 456-2000, for the specified grade of concrete the Chief Engineer may take one of the following decisions.

- (i) Instruct contractor to carryout additional test on balance 3 cubes at his own cost and review the results. If this also fails then,
- (ii) Accept the work at his discretion and such a case may make a reduction in the rate of appropriate item
- (iii) Reject the pile in which case the contractor shall not be eligible for any payment.

### **13.3 TRANSPORTING AND DRIVING OF R.C. PILES**

13.3.1 All plants, machineries, equipments, other accessories, platform, floaters, temporary works etc. including consumables required for transporting, driving and pitching of the piles shall be arranged by the contractor.

13.3.2 The area of installation of the piles includes shallow area and the contractor shall arrange at his own cost, pre-dredging, if required for producing necessary water depth for the floatation of pile driver and facilitating pitching of the pile. The contractor shall visit the site and satisfy himself of the water depth available in the area and assess the difficulties involved in the work. The rate quoted for transporting and pitching of piles shall be inclusive of the cost of pre-dredging if required for providing necessary floatation including removal of loose rubble stone or other obstructions.

13.3.3 The number of days that the pile will have to be kept in casting yard for curing before they are removed from the casting bed for driving shall be as decided by the Engineer-in-charge. In case any dispute arises on this point, the decision of the Chief Engineer shall be final. However, in any case, the driving of piles shall be commenced on completion of casting of 50% of piles.

13.3.4 When the piles are lifted and transported, they should be suspended or supported only at the toggle holes provided for the purpose. The lifting and transporting should be done only with suitable slings attached to the bolts to be placed in the toggle holes (at the time of lifting). If necessary additional supports between the toggle holes may also be provided in consultation with the Engineer-in-charge to avoid cracking and other damages. Bumping and

other heavy blows should be avoided at all costs.

- 13.3.5 For transporting piles to the site of pitching and driving the contractor shall bring his own floats and all other equipments required for the purpose.
- 13.3.6 To prevent the top of the pile from being damaged during driving a cushion of soft packing should be interposed between the helmet and the top of the pile. The packing shall be of felt, coir mats, coiled rope, sack, asbestos fibre or saw dusting bags. It is important that the cushion should fit truly over the top of the pile in order that the force from the hammer blow may be evenly distributed.
- 13.3.7 All piles shall be driven in correct position and alignment. All additional works that may become necessary due to defective driving of piles etc. should be done at the expense of the contractor.
- 13.3.8 A record of pile driving should be kept in the proforma approved by the Engineer-in-charge.
- 13.3.9 When hard driving is encountered the pile may be sunk with the aid of water jets with specific approval of the Engineer-in-charge. When adopting this method the contractor should ensure that the adjoining piles are not disturbed.
- 13.3.10 If the jet is used as an auxiliary to a hammer or to make the driving more easy the water jet should be shut off before completing the driving and a minimum length of one metre at the finishing stage should be driven by means of hammer blows only.
- 13.3.11 The contractor will not be allowed any extra rates for jetting and sinking of pile. The rates for driving shall be inclusive of all these operations. If any pile is broken or damaged while driving, the contractor should remove such pile and drive another at the same place without any extra cost.
- 13.3.12 The entire operations of transporting, pitching and driving of piles shall be measured under two different heads for payment purposes viz. (a) removing from stacking/ casting yard, transporting and pitching and (b) driving. The payment for driving shall be made only for the actual depth of driving from the pitched level to the founding level of the pile.
- 13.3.13 After completing transporting, driving and pitching of the piles, all the plants, machineries etc. including the temporary works shall be removed from the site and the site shall be cleared by the contractor at his own cost as directed by the Engineer-in-charge.

**SIGNATURE OF BIDDER**

## **14. SUPPLY AND INSTALLATION OF ELECTRICAL ITEMS**

### **14.1 Standards**

Erection, testing and commissioning of the equipments covered shall be done as per standard codes of practice and shall comply with requirements of following Indian Standards and other relevant standards, Indian Electricity Rules and acts and also to the regulations that are in force at the place of installation.

IS: 1255: Code of practice for installation and maintenance of power cables Up to and including 33 kV rating.

IS: 5216: Guide for safety procedures and practices in Electrical work

IS: 100118: Code of practice for selection, installation and maintenance for Switchgear and control gear-Part-III Installation.

IS: 13408: Code of practice for the selection, installation and maintenance of electrical apparatus for use in potentially explosive atmospheres (other than mining application of explosives processing and manufacture).

IS: 3043 / 87: Code of practice for installation & maintenance of earthing of installation.

### **14.2 Reference**

Following documents shall be read in conjunction with this specification:

- (i) Scope of work and special requirements
- (ii) Schedule of items of work
- (iii) Engineering Specification & Data sheet of General requirements of Electrical system

### **14.3 General Technical Specification - Supply of Materials**

All materials required to complete the work as per given specifications & drawings etc, must be manufactured and supplied using fresh raw materials. Re-moulded, re-circulated materials are not acceptable. The procurement of materials must be made directly from manufacturer or through authorized dealer/distributors. Documentary evidences to this effect are to be made available to the engineer-in-charge for necessary checks / verification of source of supply of materials. Second hand materials/ partial used materials/ used materials would not be acceptable. The offer should be as per Technical Specification without any deviation. But any deviation felt necessary to improve performance, efficiency and utility of equipment must be mentioned in the

Deviation Schedule with reasons duly supported by documentary evidences during pre bid meeting. Such deviations suggested may or may not be accepted by the employer. Any deviations projected after the pre bid meeting shall not be entertained at any cost.

#### **14.4 LED Lamps**

Outdoor Foot Light 9W IP 65 Decorative/Ornamental LED Luminaires.

#### **14.5 LT Cables**

##### **14.5.1 Codes & standards**

All standards, specifications and codes of practice referred to herein shall be the latest editions including all applicable official amendments and revisions as on date of opening of bid. In case of conflict between this specification and those (IS: codes, standards, etc.) referred to herein, the former shall prevail. All the cables shall conform to the requirements of the following standards and codes for 1.1KV grades if any applicable.

##### **14.5.2 Technical particulars of LT- FR cables**

The cable shall be manufactures as per latest is applicable

|                        |   |                                   |                                              |
|------------------------|---|-----------------------------------|----------------------------------------------|
| Size of Cable          | - | As Per Schedule of Works          |                                              |
| Voltage Rating         | - | 100 V                             |                                              |
| Conductor Material     | - | Plain Aluminium / CU as required. |                                              |
| Insulation             | - | Type A PVC / XLPE Compound        |                                              |
|                        |   | Tolerance                         | 0.1 mm + 0.1 nominal thickness of insulation |
| Inner sheath thickness | - | As per latest IS                  |                                              |
| Outer sheath           |   |                                   |                                              |
|                        | - | Process of application            | Extrusion                                    |
|                        | - | Thickness                         | As per IS.                                   |
|                        | - | Armour                            | As per IS.                                   |

##### **14.5.3 Laying of Cable**

The cable shall be clamped using suitable GI clamps on the walls from electrical panel to the LED luminaires as required.

##### **14.5.4 Polycarbonate Junction Box**

Hensel Poly carbonate Box without mounting plate (with transparent lid) (136

mmx 253 mm x 115 mm) IP 65 with metric knockouts for cable entry, cable glands (2 nos), din rail, 6A SP MCB, supports for taking foot light connection.

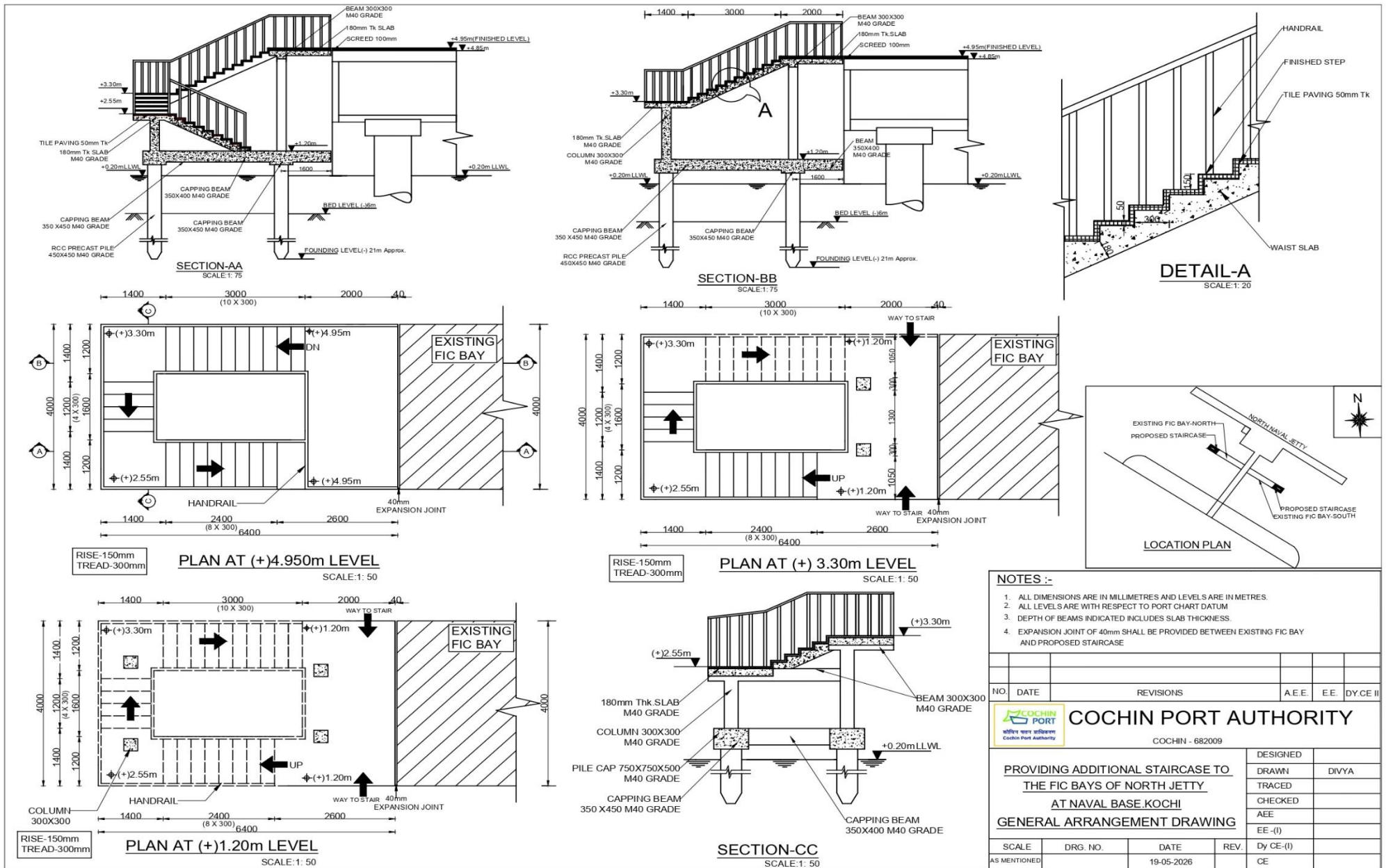
#### 14.6 Approved Makes

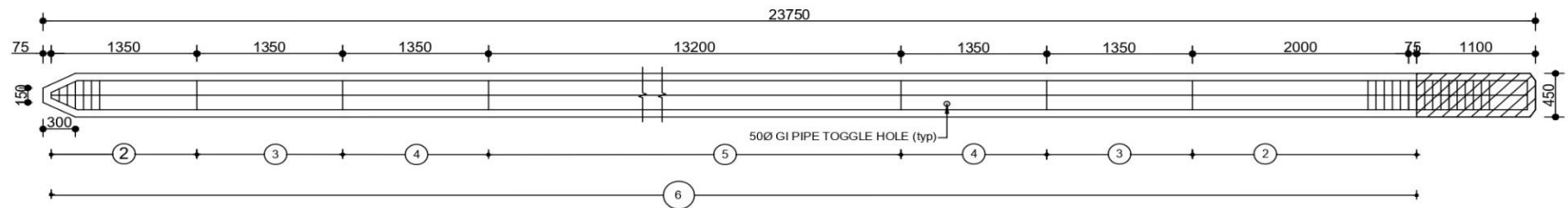
14.6.1 Specifications of materials and their approved makes are listed below:

| Sl. No. | Materials                            | Approved Make                                                                                                                             |
|---------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | 1.1 KV XLPE CABLE                    | CCI / INCAB/ UNIVERSAL/ RPG/ NICCO/ TORRENT / POLYCAB / PARAMOUNT/ KEI / HAVELLS / FINOLEX / V-GUARD/ L&T / PRIMECAB / RR KABEL / GLOSTER |
| 2       | MCB                                  | LEGRAND / ABB / INDOASIAN / L & T / SIEMENS /SCHNEIDER                                                                                    |
| 3       | LED light fittings                   | OSRAM / BAJAJ / CG / PHILIPS / WIPRO / GE / LIGHTING TECHNOLOGIES / SURYA                                                                 |
| 4       | PVC CONDUIT PIPES / CASING & CAPPING | BALCO / ATUL / GEO / CLIPSAL / PRECISION / AVONPLAST / KONSEAL                                                                            |
| 5       | WIRING CABLE                         | FINOLEX / QFLEX / RR KABEL / RPG CABLES / LAPP KABEL / V-GUARD / HAVELLS / L&T / RALLISON                                                 |

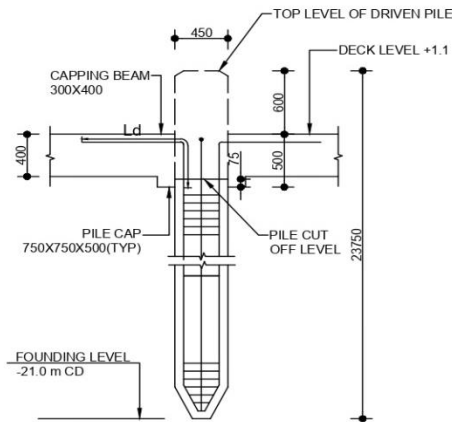
**SIGNATURE OF BIDDER**

## **15. DRAWINGS**

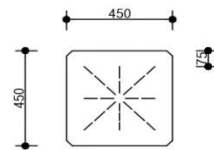




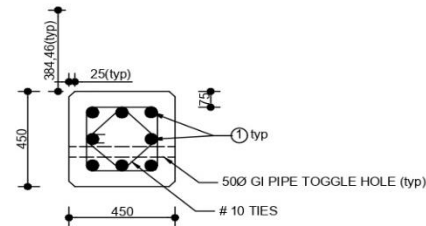
LONGITUDINAL SECTION OF 23.75 m LONG PRECAST PILE  
SCALE 1:20



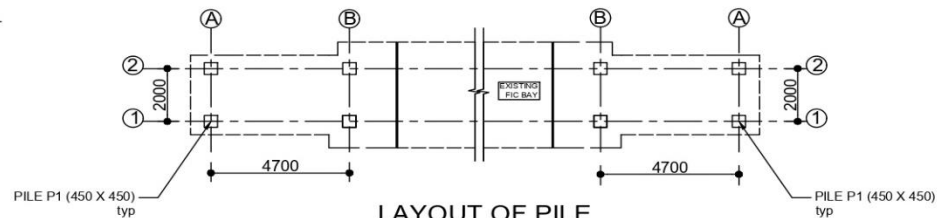
CONNECTION DETAILS AT  
AT TOP OF PRECAST PILE  
SCALE 1:20



PLAN AT TOP  
SCALE 1:10



CROSS SECTION OF PRECAST PILE  
SCALE 1:10



LAYOUT OF PILE  
SCALE 1:80

#### LEGEND :-

1. 8 # 25
2. # 10 TIES @ 75 C/C
3. # 10 TIES @ 100 C/C
4. # 10 TIES @ 125 C/C
5. # 10 TIES @ 150 C/C
6. # 16 STIFFNERS @ 1500 C/C

#### NOTES :-

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES.
2. GRADE OF CONCRETE MIX SHALL BE M40
3. # INDICATES TOR STEEL BARS
4. CLEAR COVER TO TIES SHALL BE 75mm
5. SPLICING OF MAIN BARS SHALL BE DONE BY BUTT WELDING.
6. NOT MORE THAN 50% OF BARS SHALL BE SPLICED AT A SECTION
7. Ld-INDICATES DEVELOPMENT LENGTH
8. DEVELOPMENT LENGTH=LAP LENGTH- 36 X DIA OF BAR.

| NO. | DATE | REVISIONS | A/E | E.E. | DY.CE II |
|-----|------|-----------|-----|------|----------|
|     |      |           |     |      |          |



COCHIN PORT AUTHORITY

COCHIN - 682009

STAIRCASE AT FIC BAY  
AT NORTH NAVAL JETTY  
PRECAST PILE LAYOUT AND DETAILS

|          |       |
|----------|-------|
| DESIGNED |       |
| DRAWN    | DIVYA |
| TRACED   |       |
| CHECKED  |       |
| AEE      |       |
| EE - (I) |       |
| DYCE-(I) |       |
| CE       |       |

| SCALE    | DRG. NO. | DATE       | REV. |
|----------|----------|------------|------|
| As shown |          | 19-05-2026 |      |

