

TENDER DOCUMENT

Tender No. E- 48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.

First Cover – Technical Bid

Tender Document

Civil Engineering Department 3rdfloor, 'Port House', Shoorji Vallabhdas Marg, Ballard Estate, Mumbai – 400 001 Tel. No.: +91-22-66564031 FAX No.: +91-22–22616804

Website: http://www.mumbaiport.gov.in

Any amendments to this tender including the dates, corrigendum, clarifications, if any etc. shall <u>only</u>be posted on the website of Mumbai Port Trust & the e-portal of Govt. of India (<u>www.mumbaiport.gov.in</u>&www.eprocure.gov.in). The tenderers are required to keep themselves informed of the developments by visiting websites regularly.



<u>Mumbai Port Trust</u> <u>Civil Engineering Department</u> <u>Tender No. E- 48/2021</u>

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.

Sr. No.	Particulars	Date	Time
1.0.			
1.	Tender e-publication date	27.08.2021	10:00 Hrs.
2.	Document Download start date	27.08.2021	10:00 Hrs.
3.	Document Download End Date	17.09.2021	17:00 Hrs.
4.	Pre-bid Meeting Date	03.09.2021	15:00 Hrs.
5.	Bid Submission Start Date	12.09.2021	10:00 Hrs.
6.	Bid Submission End Date	17.09.2021	15:00 Hrs
7.	Technical Bid Opening Date	18.09.2021	15:00 Hrs.
8.	Price Bid Opening Date	Will be Conveyed sub	sequently after
		Technical Bid	Scrutiny
<u>.</u>	*	***	

TENDER SCHEDULE

The Pre Bid Meeting will not be held physically due to present Covid-19 conditions,. Prospective bidders are requested to mail Pre Bid queries to Shri D.W.Narkhede, Executive Engineer at <u>dw.narkhede@mumbaiport.gov.in</u> till the date mentioned in the Bidding Schedule. The replies to the Pre Bid Queries will be published on CPP Portal and MbPT website.

Tender No. E- 48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.

Salient Features of the Tender

Sr. No.	Particulars	Details		
1.	Name of Work	Tender No. E- 48/2021 – Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU,GWMOT.		
2.	Scope of Work	Please refer Tender Notice		
3.	Estimated Cost of work put to tender	Rs. 25,55,545/-		
4.	Tender Fee	Rs. 5250/- (including 5%GST) payable online at <u>www.eplatform.mbptedi.gov.in</u>		
5.	Earnest Money Deposit	The EMD for the subject work is Rs. 52,000/- However, as per the guidelines of Govt. of India, the EMD for the said work is Nil. However, Declaration in the format enclosed as Annexure-3 is to be furnished by the tenderer		
6.	Performance Security Deposit	3% of the contract amount (Work Order Amount) to be lodged by the successful bidder within 21 days of date of receipt of work order.		
7.	Security Deposits	Performance Security Deposit		
8.	Completion Period	5(Five) Months, (excluding monsoon) from the date of release of site.		
9.	Validity of Offer	180 days from the date of opening of First Cover		
10.	Price Variation	Not applicable		
11.	Material Advance	Not applicable		

Tender No. E- 48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.

Contents of Tender Document

SI. No.	Contents
1.	Tender Activity Sheet & Tender Information
2.	Content of Tender Document
3.	Tender Notice
4.	Instructions for Online Bid submission
5.	a) Instructions for preparation and submission of Tender
	b) Addendum to instructions for preparation and submission of Tender
6.	a) Conditions of Contract
	b) Addendum to Conditions of Contract
7.	a) Technical Specifications
	b) Addendum to Specifications
8.	Annexure 1 –Letter of Application
9.	Annexure 2 – Undertaking by the Tenderer
10.	Annexure 3: EMD Declaration Form
11.	Annexure 4 – Tenderer's Particulars
12.	Annexure 5 – Annual Financial Turnover
13.	Annexure 6 – Experience of Similar Work
14.	Annexure 7 – ECS Mandate Form
15.	Annexure 8 – Integrity Pact
16.	Annexure 9 – Undertaking by the Contractor for DEP
17.	Annexure 10 - NON - DISCLOSURE AGREEMENT
18.	Proforma – I – Generalised Draft of Contract Agreement
19.	Proforma – II – Bank Guarantee Bond
20.	Proforma – III (A) – Specimen Bill Form 1 (For Estimated Bill)
21.	Proforma – III (B) – Specimen Bill Form 2 (For Measured / Final Bill)
22.	Proforma – IV – Bid Security Format – Not Applicable for this tender.

Tender No. E- 48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.

Tender Notice

1. Invitation:

Digitally signed and uploaded, Online bids under Single Stage Two Cover system are invited by the Chief Engineer on behalf of Board of Trustees of the Port of Mumbai (also referred to as Mumbai Port Trust) from the experienced, resourceful firms with proven technical and financial capabilities as stated in Clause No. 2 herein below and from contractors registered with MbPT in Civil Registration Cycle 2019-2023 in Class 'C' & above under Speciality V ,for executing the work of "Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU,GWMOT".

- 1.1. Interested eligible tenderers may obtain further information and inspect the tender documents at the e-Procurement website <u>https://eprocure.gov.in/eprocure/app</u>_This website can also be accessed by clicking the link at MbPT's Website <u>http://www.mumbaiport.gov.in</u>.
- 1.2. The Tender is to be submitted under two cover system, the first cover containing technical information and second cover containing the price bid.

1.3. Salient Features/Scope of the Work:

The work comprises of Providing and constructing Shed in Galvanised M.S. structural steel for the Foam Tanks with galvalum sheet roof and side claddings at Second Chemical Berth Pirpau, and replacing the chequered plate provided to close the gap between main berthing platform and mooring platform at Second Chemical Berth, GWMOT. etc. as described in Schedule of Quantities & Rates and as directed at site.

a)	Estimated Cost	Rs. 25,55,545/-	
b)	Earnest Money	The EMD for the subject work is Rs. 52,000/-	
	Deposit EMD	However, as per the guidelines of Govt. of India,	
		the EMD for the said work is Nil. However,	
		Declaration in the format enclosed as Annexure-3	
		is to be furnished by the tenderer	
c)	Performance Security 3% of the contract amount (Work Order Amo		
	Deposit	to be lodged by the successful bidder within 21	
		days of date of receipt of work order.	
d)	Completion Period	5(Five) Months (excluding monsoon) from the date	
	of release of site.		
e)	Free Maintenance	One year from the date of completion of work.	
	Period		

1.4. The other pertinent information of the work is as under.

f)	Liquidated Damages	The liquidated damages for delay to complete
		the work covered under this tender is 0.50% (1/2
		%) of the contract price for delay of each week or
		part thereof in completion of work subject to
		maximum ceiling of 10% of contract price.

2. Eligibility Criteria:

2.1. To qualify for the tender, the tenderer must satisfy the Financial and Technical eligibility criteria, as detailed in Table below.

	Financial Criteria	Technical Criteria					
Estimate d Cost of Work in Rs. Lakhs	Minimum Average annual financial turnover during the last THREE years ending 31.03.2021 in Rs. Lakhs	<u>THREE</u> similar works completed during last SEVEN years ending 31.07.2021 <u>each</u> costing not less than in Rs. Lakhs	OR	<u>TWO</u> similar works completed during last SEVEN years ending 31.07.2021 <u>each</u> costing not less than in Rs. Lakhs	OR	<u>ONE</u> similar work completed during last SEVEN years ending 31.07.2021 Each costing not less than in Rs. Lakhs	
(1)	(2)	(3)		(4)		(5)	
	9.32	12.42		15.53		24.85	

Note :"Similar works" means the works of Civil Engineering such as fabrication and erection of structural steel work for sheds buildings and in any civil structures.

2.2 The tenderer shall also fulfill the following criteria to be eligible to bid.

- a) The tenderer should be registered under (a) The Employee's State Insurance Corporation, Maharashtra & (b) Employee's Provident Fund Organization and the firm shall submit certificates thereof.
- b) The tenderer shall furnish complete information in respect of their firm, including financial and technical capabilities etc. in Annexure-'A' and Proforma1 and 2 enclosed with the Tender Notice.
- c) The tenderers will be short-listed based on the Eligibility criteria detailed in Clause Nos. 2(A), 2(B) &2(C) above and the information submitted by the tenderers in the Technical Bid. The Second Cover of the short-listed tenderers will be opened on the date and time, which will be intimated to them subsequently.
- d) The contractors registered with MbPT under class "C" and above in speciality" V " in the Civil Registration Cycle 2019-2023 are exempted from submission of documents pertaining to Pre-Qualification, No documents pertaining to the Technical and financial qualifications are required to be submitted.
- e) The tenderer shall have completed the 'similar work/s' as 'Prime Contractor' or 'proportionately as a member of Joint Venture' or 'approved sub-contractor' with reference being submitted to confirm satisfactory performance from the employer.

- f) The employer shall consider the bids which have been determined to be eligible and responsive to the bid documents and may award contract to one single bidder. It shall be expressly understood here that the decision of the employer in this regard shall be final and binding on the bidder.
- g) In order to cross verify the work experience claimed by the bidders, TDS certificate from their previous employers shall be submitted. In case of difficulty on submission of TDS, Form 26AS of IT Department shall be submitted.

2.3 Joint Venture / Consortium: Not allowed for this tender.

- 2.4 The tenderer shall furnish complete information in respect of their firm, including financial and technical capabilities etc.in Annexure '1 to 8' enclosed with the Tender document.
- **2.5** The tenderers will be short-listed based on the Eligibility criteria detailed in Clause No.2.1 and submission of documents as per clause 5.4 below. The Second Covers of the short-listed tenderers will be opened on the date and time, which will be intimated to them subsequently.
- 3. The Pre Bid Meeting will not be held physically due to present Covid-19 conditions,. Prospective bidders are requested to mail Pre Bid queries to Shri D.W.Narkhede, Executive Engineer at dw.narkhede@mumbaiport.gov.in till the date mentioned in the Bidding Schedule. The replies to the Pre Bid Queries will be published on CPP Portal and MbPT website.
- 4. **Procedure for obtaining Tender Documents:**
- 4.1. Interested tenderers will have to download the tender document from MbPT website www.mumbaiport.gov.in/eprocure/app and/or www.eprocure.gov.in. The downloading of the tender documents shall be carried out strictly as provided on the web site. No editing, addition / deletion of matter shall be permitted, if such action is observed at any stage, such bid is liable for outright rejection.
- 4.2. The bidder is responsible to download Addendums/ Amendments/ Errata/ replies to the queries of the bidder etc. if any, issued by the employer, from web site before the submission of the Bid Document. Any shortfall in submissions of the said Addendum/ Amendments/ Errata/ replies to the queries of the bid document, etc. along with the downloaded documents while submitting the bid documents will not be considered. Incomplete Bid documents shall be rejected outright.

5. Bid Submission

5.1 The detailed procedure for online bid submission has been provided in "Instructions for Online Bid Submission" of this tender.

- 5.2. Complete bid submission is online on the website www.eprocure.gov.in/eprocure/app The payment of Tender Fee shall be done online. Tenderer shall visit https://eplatform.mbptedi.gov.in for making the payment for Tender Fee and choose the option "Latest Tenders" on the dashboard. After selecting the relevant tender, the tenderer can make online payment after entering the basic details of bank for refund purpose, the receipt generated as PDF file of Tender Fee shall be uploaded by the tenderer on CPP Portal under relevant option as a proof for the payment, failing which Tender will not be opened. The details of bank payment reference number and payment date also need to be entered while uploading in the relevant fields.
- 5.3. Since the Tender set is non-transferable, the tenderer who is making the online payment should only utilize the same for submitting his/her own Tender on CPP portal
- 5.4. The following documents are required to be submitted online.

Sr.	Documents to be submitted online		
No.			
1	Scanned copy of the online receipt for tender fees		
	OR		
	the scanned copy of original certificate issued from: -		
	i. District Industries Centers (DICs)		
	ii. Khadi& Village Industries Commission (KVIC)		
	iii. Khadi& Village Industries Board (KVIB)		
	iv. Coir Board		
	v. National Small Industries Corporation (NSIC), Govt. of India enterprises		
	under "Single Point Registration Scheme" of Ministry of MSME		
	vi. Directorate of Handicrafts and Handloom		
	vii. Any other body specified by Ministry of Micro Small& Medium Enterprises		
	(MoMSME)		
	viii. Udyam Adhar Memorandum (UAM)		
	under the public procurement policy with effect form 18.9.2015 towards		
	availing benefits like the exemption of cost of tender fee AND		
	AND Annexure 3 EMD Declaration		
	Copy of Registration Letter under MBPT Civil Registration Cycle 2019-2023, if applicable.		
2	Scanned copy of signed Integrity Pact (Annexure 8) of the Employer and Bidder		
2	attached with the tender		
3	Scanned copy of duly filled & signed the letter of Application (On the Letter Head		
5	of the Bidder), undertaking, ECS Mandate (Annexures '1','2',7 '6' & '8')		
4	Scanned copy duly filled & signed Annexures 4, 5,6 along with Supporting		
	Documents for Eligibility criteria mentioned in Tender Notice .		
5.	Scanned copy of valid registration certification with Employee's Provident Fund		
	Organisation.		

6	Scanned copy of valid registration certification with Employee's State Insurance
	Corporation.
7	Technical Bid (First Cover) in full duly filled in and signed at required places.
8.	Scanned copy of Reply to pre-bid & Corrigendum's if any.
9.	Financial Bid Second Cover in full duly filled in and signed at required places along
	with BOQ in PDF and Excel proforma

5.5. **Price Bid:**

The bidder shall submit his offer in BOQ online in the Excel format provided in Price Bid. Bidders are requested to quote their Offer Price for the subject work in the Excel file (.xls) published along with this tender. The items of BOQ is published separately in PDF file.

- 5.6. Performance Security Deposit will be accepted only in the form of Crossed Account Payee Demand Draft or Banker's Pay Order from Nationalized or Scheduled Banks payable at Mumbai and drawn in favour of "The Board of Trustees of the Port of Mumbai". Performance Security Deposit in cash or in the form of Bank Guarantee will not be accepted.
- 5.7. Bids will not be considered in case the signed Integrity pact is not uploaded in the form and manner described at 5.4(2) above.
- 6. The tender documents are NOT TRANSFERABLE.
- 7. This clause is deleted.
- 8. This clause is deleted.

9. **Completion period:**

The Completion period for the work covered under this tender is 5(Five) Months (excluding monsoon) from the date of release of site. Monsoon period will be reckoned from 1st June to 30th September of the year. The Completion Period will commence from the date of release of site. Provisions of clause no 9.5 of GCC may be referred for further details. *The work place is adjacent to the Second Chemical Berth and therefore the required hot work permission is only given in the absence of inflammable cargo on the berth & therefore the days, when permission for hot work is not given will be considered as non working days.*

- 10. The bidders shall give an undertaking as per Annexure-'2' that they have not made any payment or illegal gratification to any person/ authority connected with the bid process so as to influence the bid process and have not committed any offence under the PC Act in connection with the bid.
- 11. The bidders shall disclose any payments made or proposed to be made to any intermediaries (agents etc.) in connection with the bid.

- 12. The Board of Trustees of Port of Mumbai reserves the right to reject any or all tenders without assigning any reasons thereof.
- 13. The Board of Trustees of Port of Mumbai reserves the right to cancel the work at any stage of contract without assigning any reasons thereof.
- 14. The rate quoted by the contractor shall be **exclusive of GST** but inclusive all other incidental charges that the contractor may have to bear for the execution of the works.
- 15. **Goods and Service Tax (GST) as applicable shall be reimbursed to the contractor through the interim bills against the invoices raised.** However, the taxes like Income Tax etc. will be deducted at source as applicable as per prevailing rules and regulations.
- 16. For any details/clarification Superintending Engineer, MOT & MSRC can be contacted on 66564509 at e-mail <u>am.sonkusle@mumbaiport.gov.in</u> or Executive Engineer, PP GWMOT on 66564532 at e-mail <u>dw.narkhede@mumbaiport.gov.in</u> or Shri.-PMH Barge, Asstt. Executive Engineer PP, GWMOT on 9869459376 or at email<u>pmh.barge@mumbaiport.gov</u>.in and at their office address 3rd floor Port Bhavan, S V Road, Mumbai 400 001
- 17. Tenderers who are registered with:
 - i. District Industries centers (DICs)
 - ii. Khadi& Village Industries commission (KVIC)
 - iii. Khadi& Village Industries Board (KVIB)
 - iv. Coir Board
 - v. National Small Industries Corporation (NSIC), Govt. of India enterprises under "Single Point Registration Scheme" of Ministry of MSME
 - vi. Directorate of handicrafts and handloom
 - vii. Any other body specified by Ministry of Micro Small & Medium Enterprises (MoMSME)
 - viii. Udyog Adhar Memorandum (UAM)- Udyam Registration.

under the public procurement policy with effect from 18.9.2015, bidders are eligible for availing benefits of exemption of cost of tender fee and EMD. They are required to submit documentary proof of such registration along with the offer, for claiming the exemptions else their offer will not be considered valid.

18. INTEGRITY PACT:

1 The scanned copy of Integrity Pact (IP) Agreement signed by the employer is uploaded along with the tender document. The bidder has to download the IP Agreement, sign and shall upload the same scanned copy of signed IP Agreement along with the bid. The unsigned scan copy of IP Agreement by the bidder shall be treated as invalid and the bid shall be considered as non-responsive bid.

2 In case the letter of intent / work order of contract / procurements is for Rs. 45 Lakhs and above, the successful bidder shall execute Integrity Pact Agreement on stamp paper of appropriate value. The scanned copy of Integrity Pact Agreement signed by the Employer, Bidder and uploaded by the bidder with the tender document shall be treated as Integrity Pact, till the formal execution of Integrity Pact by the successful bidder. 3 IP essentially envisages an agreement between prospective vendors / bidder, and Mumbai Port Trust, committing the person / officials of both sides to not to resort to any corrupt practice in any aspect of the contract at any stage. Only those venders / bidders who commit themselves to IP with MbPT, would be consider for evaluation of bid. IP would be implemented through Independent External Monitor (IEM), eminent person appointed by MbPT with approval of Central Vigilance Commission. The IEM would asses independently and objectively, as to whether and what extent the parties have complied with their obligations under the IP. IEM would have access to all contract documents, whenever required. The bidder may raise disputes / complaints if any with the IEM. The IEM would examine complaints received by him and give his recommendations / views to the Chairman of Mumbai Port.

4 Shri P.K. Gopinath, IPoS (Retd.) has been nominated as Independent External Monitor (IEM) for the implementation of Integrity Pact whose address is as under:

S – 427, First Floor, GK – 1, New Delhi – 110048 Ph. No. 011 – 4183 1210 Mob. No. : 0099157 66100 Email : <u>krishnagopinath@gmail.com</u>

19. Bidders are directed that the successful bidder will have to sign the Non Disclosure Ageement – Annexure 12 at the initiation of the Project.

20. The works contracts which do not involve transfer of property in goods are to be stamped with stamp duty of only Rs.100 and Rs.500/- and are not to be registered. As per the provisions of the Maharashtra Stamp Act, 1958, the Stamp Duty and registration charges of each tender including tender for works contract will be paid by the contractor/works contractor/successful bidder.

Chief Engineer Mumbai Port Trust

<u>Tender No.E48/2021</u> Provision of Shelter for Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU,GWMOT.

Instructions for Online Bid Submission

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: https://eprocure.gov.in/eprocure/app

REGISTRATION

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid e-mail address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (DSC) (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

T.No.E-48/ 2021; Technical Bid; Page:12.

3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. Earnest Money Deposit shall be paid online at <u>https://eplatform.mbptedi.gov.in</u> and the payment receipt is to be submitted online at CPP portal and copy of the receipt is to be deposited along with the tender.
- 5) Bidders are requested to note that they should necessarily submit their online financial bids in the format provided in the tender and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells

should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

- 5a) Bidder are requested to note that they should submit their online financial bids in the format provided in the tender and no other format is acceptable.
- 5b) Price Bid: The bidder shall submit his offer in BOQ online in the format provided in Price Bid. The items of Bill of Quantities are provided in the PDF format (.pdf file) Bidders are requested to quote the tender percentage in the Excel file (.xls) published along with this tender. Price bid should not be submitted in hard copy format in any case.
- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 3070 2232. Foreign bidder can get help at +91-48-40007451 to 460.

3). ONLINE PAYMENT OF TENDER FEE :

As tender submission is online on CPP portal, the payment of Tender Fee/EMD now also can be done online. Tenderer shall visit https://eplatform.mbptedi.gov.in for making the payment for Tender Fee and EMD and choose the option "Latest Tenders" on the dashboard. After selecting the relevant tender, the tenderer can make online payment after entering the basic details of bank for refund purpose, the receipt generated as PDF file of EMD/Tender Fee/or both (as the case may be) shall be uploaded by the tenderer on CPP Portal under relevant option as a proof for the payment, failing which Tender will not be opened. The details of bank payment reference number and payment date also need to be entered while uploading in the relevant fields. Since the tender set is not transferrable, the tenderer who is making the online payment, should only utilize the same for submitting his/her own Tender on CPP portal.

Tender No. E- 48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU,GWMOT.

Instructions for Preparation and Submission of Tender

On line Tenders in Single Stage Two Cover (Technical bid and Price bid) are invited for the work of **Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.**

- 1.1 The tenders will be received by the Employer online at <u>www.eprocure.gov.in</u> The Employer may at their discretion extend the date for receiving tender.
- 1.2 The tenderers are advised to acquaint themselves with the job involved at the site, examine the buildings & premises, climatic conditions, availability of labour, quarry materials, equipment, means of transport, communication facilities, entry restrictions, laws and bylaws of Govt. of Maharashtra or Govt. of India and any other statutory bodies and collect all information that maybe necessary for preparing and submitting the BID and entering into the contract.
- 1.3 The Tenderers shall bear all the costs of visiting the site, collecting the information and for preparing and submitting the bid.
- 1.4 The Tenderer and or his servants and agents will be granted permission to visit the site for the purpose of inspection. The Tenderer will be fully responsible for any injury (whether fatal or otherwise) to himself or his servants and agents or for any loss or damage to property or for any other loss, damage, costs and expenses whatsoever caused which but for the granting of such permission would not have arisen. The Tenderer will be liable to indemnify the Employer against any loss or damage to the property of the Employer or neighbouring property which may be caused due to any act of the Tenderer or his servants and agents.
- 1.5 The Tender prepared by the tenderer, all documents and correspondence in respect of or in connection with the tender and the work to be executed hereunder shall be in English Language only.
- 1.6 The Tenderer shall examine carefully, all instructions, General Conditions of Contract, Specifications, Bill of quantities, Scope of work, Drawings etc. and all documents issued along with and for the purpose of tender, any amendments made there to from time to time, conditions, nature of the ground and substrata, quantity and nature of work, materials necessary for the completion of work, climatic conditions, means of access to the site, the existing roads and other means of communication, and in general shall be deemed to have been examined and obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect his tender. Failure to comply with the requirements of the tender documents will be on tenderers own risks. Tenders, who are not substantially responsive to the requirement of the tender documents, are liable to be rejected.
- 1.7 Tenderer shall bear all costs for preparation and submission of his tender. Employer will not be responsible for or pay for any expenses or losses, which might be incurred or suffered by any tenderer in connection with submission of tender.

2. Earnest Money Deposit (EMD):

The EMD for the subject work is Rs. 52,000/- However, as per the guidelines of Govt. of India, the EMD for the said work is Nil. However, Declaration in the format enclosed as Annexure-3 is to be furnished by the tenderer

- 3. **Performance Security Deposit** of 3% of Contract Price will be accepted only in the form of Crossed Account Payee Demand Draft or Banker's Pay Order from Nationalized or Scheduled Banks payable at Mumbai and drawn in favour of "The Board of Trustees of the Port of Mumbai". Performance Security Deposit in cash or in the form of Bank Guarantee will not be accepted.
- 4. The tenderer shall submit with his tender Permanent Account Number (PAN) and GST Number, Copy of latest income tax clearance certificate and also his sales tax registration number if any.
- 5. The Tender shall remain valid and open for acceptance for a period of 180 days from the date of opening of first cover. The Employer reserves their right to extend the period of validity for a specific time. The request and the response thereto shall be made in writing or by Fax, E-mail. The Tenderers will have an option to refuse the request without forfeiting his tender security. However, in the event of the Tenderer agreeing to the request, he will not be permitted to modify his tender. In the event of the tenderer agreeing to the extension, the Tenderer shall correspondingly extend the validity of his tender security.

6. Eligibility and Qualification Requirement:

To be eligible for award of contract, tenderers shall provide evidence, satisfactory to the Employer of their eligibility and of their capability and adequacy of resources to carry out the subject contract effectively in addition to documents evidencing fulfilment of all the minimum qualifying criteria as stipulated in the "Tender Notice". The tenderer shall also submit following information.

- a) Copies of original Documents defining the constitution or legal status, place of registration and principal place of business of the company or firm or partnership.
- b) Details of the experience of the Tenderer on works of a similar nature within the past seven years,
- c) Reports on the financial standing of the Tenderer as prescribed in the tender document including profit and loss statements, balance sheets and auditor's reports for the past three years and an authority from the Tenderer for the Employer to seek reference from the Tenderer's bankers.
- d) Information regarding any current litigation in which the Tenderer is involved.
- 7. At any time prior to the last date for submission of tenders, the employer may for any reason whatsoever change or modify the tender documents by amendments. The amendments so carried out will be hosted on e-procure & MbPT website. The amendment so carried out will form part of the tender and shall be binding upon the Tenderers. The Employer may at their discretion extend the last date for submission of the tenders to enable the Tenderers reasonable time to submit their tender after taking into consideration such amendments. The responsibility of downloading such documents from above website fully lies with the Tenderer.

8. The tenderers are required to enter the percentage addition or deduction, in the Excel file published with this tender. The items of BOQ are published separately as PDF file. The percentage addition/ deduction will apply to the rates for each of the items in the Schedule of Quantities and Rates without reference to quantity or location of the work or any variation in the estimated quantity. The percentage addition/ deduction shall be quoted by tenderer having regard to the specification, conditions of contract and all other provisions in the tender document, and no variation in rates etc. will be allowed on any ground such as mistake, misunderstanding etc. after the tender has been submitted.

Note: The tenderer is required to fill in their percentage (addition or deduction) at the place specified in the price cover after the BOQ/ summary sheet of schedule of Quantities and Rates.

- 9. The price 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 GST** as per Govt. Notifications etc. necessary for proper execution and maintenance of the works.
- 10. The tender documents shall not be defaced or detached. Additions and alterations or interpolations shall not be made in the tender document.
- 11. The tenderer shall submit his tender strictly based on MbPT's design and specifications.
- 12. Inspection of Site: Tenderers are strongly advised to inspect the site of work and acquaint themselves with the site conditions and quantum of work involved etc. before tendering. Access to the site for inspection will be arranged by Superintending Engineer,3rd Port Bhavan, Mumbai 400 001, Telephone No.66564527 or by Executive Engineer, Telephone No.66564525.

13. Pre-Bid Meeting

- 12.1. Pre-Bid Meeting of the Bidders will be held as stated in the Tender Activity Sheet.
- 12.2. During the course of Pre-Bid meeting, the Bidders will be free to seek clarifications and make suggestions for consideration of the Authority. The Authority shall endeavour to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process.
- 14. PRICE BID: The Price Bid shall be opened online at <u>www.eprocure.gov.in</u> on a date to be fixed later and intimated to all the responsive and eligible tenderers. The Price Bid shall be opened if the Tenderer's submission in Technical Bid satisfies / includes all requirements and the same are found acceptable to the Employer / Mumbai Port Trustee price bids of only technically qualified tenderers / bidders will be opened.
- 13.1. Conditional Tender will be rejected outright considering it as nonresponsive offer and Tender will be liable to be rejected outright if it is found that;
 - i) The Tenderer proposes any alteration in the work specified in the tender or in time allowed for completing the works or indicate any other unacceptable condition.
 - ii) All corrections are not initialled by the tenderer.
 - iii) Disclosure/indication of the price in the technical bid shall render the tender disqualified and rejected.
 - iv) The bid is non-responsive

- 13.2. After the public opening of Tenders, information relating to the clarification, evaluation and comparisons of Tenders and recommendations concerning the award of contract shall not be disclosed to Tenderers or any other(s). Any efforts by the tenderer to influence the Employer, in the process of examination, clarification, evaluation and comparison of tenders and decisions concerning award of contract may result in the rejection of the tenderer's tender.
- 13.3. To assist in the evaluation and comparison of tenders, the employer may ask tenderers, individually for clarifications of their tenders. The request for clarification and the response shall be in writing or by email, but no change in price or substance of the tender shall be sought, offered or permitted nor the tenderer be permitted to withdraw his tender before the expiry of the tender validation period.
- 13.4. The employer will determine whether the tender is substantially responsive to the requirements of the tender documents. For the purpose of this clause a substantially responsive tender is one which interalia conforms to all the terms, general conditions and specifications of the tender documents and Technically suitable. A tender which, in relation to the cost estimates of the Employer is seriously unbalanced may be rejected as nonresponsive.
- 13.5. This clause is deleted
- 13.6. Prior to the expiration of the prescribed period of tender validity or such extended period the Employer will notify the successful tenderer, by email or telex, fax confirming in writing by registered letter that his tender has been accepted. The notification of award will constitute the formation of the contract. Upon the furnishing by the successful tenderer of a performance security, the Employer will promptly notify the unsuccessful tenderers that their tenders have been unsuccessful.
- 13.7. All costs, charges and expenses including stamp duty in connection with contract as well as preparations and completion of agreement shall be borne by the tenderers.
- 13.8. The contractor shall, in accordance with the requirement of the Employer, afford all reasonable opportunities for carrying out their work to any other contractors employed by the Employer and their workmen and to the workmen of the Employer and of any other duly constituted authorities who may be employed in the execution on or near the site of any work not included in the contract or of any contract which the employer may enter into in connection with or ancillary to the works.

15. INTEGRITY PACT :-

1 The scanned copy of Integrity Pact (IP) Agreement signed by the employer is uploaded along with the tender document. The bidder has to download the IP Agreement, sign and shall upload the same scanned copy of signed IP Agreement along with the bid. The unsigned scan copy of IP Agreement by the bidder shall be treated as invalid and the bid shall be considered as non-responsive bid.

2 In case the letter of intent / work order of contract / procurements is for Rs. 45 Lakhs and above, the successful bidder shall execute Integrity Pact Agreement on stamp paper of appropriate value. The scanned copy of Integrity Pact Agreement signed by the Employer, Bidder and uploaded by the bidder with the tender document shall be treated as Integrity Pact, till the formal execution of Integrity Pact by the successful bidder. 3 IP essentially envisages an agreement between prospective vendors / bidder, and Mumbai Port Trust, committing the person / officials of both sides to not to resort to any corrupt practice in any aspect of the contract at any stage. Only those venders / bidders who commit themselves to IP with MbPT, would be consider for evaluation of bid. IP would be implemented through Independent External Monitor (IEM), eminent person appointed by MbPT with approval of Central Vigilance Commission. The IEM would asses independently and objectively, as to whether and what extent the parties have complied with their obligations under the IP. IEM would have access to all contract documents, whenever required. The bidder may raise disputes / complaints if any with the IEM. The IEM would examine complaints received by him and give his recommendations / views to the Chairman of Mumbai Port.

4 Shri P.K. Gopinath, IPoS (Retd.) has been nominated as Independent External Monitor (IEM) for the implementation of Integrity Pact whose address is as under:

S – 427, First Floor, GK – 1, New Delhi – 110048 Ph. No. 011 – 4183 1210 Mob. No. : 0099157 66100 Email : krishnagopinath@gmail.com

- 16. Bidders are directed that the successful bidder will have to sign the Non Disclosure Ageement Annexure 9 at the initiation of the Project.
- 17. The works contracts which do not involve transfer of property in goods are to be stamped with stamp duty of only Rs.100 and Rs.500/- and are not to be registered. As per the provisions of the Maharashtra Stamp Act, 1958, the Stamp Duty and registration charges of each tender including tender for works contract will be paid by the contractor/works contractor/successful bidder.
- 18. Evidence of Work Experience:
- 15.1. In order to cross verify the work experience claimed by the bidders, TDS Certificate from their previous employers is to be submitted.
- 15.2. In case of difficulty on submission of TDS by bidders, Form 26 AS of IT Department shall be submitted as evidence for establishing work experience.
- 19. Fraudulent documentation by bidders:

Submission of fraudulent documents by the bidder shall be treated as major violation of the tender procedure and in such cases, pursuant to clause no 33 of GCC, the Port shall resort to forfeiture of EMD/SD/BG of the bidder, apart from blacklisting the firm for the next 3 years. The list of blacklisted firms shall be published on Port Trust website.

Chief Engineer Mumbai Port Trust

Tender No. E- 48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.

General Conditions of Contract

C	lause No.	Description
1.		Definitions and Interpretations
	1.1.	Definitions
	1.2.	Singular and Plural
	1.3.	Applicability of Clauses/ Conditions
2.		Duties & Powers of Engineer's Representative
3.		Subletting and Partnership
4.		Extent of Contract
5.		Contract Documents
	5.1.	Documents mutually explanatory
	5.2.	Further drawings and Instructions
	5.3	Drawings for temporary works
6.		General Obligations
	6.1.	Contract Agreement
	6.2.	Security Deposits
	6.3.	Delay/ Failure to lodge Security Deposit
	6.4.	Inspection of site
	6.5.	Sufficiency of Tender
	6.6.	Work to the satisfaction of the Engineer
	6.7.	Programme to be furnished
	6.8.	Contractor's employees
	6.9.	Setting out of work
	6.10.	Care of works
	6.11.	Insurances
	6.12.	Damage To Employer's Property
	6.13.	Giving of Notices & Payment of Fees
	6.14.	Compliance with Statutes – Regulations etc.
	6.15.	Patents, Rights and Royalties
	6.16.	Interference with Traffic and adjoining properties
	6.17.	Bribes, Commission and Corrupt Gifts
	6.18.	Official secrets and Drawings and Photographs of works
	6.19	Precaution
	6.20.	Custom and Security requirements

T.No.E-48/ 2021; Technical Bid; Page:21.

Clause No.		Description			
	6.21.	Water supply for Construction purposes			
	6.22.	Electric supply for Construction purposes			
	6.23.	Restrictions for safety, Security and Co-ordination			
	6.24.	Life Saving Appliances & First Aid			
7.	1	Labour			
	7.1.	Compliance with statutes and payment of wages			
	7.2.	Supply of drinking water to labours			
	7.3.	Festivals and religious customs			
	7.4.	Epidemics			
	7.5.	Disorderly Conduct etc.			
	7.6.	Foot wear, gloves etc.			
	7.7.	Accidents			
	7.8.	Fair Wages Clause			
	7.0.				
8.	1	Materials and Workmanship			
<u>.</u>	а	Quality of Materials, Workmanship and Tests			
	b	Access to place of manufacture/ works etc.			
	C C	Examination of work before covering up			
	d	Removal of Improper work and materials			
	е	Right to Use Before Test			
0		Common common the time and Delaws			
9.	0.1	Commencement time and Delays			
	9.1.	Release of Site			
	9.2.	Commencement and Execution of works			
	9.3.	Remedy for Contractor's failure to make proper progress			
	9.4.	Suspension of work on order of Engineer			
	9.5.	Time for Completion			
	9.6.	Extension of Time			
	9.7.	Working Hours			
	9.8.	Liquidated Damages for delay in completion			
	9.9.	Certificate of Substantial completion of works			
10.	<u>.</u> T	Maintenance and defects			
	10.1.	Defect during execution			
ļ	10.2.	Defect liability period			
	10.3.	Repair and remedies during defect liability period			
	10.4.	Cost of repairs and remedies			
	10.5.	Remedy on Contractor's failure to carry out work as required			
11.	<u> </u>	Addition, Alteration and Omission			
	11.1.	Variations			
	11.2.	Valuation of Variations			
	11.3	Payment for extra work			
12.		Plant, temporary works and materials			
	12.1.	Exclusive use for the works			
	12.2.	Removal of plant etc.			
	12.3.	Employer not liable for damage to the plant etc.			
	12.4.	Employer's plant and equipment			

Clause No.		Description
13.		Measurement
15.	13.1.	Quantities
		Works to be measured
	13.3.	
14.		Price variation and price adjustment
15.		Certificates and Payments
	15.a.	Mode of payment
		Refund of Security Deposit
	15.c.	No Interest payable
16.	1	Remedies and Powers
	16.1.	
		Liquidation and Re-entry
		Damages and forfeiture of Security Deposit
	16.4.	Extras Expenses
17.		Law and language
17.		
18.		Engineer's Decision - FINAL
19.		Notice to Statutory bodies
20.		Safety of existing underground services
21.		Contractor's site office and stores
22.		Removal of surplus excavated materials& debris
23.		Records
24.		Facilities to be provided by the contractor
<u> </u>	24.1	Vehicle
	24.1	Site Office
25.		Adjustment for changes in Legislation
<u>26.</u>		Force Majeure
20. 27.		Use of MbPT Weigh Bridges
27. 28.		As made drawings & progress photograph
		Mobilisation Advance
29. 20		Claims, dispute & Arbitration
30. 21		Space for Material, Storage, labour camp & Residential Accommodation.
31		

Clause No.	Description
32	Termination
33	Corrupt or Fraudulent Practices.
34	Advertisement
35	Management Meetings.
36	Third party Inspection
37	Integrity Pact

<u>Mumbai Port Trust</u> <u>Civil Engineering Department</u> <u>Tender No. E- 48/2021</u>

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works

at Second Chemical Berth, PIRPAU, GWMOT.

GENERAL CONDITIONS OF CONTRACT

1. Definitions and Interpretations:

1.1. Definitions:

In the Contract (as hereinafter defined) the following words and expressions shall have the meaning hereby assigned to them except where the context otherwise requires.

- (a) **'Employer'** means the Board of Trustees of the Port of Mumbai i.e. "MbPT" constituted by the Major Port Trusts Act 1963.
- (b) **'Contractor'** means the person or persons, firm or company whose tender has been accepted by the Employer and includes the Contractor's personal representatives, successors and permitted assigns.
- (c) **'Engineer'** means the Chief Engineer of the Port of Mumbai or other Engineer authorised from time to time by the Employer/ Chief Engineer/ to act as Engineer for the purpose of the Contract.
- (d) 'Engineer's Representative' means any Engineer Namely Dy. Chief Engineer/ Superintending Engineer/ Executive Engineer/ Assistant Executive Engineer/ Jr. Engineer authorised from time to time by the Engineer to be in direct supervision of the Works.
- (e) **'Works/ Permanent Works'** means the works to be executed in accordance with the Contract.
- (f) 'Contract' means the Contract Agreement, the Letter of Acceptance, the Letter of Tender, Conditions of Contract, the Specifications, the Drawings, the BOQ, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.and includes the entire document comprising of the following. FIRST COVER
 - 1. Tender Activity Sheet & Tender Information.
 - 2. Content of Tender document.
 - 3. Tender Notice.
 - 4. Instructions for Online Bid submission.
 - 5. Instructions for Preparation and Submission of Tender.
 - 6. a) Conditions of Contract Index.b) Conditions of Contract
 - 7. Technical Specifications
 - 8. Addendum to Specifications
 - 9. Annexure '1 to 8'.
 - 10. Proforma I to V

and

SECOND COVER

- 1. Directions to Tenderers for filling in the schedule of Quantities
- 2. Preamble to Schedule of Quantities & Rates
- **3.** Schedule of Quantities & Rates

T.No.E-48/ 2021; Technical Bid; Page:25.

4. Form of Tender

and

The correspondence exchanged between MbPT and the tenderer upto issue of the letter of acceptance.

and

The letter of acceptance

and

When completed, the Contract Agreement.

- (g) **'Tender'** means the Contractor's priced offerto the Employer forthe execution and completion of the works and the remedying of any defects therein in accordance with the provisions of the contract, as accepted by the Letter of Acceptance.
- (h) **'Contract Price'** means the sum named in the Tender subject to such additions thereto or deductions there from as may be made under the provisions hereinafter contained.
- (i) 'Construction Plant' means all appliances or things of whatsoever nature, required in or about the execution or completion of the Works or Temporary Works (as hereinafter defined) but does not include materials or things intended to form or forming part of the permanent work.
- (j) **'Temporary Works'** means all temporary works of every kind required in or ancillary to or about the efficient execution and completion of the Works.
- (k) 'Drawings' means the drawings indicated in this document and any modifications of such drawings approved in writing by the 'Engineer' and such other drawing as may from time to time be furnished or approved in writing by the 'Engineer'.
- (I) 'Site' means the land or other places, on which the Works are to be executed or carried out and any other lands or places provided by the Employer for the purpose of the Contract.
- (m) **'Approved'** means approved in writing, including subsequent written confirmation of previous verbal approval and 'Approval', means approval in writing including as aforesaid.
- (n) **'Letter of Acceptance/ Work Order** means formal letter with accompaniments issued by Engineer or Engineer's representative addressed to the tenderer, conveying the acceptance of his tender.
- 1.2. <u>Singular and Plural</u>: Words importing the singular only also include the plural and vice versa where the context requires.
- 1.3. <u>Applicability of Clauses / Conditions</u>: All the clauses/ conditions of this 'Contract' are applicable for the subject tender work unless otherwise specified in Special Conditions of Contract.

2. Duties and Powers of Engineer's representative:

The duties of the Engineer's Representative are –

- to monitor and supervise the Works & workmanship employed.
- to test and examine materials to be used in the works.
- to direct removal of improper work and materials in connection with the Works.
- to take measurements of works and material.
- To ensure compliance of all the conditions of contract & specifications by the contractor.

T.No.E-48/ 2021; Technical Bid; Page:26.

3. Subletting and Partnership:

The Contractor shall not sublet the Works or any portion thereof without the written permission of the Engineer nor assign his right and interest in these presents, nor assume a fresh partner or partners nor dissolve the partnership at present subsisting between them in reference to this Contract, without the written permission of the Engineer and such consent if given shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts defaults and neglects of any sub-Contractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor/his agents, servants or workmen provided always that the provision of labour on a piece work basis shall not be deemed to be a subletting under this Clause.

4. Extent of Contract:

The Contract comprises the construction, completion and maintenance of the Works and the provision of all labour, materials, constructional plant, temporary works and everything whether of a temporary or permanent nature required in and for such construction, completion and maintenance of works up to Defect Liability Period.

5. Contract Documents:

5.1. <u>Documents mutually explanatory</u>:

The several documents forming the Contract are to be taken as mutually explanatory of one another.

In the case of discrepancy/ ambiguities, if any, found in these documents, the Engineer will decide which document would prevail and his decision shall be final and binding on the contractor. The contractor shall execute the works according to such decision without any variation in the price quoted by the contractor.

5.2. <u>Further Drawings and Instructions:</u>

The Engineer shall have full power and authority to supply to the Contractor from time to time during the progress of the works, such further drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the works and the Contractor shall carry out the works accordingly and be bound by the same.

5.3. Drawings for Temporary Works:

The Contractor shall submit to the Engineer for his approval and / or record full details and drawings of any temporary works/ working platforms etc. which he proposes to construct/ erect necessary for execution of works. These details shall be submitted well in advance before erection of any such Temporary works at site. The submission to and approval by the Engineer or Engineer's representative of such particulars shall not relive the contractor of any of the duties or responsibilities under the contract in connection with the Works or Temporary works.

5.4 **Communications**

Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered or on the notice's effective date, whichever is later.

6. General Obligations:

6.1. <u>Contract Agreement:</u>

The successful tenderer will be required to enter into a formal Agreement with the Employer incorporating the documents detailed in clause No.1.1 (f) hereto before, with such modifications as may be necessary and the correspondence exchanged upto and including the stage of award of the contract and the letter of acceptance. The Contract Agreement will be prepared by the Employer as per the format enclosed as Proforma-I. All costs, charges and expenses including stamp duty incurred in this connection will be borne by the Employer. Until such Contract Agreement is executed, the acceptance of the tender in terms of the Contract as defined in Clause No.1.1 (f) shall be binding upon the MbPT& the Contractor, and shall be the Contract.

The Contractor's bills will not be passed for payment until the contract agreement is executed.

6.2. <u>Security Deposits:</u>

The security deposit for due performance of the contract shall comprise of the following.

- (a) Performance Security Deposit (PSD) equivalent to Three percentage (3%) of the Contract Price and rounded off to the next higher thousand in Rupees, in the form of Pay Order/Demand Draft in favour of the <u>'Board of Trustees of the Port of Mumbai'</u>.
- (b) The Performance Security Deposit under (a) above, shall be lodged by the Contractor within 21 days from the date of award of contract. Failure of successful party to lodge the required Performance Security Deposit shall constitute sufficient grounds for the termination of contract. The performance security shall remain in force until the defect liability period from the date of issue of completion certificate of this assignment and will be discharged thereafter.

The Performance security deposit shall not bear any interest.

6.3. Delay/ Failure to lodge Security Deposit:

- A. Unless the Performance Security Deposit is furnished by the Contractor within 21 days from the date of award of contract or such further period as may be allowed by the Engineer in writing, the Earnest Money lodged with the tender will be liable to forfeiture and the contract is liable to be terminated and the tenderer will be responsible to the Employer for the damage thereby incurred by the Employer.
- B. Delay in submission of Performance Security Deposit will carry 18% interest for delayed period. However, Chief Engineer may condone only the delay if reasons for delayed submission of Performance Security Deposit are found genuine and factual.

6.4. Inspection of site:

The Contractor shall be deemed to have inspected and examined the site and its surroundings and have satisfied himself before submitting his tender regarding the nature and condition of structure, nature and scope of the work, materials necessary for the completion of the Works, the physical and climatic conditions there, the availability and conditions affecting labour, the facilities for obtaining materials necessary for the completion of the Works, the condition of the existing roads/ access, under-ground services etc. and shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect his tender.

6.5. <u>Sufficiency of tender</u>:

The Contractor shall be deemed to have satisfied himself before tendering as to the practicability and the suitability of the design and his method of working and to the correctness and sufficiency of his tender for the Works; and the rates and prices stated in the Schedule of Quantities and Rates shall be held to cover all his obligations under the Contract and all matters and things necessary for the proper execution, completion and maintenance of the work.

6.6. <u>Work to the satisfaction of Engineer:</u>

The Contractor shall execute, complete and maintain the works in strict accordance with the Contract to the satisfaction of the Engineer/ Engineer's Representative and shall comply with and adhere strictly to his instructions and directions on any matter whether, mentioned in the Contract or not, concerning the Works. The Contractor shall take instructions and directions only from the Engineer or from the Engineer's Representative.

6.7. <u>Programme to be furnished:</u>

The execution of the works shall be so planned as to cause as little impediment as practicable to the working of the Port and other persons using the site and the organisations in the vicinity in general.

After the award of the contract, the Contractor shall prepare network-based programme of work and will further breakdown his 'work/s' into weekly/ fortnightly/ monthly targets, as required by the Engineer's representative.

The progress of the work shall be reviewed periodically with reference to the networkbased programme of work. The network shall be up-dated by the Contractor periodically so as to ensure completion within completion period and the Contractor must mobilise at no extra cost to the Employer, additional resources if required for completion of the whole work in the completion period.

6.8. <u>Contractor's Employees:</u>

- 6.8.1. The Contractor shall provide and employ on the Site in connection with the execution and maintenance of the Works,
 - a) Only such technical assistants as are skilled and experienced in their respective trades, as are competent to give proper supervision to the work they are supposed to supervise;

- b) Such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution of the Works.
- c) The personal to be deployed under this contract should be skilled and should be able to read English/Marathi/ and Hindi words, so as to enable them to read the instructions issued by Engineer in charge.
- d) 1Site Engineerwill be Diploma holder(minimum) in Civil Engineering with 4 to 6 years' experience for full time. Site Engineer will maintain all site record as directed.
- e) 1 Supervisor having 5 years' experience in civil works shall be posted full time.
- 6.8.2. The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person or Sub-Contractor employed by the Contractor in or about the execution or maintenance of the Work who in the opinion of the Engineer misconducts himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by the Engineer to be undesirable and such person shall not be again re-employed.
- 6.8.3. Employment of retired Class-I Officers of MbPT:

The Employer shall be at liberty to terminate the Contract if the contractor himself or any of his partners/ employees or any of his directors who having held Class-I post in the Mumbai Port Trust prior to his retirement has failed to obtain the Mumbai Port Trust Chairman's specific permission to undertake an occupation or any outside employment before the expiry of two years from the date of his retirement, in accordance with the provisions of the Mumbai Port Trust Class-I employees (Acceptance of employment after retirement) Regulations 1975.

6.9. <u>Setting out of work:</u>

The Contractor shall be responsible for the true and proper setting out of the Works in relation to original points, lines and levels of references given by the Engineer/ Engineer's Representative in writing and for the correctness of the positions, levels, dimensions and alignment of all parts of the work and for the provision of all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of works any error shall appear or arise in the positions, levels dimensions or alignment of any part of the works, the Contractor on being required so to do by the Engineer or Engineer's Representative shall at his own expense rectify such error to the satisfaction of the Engineer or Engineer or the Engineer or the Engineer's Representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof. The Contractor shall carefully protect and preserve all benchmarks, sight-rails, pegs and other things used in setting out the works.

6.10. Care of works:

- 6.10.1. From the commencement to the completion of the Work the Contractor shall take full responsibility to care the work and temporary work. In case any damage, loss shall happen to the Works or to any part thereof or to any temporary Works from any cause whatsoever, shall at his own cost repair and make good the same so that on completion, the Works shall be in good order and condition and in conformity in every respect with the requirements of the contract and the Engineer's instructions.
- 6.10.2. There are various utility services like oil pipe lines, electrical services, water mains,

drainage lines, telephone cables etc. on site under the scope of subject work. These services shall be safeguarded and protected by the contractor at his own cost, during the execution of repairs works at locations and its surroundings where work is being executed.

6.10.3. The Contractor at his own cost shall make such provisions for lighting the works, storage area and plant and shall provide all such marks and lights as may be required by the Engineer or any other authority having jurisdiction in connection with the site together with all labour, stores and services required for their efficient working and use at any time of day and night. He shall requireprotecting and securing all places dangerous whether to the Contractor's workmen or to other persons until the work shall be handed over to the Employer unless the Engineer shall decide that such services are no longer required.

6.11. Insurance:

Without limiting his obligations and responsibilities under Clause No.6.10 hereof the Contractor shall insure in the joint names of the Employer and the Contractor against all loss or damage from whatever cause arising for which damage he is responsible under the terms of Contract and in such manner that the Employer and the Contractor are covered during the period of construction of the Works and are also covered during the Defect Liability period for loss or damage arising from a cause occurring prior to the expiry of Defect Liability period and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clause No.10 hereof.

- a) the Works and the temporary Works to the full value of such works executed from time to time and
- b) the materials, constructional plant and other things brought on to the site by the Contractor to the full value of such materials, constructional plant and other things.
- c) Third party insurance: Against any damage, loss or injury which may occur to any property or persons inter-alia including any property of the Employer and any employee of the Employer by or arising out of the execution of the Works or temporary Works or in carrying out of the Contract. <u>Third party Insurance policy shall</u> <u>be for an amount of Rs.25lakhsin any one incident and to be recouped after every incident till completion of the entire work</u>.

Such insurance shall be effected with the General Insurance Corporation of India or other insurance company approved by the Employer and in terms approved by the Employer and the Contractor shall whenever require, produce to the Engineer or the Engineer's Representative the policy or policies of insurance and the receipt for payment of the current premium. All risk policy shall not cover Earth quake risk and STFI. All Insurance policy premiums shall be paid by the contractor.

6.11.1. Insurance against accident to workmen:

The Contractor shall indemnify and keep indemnified the Employer against all damages or compensation payable at Law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the Contractor or any Sub-Contractor and against all claims, demands, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto and the Employer shall be at liberty to deduct or adjust from the Contractor's bills any amount that Employer may be called upon to pay toward claims, demands, proceedings, costs, charges and expenses whatsoever in respect of or in relation to any accident or injury referred to above without any reference to the Contractor.

T.No.E-48/ 2021; Technical Bid; Page:**31**.

The Contractor shall insure against such liability with the General Insurance Corporation of India or other insurance company approved by the Employer and shall continue such insurance during the whole of the time that any persons are employed by him in the Works and shall when required produce to the Engineer or the Engineer's Representative such policy of insurance and the receipt for payment of the current premium provided always that in respect of any persons employed by any Sub-Contractor the Contractor's obligations to insure as aforesaid under this sub-clause shall be satisfied if the sub-Contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy but the Contractor shall require such sub-Contractor to produce to the Engineer or the Engineer's Representative when required such policy of insurance and the receipt for payment of the current premium.

In case of department's requirement for early completion of work requires deployment of additional labour and the contractor is prevailed upon for additional labour deployment, the premium of additional policy/ies shall also be paid by the contractor.

6.11.2. Insurance against war risk:

If during the course of Contract there occurs war or threat of war and the Government impose War Risk Insurance, in that event the Contractor shall take out War Risk Insurance.

6.11.3. Payment of insurance premia:

The premia and other charges for the various insurance policies required to be furnished by the Contractor under this tender shall be paid by the Contractor. No reimbursement will be made for any policy premium by MbPT

6.11.4. <u>Remedy on Contractor's failure to insure:</u>

If the Contractor shall fail to effect and keep in force the insurance referred to above the contract will be liable to be terminated and the Contractor will be responsible to the Employer for the damage thereby incurred by him.

6.12. Damage to persons and property:

- 6.12.1. The Contractor shall indemnify and keep indemnified the Employer against all losses and claim for injuries or damage to any persons or any property whatsoever which may arise out of or in consequence of the construction and maintenance of the Works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto.
- 6.12.2. In case of any damage to Employer's property, a preliminary formal enquiry will be held by the person nominated by the Employer. The enquiry will be held in the presence of the concerned Representative of the Engineer and of the Contractor's authorised representative. If, as a result of the enquiry, a prima-facie case is established against the Contractor, recovery towards making good the damage will be made from the Contractor.
- 6.12.3. In case Insurance coverage is available for making good the damages, the contractor may claim from the Insurance Company for the same. However, the Employer will effect

the recovery as stated above at the first instant and the contractor may then claim to the Insurance Company.

6.13. <u>Giving of notices and payment of fees:</u>

The Contractor shall at his own expense give all notices and provide in his rates for the payment of all fees, income tax, import duties, and other charges, duties and taxes excluding GST required to be given or paid by an act of the Central or State Government or any regulation or bye-law of any local or any other statutory authority in relation to the materials, labour and plant and all other things obtained by him or used by him for the execution of the works or temporary works and by the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the works or temporary works.

6.14. <u>Compliance with statutes, regulations etc.</u>:

The Contractor shall conform in all respects with the provisions of any such Statutes Ordinance or Law as aforesaid and the Regulations or Bye-laws or any local or other duly constituted authority which may be applicable to the Works or to any temporary Works and with such rules and regulations of public bodies and companies as aforesaid and shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such Statutes, Ordinance or Law, Regulations or Bye-Laws.

6.15. <u>Patents, Rights and Royalties:</u>

The Contractor shall save harmless fossils and indemnify the Employer from and against all claims and proceedings for or an account of infringement of any patent rights, design trade mark or name or other protected rights in respect of any construction plant, machine, work or material used for or in connection with the works or temporary works or any of them and from against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. The contractor shall pay all tonnage and other royalties, rent and other payments or compensation (if any) for getting stone, sand, gravel, clay or other materials required for the works or temporary works. The contractor shall also pay all royalties, rents and other payments for the disposal of material from demolition and other surplus material.

6.16. <u>Interference with traffic and adjoining properties:</u>

All operations necessary for the execution of the Works and for the construction of temporary Works shall so far as compliance with the requirements of the Contract shall be carried in such manner so as not to interfere unnecessarily or improperly with the public convenience or the access to use and occupation of public or private roads and footpaths or to properties whether in the possession of the Employer or of any other person

6.17. Bribes, Commission and Corrupt Gifts:

Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner, agent or employee or anyone in his or their behalf to any officer, servant, representative or agent of the Engineer or to any person on his behalf in relation to the obtaining or to the execution of this or any other Contract with the Employer shall in addition to any original liability which he may incur, subject the Contractor to the cancellation of this and all other Contracts with the Employer and also to the payment of any loss or damage resulting from any such cancellation and the Employer shall be entitled to deduct the amount so payable from any money otherwise due to the Contractor during this or any other Contract. Any question or dispute as to the commission of any offence under the present Clause shall be settled by the Engineer in such manner and on such evidence or information as he shall think fit and consider sufficient and his decision shall be final and binding on the Contractor.

6.18. Official secrets and drawings and photographs of works:

- 6.18.1. The Contract involves an obligation of secrecy and the commission by the Contractor, the agent's servants, or sub-Contractor or their agents or servants of any offence under the Indian Official Secret Act 1923 or any statutory modifications or re-enactments thereof will apart from being a criminal offence constitute a breach of the Contract.
- 6.18.2. The Contractor shall not disclose the detail of drawings furnished to him and of Works on which he is engaged without the approval of the Engineer. No photographs of the Works or any part thereon or plant employed thereon shall be taken or permitted by the Contractor to be taken by any of his sub-contractors' employees without the approval of the Engineer and no such photographs shall be published, or otherwise circulated without the approval of the Engineer.
- 6.18.3. Without taking any prior written permission from the appropriate authority of MbPT, any kind of photography whether still or video / movie inside the Dock is prohibited

6.19. Precautions:

6.19.1. Anti-malarial precautions:

Every precaution shall be taken by the Contractor to prevent the breeding of mosquitoes on the Site and all receptacles used for the storage of water must be suitably protected for this purpose. Any notice from MCGM PCO related to noncompliance of Mosquito prevention guidelines at site shall be contractor's responsibility and Contractor will be held responsible to comply and pay the fine to the satisfaction of PCO.

6.19.2. **Precaution against air and water pollution**:

Every precaution shall be taken by the Contractor to reduce air and water pollution resulting from his operations. He shall fully comply with the relevant provisions of the Maharashtra Prevention of Water Pollution Act, 1969 or subsequent legislation thereof.

6.20. Custom and Security requirements:

The Contractor shall comply with all the regulations imposed by the Customs and Port Security Authorities in respect of the passage of Plant, vehicles, material and personnel through Custom's barriers.

6.21. <u>Water supply for construction purposes:</u>

6.21.1. The contractor may seek fresh water for construction purposes from the Employer's water main existing in the vicinity of site **on chargeable basis** at the prevailing applicable rates of MbPT (MCGM rate of Industrial use + sewerage charge + 25 % towards unexpected liabilities) along with extra water charges if any levied by the MCGM. MCGM tested water meter and water supply network shall be arranged by the contractor as necessary. In case the water supply from Employers main is insufficient to meet the requirements at the site, the contractor shall make the arrangements at his own cost to bring fresh water from outside sources. Inadequate supply of water, if any, from

T.No.E-48/ 2021; Technical Bid; Page:34.

Employer's water main will not be accepted as an excuse for delay or deficiencies in the work.

6.21.2. For obtaining water supply from Employer's water main, the Employer will provide a connection at suitable location from where the contractor will draw water for construction purposes. The contractor at his own cost lay and maintain the water pipe lines and storage tanks etc as may be required by him for further use. The charges for the water supplied by the Employer shall be recovered through the contractor's bills for the works. The Contractor shall at his own cost construct and maintain at the Site, to the approval of the Engineer, a temporary water storage tank of capacity sufficient to meet at least two day's peak requirements. The Contractor will not be permitted to commence, on any day, work requiring use of water, unless the temporary water storage tank provided as per (a) above is at least 3/4th full.

6.22. <u>Electric supply for construction purposes</u>:

- 6.22.1. All costs in connection with the procurement of all electrical energy required for the construction and maintenance of the works shall be borne by the Contractor.
- 6.22.2. The Contractor may seek electrical energy for construction purposes from the Employer's electrical distribution system available at site on chargeable basis at the prevailing rates. In the event of non-supply or inadequate load from Employer's Electrical System, the contractor has to make his own arrangement to produce the required electricity at their cost.
- 6.22.3. In case of electric connection from the Employer's electrical network, the Electrical Department of the Employer will provide, at the cost of the Employer, a meter at the location of supply. The Contractor shall at his own cost, lay and maintain the cable and install and maintain a distribution board with good quality switch gear through a licensed electrical Contractor and the Contractor shall submit Insulation Test Certificate issued by the licensed electrical Contractor. The contractor shall approach Mechanical Engineering & Electrical Department for electrical connection and make requisite security Deposit and complete the requisite formalities of MEED.
- 6.22.4. The Employer reserves the right to disconnect or switch off the electric connection given from its electrical network if
 - (a) it becomes necessary to do so for maintaining electric supply to the Employer's installations
 - (b) the Contractor's installation is defective
 - (c) the Contractor fails to comply with any of the conditions under which the connection has been given.

In the event of disconnection/ switching off of the electric connection as above the Contractor will have to make his own arrangements at his cost for diesel generating sets etc. and the Contractor will have no claim to extra cost for completing the Works. In case of (b) above the electric supply will be restored only after the Contractor rectifies the fault and submits a fresh Insulation Test Certificate through a licensed electrical Contractor.

6.22.5. The electrical energy consumed will be charged on the basis of meter reading at the prevailing rate at the time of use. The Contractor shall fulfil all other formalities necessary for electrical connection, from the employer's electrical network.

6.22.6. For the purpose of procurement of electrical energy, Connection, Installation of water Meters, billing etc. Contractor has to coordinate with the Power Trading Corporation (PTC), agency appointed by MEED Department of MbPT.

6.23. <u>Restrictions for safety, security and co-ordination:</u>

6.23.1. General safety rules:

Contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions and shall comply with safety rules regulations of the Employer and other concerned authorities. The cost of the same is deemed to be included in the rates quoted by the Contractor.

i. <u>First-aid and industrial injuries:</u>

- 1. Contractor shall maintain first aid facilities for his employees and those of his sub-contractors and also for Employer's representative working / supervising the work.
- 2. Contractor shall make necessary arrangements of and ambulance (land transport leg) for the treatment of industrial injuries requiring hospitalisation, without loss of time. Names of those providing these services and their telephone numbers shall be prominently displayed at the site.
- 3. All critical industrial injuries shall be reported promptly to Employer, and a copy of Contractor's report covering each personal injury requiring the attention of a physician shall be furnished to the Employer.
- ii. <u>No smoking:</u>

Smoking within the dock areas, extended dock area and on the Jetty is strictly prohibited. Violators of the no smoking rules shall be removed immediately.

- iii. Contractor's Barricades and lights:
 - 1. Contractor shall erect and maintain barricades and lighting required in connection with his operation to guard or protect,
 - i) Hoisting areas.
 - ii) Areas adjudged hazardous.
 - iii) Employer's existing property subject to damage by Contractor's operations.
 - iv) Road, unloading spots.
 - v) Any other area directed by the Engineer.
 - 2. Contractor's employees and those of his sub-contractors shall become acquainted with the Employer's barricading practice and comply with the provisions thereof.
 - 3. Red flasher lanterns shall mark barricades and hazardous areas adjacent to but not located on normal routes of travel at nights.
- iv. <u>Scaffolding:</u>
 - 1. Suitable strong suspended or otherwise scaffolding should be provided for workmen for all works that cannot safely be carried out from the available access/approaches or from existing permanent structures.
 - 2. Scaffolding or staging and swing suspended from an overhead support or erected with stationary support shall have a guard rail properly attached bolted braced and otherwise guarded at least 1 m. high above the floor or platform of

such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the structure.

- 3. Working platform, gangways and stairways should be so constructed that they should not sag unduly or unequally and should be closely boarded, should have adequate width and should be suitably fastened.
- 4. Every opening in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 metre.
- 5. Safe means of access shall be provided to all working platforms and other working places. Adequate precautions shall be taken to prevent danger from electrical equipment. No material on any of the sites of work shall be so stacked or placed to cause danger or inconvenience to any person or public. The Contractor shall also provide all necessary fencing and lights to protect the workers and staff from accidents, and shall be bound to bear the expenses of defence of every suit, action or other proceeding of law and that may be brought by any person for injury sustained owing to neglect of necessary precautions and pay any damage and costs which may be awarded in any such suit or action or proceedings to any such person or which may with the consent of the Contractor be paid to compromise any claim by any such person.
- v. Excavation and Trenching: Not applicable
- vi. <u>Demolition: Not applicable</u>
- vii. <u>Safety equipment:</u>
 - 1. All necessary personnel safety equipment like, safety belt, industrial helmet, gum boot, gloves another personnel protection equipment as considered adequate by the Engineer should be kept available for the use of the persons employed on the site and maintained in condition suitable for immediate use, and the Contractor shall take adequate steps to ensure proper use of equipment by those concerned.
 - 2. Workers employed on mixing chemicals, cement concrete, mortars etc. shall be provided with protective footwear and protective gloves.
 - 3. Those engaged in white washing and mixing or stacking of cement or any materials, which are injuries to the eyes, shall be provided with protective goggles.
 - 4. Those engaged in welding and cutting works shall be provided with face & eye shields and hand gloves.
 - 5. Those engaged in works near any place wherever there is a risk of drowning, necessary equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger. Besides above these workers shall be provided with lifesaving safety jackets to ensure flotation.
 - 6. Contractor shall use mobile Man Lift sufficient to reach to the ridge of the roof and can carry man and material to ensure proper bolting of the roof and for inspection purpose.
- viii. <u>General</u>:
 - 1. All ladders / temporary supporting platforms and other safety devices

mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided near places of work.

- 2. These safety provisions should be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work-spot. The person responsible for compliance of the safety code shall be named therein by the Contractor.
- 3. To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the Contractor shall be open to inspection by the Employer's Welfare Officer, Engineer or Safety Officer or their representatives.
- 4. Notwithstanding the above clauses there is nothing in these to exempt the Contractor for the operations of any other Act or rules in force. The work throughout including any temporary works shall be carried out in such a manner as not to interfere in any way whatsoever with the traffic on any roads or foot-paths at the site or in the vicinity thereto or any existing works whether the property of the Employer or of a third party.
- 5. In addition to the above, the Contractor shall abide by the safety code provision as per CPWD Safety Code and IS:3696 (Part-É and Part-II), IS:3764 and IS:4081.
- ix. Additional Safety Conditions:
 - 1. The contractor shall provide all safety equipment such as safety jacket, full harness safety belt, safety shoes, helmet etc. to his Supervisors, labourers during the execution of the work.
 - 2. If the contractor does not follow the safety precaution as prescribed in the tender condition, the contractor will be imposed a penalty of Rs. 1,00,000/- per occasion for not adhering to the instruction of the Engineers.
 - 3. If the contractors do not adhere to the safety instruction for continuously three occasions during the execution of particular work, the contractor shall be debarred for six months' period from participating in MbPT tenders.
 - 4. During the execution of work if any death incidence occurs to the labourers employed by the contractor due to the negligence and also not adhering to the instructions on safety, the contractor shall be blacklisted for minimum 3 years and/ or as may be decided by the Chief Engineer and will not be allowed to participate in any of the tenders of MbPT in future.
 - 5. If the labourer is required to be worked at a height of 20 feet and above, the contractor shall provide the safety net. However, Contractor has to keep separate supervisor for supervising the same.
 - 6. Contractor shall daily submit work permit if the height at which the work is involved is + 2.00meter above ground level/ floor level. The format of work permit is enclosed as Annexure.

6.23.2. <u>Carrying out welding, gas cutting or other hot work:</u>

Whenever welding, gas cutting or other hot work is to be carried out, the Contractor shall give at least one week's prior notice to the Employer's Port Safety & Fire Officer (and copy to Engineer's Representative) who in turn will issue the permission along with

the guidelines and precautions required to be taken while carrying out the hot work. The Contractor shall at his own cost, immediately comply with all the requirements intimated to him, such as provision of fire buckets, water, sand, portable fire extinguishers etc. The Contractor shall not commence hot work until he receives clearance in writing from Employer's Port Safety & Fire Officer to do so. In case the hot work is required to be suspended for safety reasons, the Contractor shall immediately suspend the hot work upon receiving instructions from the Engineer's Representative and the hot work shall not be resumed until further instructions are issued by the Engineer's Representative to do so.

6.23.3. Facilities for works of other agencies:

The Contractor shall take care to see that his works do not, in anyway, hamper the concurrent progress of works of other agencies in and around the premises. The Contractor shall afford all facilities to them like lockable & open place for storing their materials, place for their site office, etc., as may be directed by the Engineer's Representative, so that they can concurrently carry on their works. These agencies will make their own arrangements for the security of their stores, works, offices, etc.

6.24. <u>Lifesaving appliances and First-Aid equipment:</u> The Contractor shall provide and maintain upon the works sufficient, proper and efficient lifesaving appliances and first aid equipment to the approval of the Engineer and Port Safety Officer.

6.25. Safety Measures :-

- a) The contractor shall provide all safety equipment such as jacket, safety belt, safety shoes, helmet, gloves etc. to his workers during the execution of work
- b) If the contractor does not follow the safety precautions as prescribed in the tender conditions/ instructed/ required as per construction practices, the contractor will be imposed a penalty of Rs. 1,00,000/- per occasion
- c) If the contractor fails to follow the safety instructions continually for 3 occasions during the execution of any particular work, the contractor shall be debarred for 6 months from participating in MbPT tenders.
- d) During the execution of work if any fatal accidents occurred to the labourers employed by the contractor due to the negligence and also not adhering to the instructions on safety, the contractor shall be blacklisted for minimum 3 years and/ or as may be decided by the Chief Engineer and will not be allowed to participate in any of the tenders of MbPT.
- e) If the labourers are required to work at a height of 20 feet or above, the contractor shall provide safety net as per the site requirement and a separate supervisor shall be posted to monitor the same.

7. Labour:

7.1. <u>Compliance with statutes and payment of wages:</u>

- 7.1.1. The Contractor shall make his own arrangements for the engagement of all labour preferably local.
- 7.1.2. The Contractor shall comply fully with all Central and State laws dealing with the employment of persons, apprentices etc. including the Employment of Children Act, 1938, Payment of Wages Act, 1936, the Workmen's Compensation Act, 1923, the Factories Act, 1948, the Minimum Wages Act, 1948, Dock Labour Regulations, Contract Labour

(Regulation and Abolition) Act 1970 and any statutory amendment or re-enactment thereof for the time being in force.

The successful Contractor shall also obtain certificate of registration under rule No.24 of the 'Building and Other Construction Workers Central Rules 1988' from the office of the Deputy Chief Labour Commissioner (Central)-IV, Mumbai.

- 7.1.3. The Contractor shall display on the site of the Work notices regarding wages etc. as are required under the law. The Contractor shall also maintain Wage Books and Wage Slips and other records concerning labour/ workers as are required under the law.
- 7.1.4. The Contractor shall submit periodical return records concerning the labour employed on the Works, to the Engineer's representative.
- 7.1.5. The Contractor shall ensure that none of his or his Sub-Contractor's employees camp at the site/ working area or at the Employer's lands/ premises without written permission.
- 7.1.6. The Contractor shall be responsible for the observance by his sub-contractors of the foregoing provisions.
- 7.1.7. The Employer shall have the right to deduct from the moneys due to the Contractor, any sum required or estimated to be required for making good loss suffered by a worker or workers by reason of non-compliance by the Contractor to the existing laws and regulations concerning the labour employed on the Work.
- 7.1.8. The Contractor shall make necessary arrangements for the representative of MbPT to witness the payment made by the Contractor/ sub-contractor to his labourers.
- 7.1.9. Contractor shall submit the labour records every month and his bills will be recommended upon confirmation of ESIC & PF and salary to labour in their bank accounts.
- 7.1.10. The contractor shall comply with the following conditions while deploying of casual labours on the contracts awarded to them by MbPT and submit the required documents in support thereof.
 - a. Registration with Employees Provident Fund (EPF), Organisation & intimation of P.F. Registration code No.
 - b. Registration with Employees State Insurance Corporation and submission of ESI code Noand updating the contribution towards the ESIC,
 - c. Workmen Compensation Policy shall be invariably taken irrespective of labour strength,
 - d. Labour License shall be obtained if the deployed man power is more than 19,
 - e. All the workmen shall be paid as per Minimum Wages Act asper circulars issued by Ministry of Labour, Govt. of India
 - f. Payment to the workers shall be made through ECS in their Bank accounts only;
 - g. All the workmen should be covered under Life Insurance under PradhanMantriBima Scheme.

All the conditions mentioned above, shall be scrupulously followed failing which payment of bills will not be recommended. <u>Dock Entry permits will be issued to only that labourer</u> who carries EPF/ESIC Id Cards, Adhar card linked with MbPTPermit Section, bank accounts for remittance of their salary.

<u>All the conditions mentioned above, shall be scrupulously followed failing which payment of bills will not be recommended.</u>

7.2. <u>Supply of drinking water to labour:</u>

The Contractor as far as practicable, having regard to local conditions, provide on the Site, to the satisfaction of the Engineer's Representative an adequate supply of drinking and other water for the use of the Contractor's staff and workmen.

7.3. <u>Festivals and religious customs:</u>

The Contractor shall in all dealings with labour in his employment have due regard to all recognised festivals and observe days of rest as applicable to the outdoor staff of the Engineering Department of Mumbai Port Trust.

7.4. Epidemics:

In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.

7.5. <u>Disorderly conduct etc.</u>:

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or among his employees, officers or agents and for the preservation of peace and protection of persons and property in the neighbourhood of the works against the same.

7.6. Foot wear, gloves etc.:

The Contractor shall at his own expense provide footwear and gloves for all labour engaged on concrete mixing work and all other types of work involving the use of tar and cement, glass shields for welder and diving equipment for divers etc. to the satisfaction of the Engineer or his Representative and on his failure to do so, the Employer shall be entitled to provide the same and recover the cost from the Contractor.

7.7. Accidents:

The Contractor shall within 24 hours of the occurrence of any accident at or about the site or in connection with the execution of the Work report such accidents to the Engineer and the Engineer's Representative. The Contractor shall also report such accidents to the concerned constituted authorities- Sr. Safety Officer Safety Cell, Ambedkar Bhavan, Inspectorate of Dock Safety, OSC Building and Police if accident is fatal.

7.8. Fair wages clause:

(i) The Contractor shall pay the labourers engaged by him on the work not less than fair wages which expression shall mean whether for time or piece work the respective rates of wages as fixed by the Central Public Works Department as Fair Wages for Greater Mumbai payable to the different categories of labourers as set out in the schedule annexed thereto. However, subject to the other provisions in the Conditions of Contract herein and to provision of any other law for the time being in force in the country.

- (ii) Contractor shall notwithstanding the provision of any contract to the contrary cause to be paid a fair wage to the labourers directly engaged on the work including any labour engaged by the sub-Contractor in connection with the said works as if the labourers had been immediately employed by him.
- (iii) Display of notices regarding wages, etc.:

The Contractor shall, before he commences his work of contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition at conspicuous places on the work site notices in English and in the local Indian language spoken by the majority of the workers stating therein the rates of wages which have been fixed as fair wages and the hours of work for which such wages are earned and send a copy of such notices to the Engineer, Mumbai Port Trust.

(iv) Wages, Books and Wage Slips: -

The Contractor shall maintain Wage book of each worker in such form as may be convenient but the same shall include the following particulars.

- i) Rate of daily or monthly wages.
- ii) Nature of work on which employed.
- iii) Total number of days worked during each wage period.
- iv) Total amount payable for the work during each wage period.
- v) All deductions made from the wages with all indications in each case of the ground for which the deductions are made.

vi) Wages actually paid for each wage period.

A wage slip for each worker employed on the work.

Provided that the Engineer may grant exemption from the maintenance of the wage slip if in his opinion not more than 10 persons are likely to be employed directly or indirectly on the work but in any case he will have to maintain wage books.

(v) Preservation of books and slips:

The wage books and the wage slips shall be preserved for a period of not less than 12 months after the date of last entry made in it.

(vi) Inspection of books and slips:

The Contractor shall allow inspection of the aforesaid wage books and wage slips to any of his workers or to an agent at a convenient time and place after due notice is received or to the Engineer, MbPT or any other person authorised by him or on his behalf.

- (vii) The Engineer, MbPT or any other person authorised by the Engineer on his behalf shall have power to make enquiries with a view to ascertaining and enforcement due and proper observance of the fair wage clause. He shall also have the power to investigate into any complaint regarding any default made by the Contractor or sub-Contractor in regard to such provision.
- (viii) The Engineer shall have the right to deduct from the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers for the reason of non-payment of the aforesaid fair wages except on account of any deductions that may be permissible under any law for the time being in force.
- (ix) The contractor will be required to submit evidence of payment of wages to the labour/ workmen in to their bank account, the statement of remittance towards wages, EPF & ESIC for all labours engaged for the subject work along with their

bills duly verified by the Executing Engineer and an Officer of the Welfare Division of Mumbai Port Trust. The wages and remittances for ESIC, EPF etc. shall be in accordance with the prevailing labour laws, rules and regulations governing the minimum wages Act. The contractor's bills will not be processed / passed/ in case of non-compliance of these provisions in the contract

8. Materials and Workmanship:

- a) Quality of materials, workmanship and tests:
 - i. All material and workmanship shall be of the respective kinds described in the Specification and in accordance with the Engineer's Instructions and shall be subjected from time to time to such test as the Engineer may direct at the place of manufacture or fabrication, on the Site or any approved Testing Laboratories. The scale of sampling and testing shall be as per norms prescribed by the Bureau of Indian Standard, and where not prescribed by BIS the same shall be as directed by the Engineer.
 - ii. The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for inspection, sampling, measurement or testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the Works for testing as may be selected and required by the Engineer.
 - iii. The material under test shall be stacked by the Contractor separately and he shall not use a material unless and until it is tested and accepted by the Engineer or his Representative. In case of violation of this requirement by the Contractor, payment may not be made for the work executed with such materials. If the Contractor repeatedly violates the above requirement, the Employer will be at liberty to determine the contract and the Contractor will be responsible to the Employer for the damage thereby incurred by the latter.
 - iv. Acceptance/ rejection of the material(s) will normally be communicated to the Contractor as per the test result findings. Rejected material shall be removed from the site by the Contractor within three days of rejection or such period as may be specified by the Engineer or his Representative.
 - v. The Contractor shall arrange to test any of the materials/ finished items/ concrete cubes etc. as per relevant IS Specifications in laboratories of Engineer's choice. All other costs (except the testing charges) i.e. cost of material, packaging, transportation etc. shall be borne by the Contractor. The testing charges shall be borne by the Employer if the test results are satisfactory except for the testing carried out at the Contractors Material Testing Laboratory at site. If the test results are unsatisfactory/not as per relevant IS Specifications/ MbPT's Specifications, the testing charges shall be borne by the Contractor. The payment of testing charges for satisfactory test results will be reimbursed through the Contractor's next interim bill.
 - vi. Materials may be tested at following Laboratories
 - 1. VJTI Material Testing Lab
 - 2. MCGM Material Testing Lab at Worli

- 3. Structwel lab
- 4. TCR lab
- 5. SKG Laboratories

b) Access to place of manufacture/ works etc.:

The Employer and the Engineer and any person authorised by them shall at all times have access to the Contractor's plant, Works and to the site and to all workshops and places where work is being prepared or where material, manufactured articles or machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance in obtaining right to such access.

c) <u>Examination of work before covering up:</u>

No work shall be covered up or put out of view without the approval of the Engineer or the Engineer's Representative. The Contractor shall afford full opportunity for the Engineer or the Engineer's Representative to examine and measure any work, which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer's Representative whenever any such work is ready or about to be ready for examination and the Engineer's Representative shall without unreasonable delay attend for the purpose of examining and measuring of such work.

d) <u>Removal of improper work and materials:</u>

The Engineer or his Representative shall, during the progress of the works, have power to order in writing from time to time.

- a. the removal from the site within such time or times as may be specified in the order, of any materials which in the opinion of the Engineer or his Representative are not in accordance with the Contract, and
- b. the substitution of the materials so removed by proper and suitable materials, and
- c. The removal and proper re-execution (notwithstanding any previous test thereof or interim payment thereof) of any Work which in the opinion of the Engineer or his representative is not in accordance with the Contract in respect of materials or workmanship.

In case of default on the part of the Contractor in carrying out such order the Employer shall after giving a notice to the Contractor, be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be borne by the Contractor and shall be recovered from him by the Employer or may be deducted by the Employer from any moneys due or which may become due to the Contractor.

e) <u>Right to use before tests:</u>

If the Contractor neglects to make the tests on completion within the time stipulated by the Contractor, the Engineer / Employer shall nevertheless have the right of using the works at the Contractor's risk until the test on completion are successfully carried out.

9. Commencement and Delays:

9.1. <u>Release of site for carrying out the works:</u>

The Contractor shall complete all initial formalities for the tender such as payment of Security deposit, taking out necessary insurance policies, Labour License etc. under this contract within **21 days** after the date of receipt of the letter of acceptance of his offer. If the Contractor delays these activities, the contract will be liable for termination and the Earnest money deposited by him will be forfeited and the Contractor will be responsible for the losses suffered by the Employer.

9.2. <u>Commencement & execution of works:</u>

Contractor shall commence the work immediately at the site or part site(s) released to them. The works shall be carried out as in the 'Schedule of Quantities & Rates' and as specified and as directed.

9.3. <u>Remedy for Contractor's failure to make proper progress:</u>

Upon the Engineer certifying that, in his opinion, the Contractor, after receiving from the Engineer a written notice,

- 1. has suspended progress on any portion or any item of the Works for seven days, or
- 2. has failed to make proper progress on any portion of item of the works for seven days, or
- 3. has failed to complete any portion or items of the works by the time specified by the Engineer, or
- 4. has failed to remove from site within seven days, materials which have been condemned and rejected, or
- 5. has failed to pull down within seven days and rebuild within the time stipulated by the Engineer, works which have been condemned and rejected, or
- 6. has failed to give to the Engineer or his Representative proper facilities for inspecting the works or any part thereof for three days, or
- 7. has failed to carry out proper tests for three days on any work or materials,

then the Employer, without restricting/prejudice to their rights under relevant Clause in the 'Conditions of Contract' and without expelling the contractors from the site of works, without determining the contract and while permitting the Contractor to carry out other balance works under this contract, may carry out at the risk and cost of the Contractor

- a. the execution of such portion or items of the works which the Contractor has suspended or failed to make proper progress in or failed to complete within the specified time,
- b. removal of condemned and rejected materials from the site,
- c. pulling down and rebuilding of condemned and rejected work,
- d. the provision of proper facilities for inspecting the works, and
- e. Testing of any work or materials.

In such cases, additional expenditure incurred if any by the Employer over and above that which would have been incurred by him had the above works been carried out by the Contractor under the terms of this contract shall be paid by the Contractor to the Employer. The Employer reserves his right to recover such additional expenditure from

the money's payable to the Contractor or from deposits or such amount that may have been lodged by the Contractor with the Employer for due performance of the contract. The Employer further reserves his right to recover such additional expenditure from the money's Payable to the Contractor for any other contracts or transactions of any nature whatsoever existing between the Employer and the Contractor.

Further, MbPT reserves the right to debar/ blacklist the contractor for 3 years from taking up any MbPT works/ contracts.

9.4. <u>Suspension of work on order of Engineer:</u>

The Contractor shall on the written order of the Engineer or his representative suspend the progress of the Works or any part thereof for such time or times and in such manner as the Engineer or his representative may consider necessary and shall, during such suspension, properly protect and secure the Work so far as is necessary in the opinion of Engineer or his representative and shall not resume the execution of the same until a written order is received from the Engineer or his Representative to proceed. Cost, if any, incurred by the Contractor in giving effect to the instructions of the Engineer or his Representative under this clause shall not be borne or paid by the Employer.

9.5. Completion Period:

9.5.1. Time is the essence of the Contract. The Completion Period for the entire work covered under this tender is 5 (Five) Months <u>excluding Monsoon</u> as mentioned in the tender Notice hereinbefore.

- 9.5.2. The work shall be completed in accordance with the provisions of the Contract with any authorised alterations, amendments, additions or omissions within the contract period stipulated or such further period as may be allowed by the Engineer under Clause No.9.6 hereunder and shall not be considered as completed until the Engineer has certified in writing that it has been completed to his satisfaction.
- 9.5.3. If the work is delayed beyond the completion period stipulated in the contract or extended period as may be allowed by the Engineer in accordance with Clause No.9.6 hereunder, the Contractor shall be liable to pay liquidated damage to the Employer as set out in Clause No.9.8 hereunder.
- 9.5.4. If the delay in completion of the work is more than twenty-fivepercent (25%) of the stipulated completion period, the contract is liable to be terminated.

9.6. Extension of time:

- 9.6.1 In the event of
 - (i) any delay, impediment or prevention by employer
 - (ii) Any extra or additional works
 - (iii) Exceptionally adverse climatic conditions
 - (iv) Other special circumstances which may occur other than through a default of or breach of contract by the contractor or for which he responsible.

which may occur be such as may in the opinion of the Engineer fairly entitle the

Contractor to an extension of time for the completion of the work, the Engineer shall determine the period of such extension on the basis of detailed reasoning provided by the Contractor, subject to the condition that any and every extension of time granted by the Engineer shall be deemed to be in full compensation and satisfaction for and in respect of any and every actual or possible loss/ damage or injury sustained or sustainable by the Contractor in respect of the cause or causes giving rise to such extension. Provided further that the Engineer is not bound to take into account above circumstances / event unless the Contractor has within 28 days after such circumstances / event have arisen or as soon thereafter as is practicable delivered to the Engineer's Representative particulars of any claim to an extension of time to which he may consider himself entitled in order that such claim may be investigated at that time.

Note: No extension case will be considered if Contractor submit the request for extension 28 days after the scheduled/ extended/ actual date of completion.

9.6.2 As per MbPT transparency plan, the extension in completion period will be initially approved by Chief engineer and will be sent for audit concurrence. On receipt of audit concurrence, the proposal will be put-up to variation committee. Based on recommendations of variation committee, it will be put up for competent Authority's sanction. This complete process will take about 60 days' time which the contractor shall note.

9.7. Working hours:

The Working Hours shall normally be from 09.00 A.M. to sunset. No work shall be carried out between sunset and 09.00 A.M. and on Sundays and on public holidays except with the previous sanction in writing of the Engineer or his Representative. However, granting of such permission will be entirely at the discretion of the Engineer or his Representative and cannot be claimed by the Contractor as a matter of right. The refusal to grant such permission will not be accepted as a ground or excuse for not completing the Works within the Completion Period stated above or as a ground for the Contractor to claim additional payment. However, the timing of the place of work/ office/ hospital shall be followed for working in coordination with the concerned staff thereat.

9.8. Liquidated damages for delay in completion:

- If the Contractor fails to complete the Work within the time period prescribed in the Contract or extended time period as may have been granted by the Engineer, then the Contractor shall pay to the Employer, liquidated damages for such default (and not as a penalty).
- Liquidated damages for delay in completion of the works are 1/2 percent (0.50%) of the Contract Price, for delay of each week or part of a week subject to a maximum ceiling of 10% of the Contract Price of work. However, if the work is delayed by more than 25% of the contracted completion period of tender, the contract is liable to be terminated and the balance works are liable to be got completed by Mumbai Port Trust through any other agency at the risk and cost of the defaulting Contractor.
- The Employer may without prejudice to any other method of recovery deduct the amount of such damages from any moneys in his hands due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligations to complete the works under tender or from any other of his obligations and liabilities under the Contract.

9.9. <u>Certificate of substantial completion of works:</u>

- 9.9.1. As soon as, in the opinion of the Engineer the works have been completed and have satisfactorily passed any final test that may be prescribed by the Contract, and the site shall have been handed back by the Contractor to the Employer, the Engineer may on receiving a written undertaking by the Contractor to finish all outstanding work during the first two months of Defect liability period, issue a certificate of completion. The Defect Liability Period for the Works shall commence from the date of such certificate. In the event of the outstanding works not being completed within two months from the date of issue of the Completion Certificate, the Work shall be deemed not to have been taken over on the date of the Completion Certificate and the Defect liability period thereof shall begin only when the outstanding works are completed in all respects and handed over to the Engineer.
- 9.9.2. The issue of such certificate of Completion is a matter to be decided by the Engineer in his absolute discretion and the discretion will be exercised in cases of the following types.
 - i. Work has been completed to such an extent that the Employer is enabled to occupy and make gainful use of it to the extent he intended to and such gainful use can be made by him without being unduly inconvenienced by concurrent execution of the balance of works by the Contractor.
 - ii. The work has been absolutely handed over to another agency and the balance of works is small and the Contractor cannot undertake these small balance works efficiently concurrently with the work of the other agency.
- 9.9.3. In cases where the Engineer decides that the circumstances justifying issue of certificate of Completion do not exist, the date of completion means the date on which the work has been completed in all respects (barring rectification of minor defects, which rectification does not interfere with the gainful use).
 - 9.10 Bonus:Not applicable.

10. Maintenance and defects:

10.1. <u>Defect during execution:</u>

The Contractor shall at his own cost and within three days after notice in writing to that effect has been given, commence to re-execute such portion of the works under each part of the tender as the Engineer or his Representative may consider have been executed in an unsatisfactory manner, even though the works may have been previously passed, or even if the Contractor's attention had not been previously drawn to the unsatisfactory nature thereof. No certificate that may be granted by the Engineer to the Contractor under these presents shall relieve the Contractor from his liability for and in respect of unsound work discovered prior to the date of issue of the final certificate.

10.2. Defect liability period:

Defect Liability Period for the works covered under this contract is <u>one year</u> from the date of completion of the entirework.

10.3. Repair and remedies during defect liability period:

During the Defect Liability Period, the Contractor shall execute all such works of repair, amendment, reconstruction, rectification and making good of defects, imperfections, shrinkages or other faults as may be instructed to the Contractor in writing by the Engineer. Such repair or remedial measures shall be attended within fourteen days from the date of receipt of written instructions.

As regards to the procedure of carrying out the repair/s, rectification and making good of defects, the decision of Engineer shall be final and binding upon the Contractor. The works carried out during the Defect Liability Period shall also be maintained till the end of Defect Liability Period.

10.4. Cost of repairs and remedies:

All such work of repairs and remedies shall be carried out by the Contractor at his own expense, if in the opinion of the Engineer, the same is due to the use of materials or workmanship not in accordance with the Contract or due to neglect or failure on the part of the Contractor to comply with any obligations expressed or implied under the contract.

10.5. <u>Remedy on Contractor's failure to carry out work as required:</u>

If the Contractor fails to do any such work of repairs and remedies and as required by the Engineer, the Employer shall be entitled to carry out such work by his own workmen or through other Contractor. The cost so incurred shall be deducted from contractor's retention money or any money's due or that become due to the Contractor.

11. Additions, Alterations and Omissions:

11.1. Variations:

- (i) The Engineer may make any variations in the, quality or quantity of the Works, or any part thereof that may in his opinion be necessary, and for that purpose or if for any other reason it shall in his opinion be desirable, shall have powers to order the Contractor to do and the Contractor shall do any of the following.
 - a. Increase or decrease the quantity of any work included in the Contract.
 - b. Deletion of any work.
 - c. Change the character or quality or kind of any work.
 - d. Change the levels, lines, position and dimensions of any part of the Works, and
 - e. Execute additional work of any kind necessary for the completion of the Works.

Such variation shall not in any way vitiate or invalidate the Contract but the value (if any) of all such variations shall be taken into account in ascertaining the amount of the Contract Price.

(ii) No such variation shall be made by the Contractor without an order in writing of the Engineer, provided that no order in writing shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this clause but is the result of the quantities required to be executed for completion of the work being more or less than those stated against the respective items in the Schedule of Quantities and Rates, and provided further that in such cases, variation from the rates in the accepted Schedule of Quantities and Rates shall not be allowed.

- (iii) The valuation of extra item / substituted item / modified item shall be made in accordance with Clause No.11.2 hereunder, provided that the varied work has been executed with the prior approval of the Engineer.
- (iv) If extra item / substituted item / modified items are executed by the Contractor without the prior approval of the Engineer, such work is liable to be rejected and shall be re-executed by the Contractor at no extra cost. However, the Engineer, at his sole discretion, may accept such works, but the payment for the same will be made after reduction of ten percent (10%) from the valuation of such works made as per Clause No.11.2.

11.2. Valuation of extra item / substituted item / modified item:

The rate for any extra item/ substituted item/ modified item shall be determined by the Engineer as detailed below.

- a) From a similar item if such an item exists in the tender.
- b) From a comparable item, if such an item exists in the tender.

If (a) & (b) are not available then, in the following order of preference

- c) From a similar or comparable item from the Mumbai Port Trust Schedule of Rates.
- d) From CPWD Analysis of Rates/ All India Standard Schedule of Rates -Standard Analysis of Rates published by Government of India, Ministry of Works and Housing, National Buildings Organisation and using current costs of labour and materials and with an allowance of 10% on direct costs toward contractors' profit and overheads.
- e) From actual direct costs of labour and materials consumed and with an allowance of 10% towards contractors' profit and overhead.

In case of (d) and (e) above, the Contractor shall submit vouchers in respect of the rates of labour, material and hire charges of hired plant and equipment paid by him. In case of plant and equipment owned by the Contractor, the rates of hire charges to be billed will be fixed by the Engineer.

Provided that no increase of the Contract price under this clause of variation of rate or price shall be made unless as soon after the date of the order as is practicable, and in the case of extra or additional work before the commencement of the work or as soon thereafter as is applicable, notice shall have been given in writing:

Provided further that in the event of the Contractor disagreeing with the rate determined by the Engineer, the Contractor shall not stop the work but shall expeditiously execute the same and the Employer will make provisional payment at the rate determined initially pending review and final decision.

If the valuation of rates of extra items/ substituted/ modified items are determined as per Clause Nos.11.2(a), 11.2(b) & 11.2(c) then the percentage on total amount/ offered/ quoted by the Contractor above or below the estimated cost put to the Tender shall be applied to these rates and if the valuation of rates of extra items/ substituted items are determined as per Clause Nos.11.2(d) & 11.2(e) then the percentage on total amount/ offered/ quoted by the Contractor above or below the estimated cost put to the Tender Notice, shall not be applied to these rates.

11.3. Payments for extra work:

The contractor shall send to the Engineer once in every month an account giving particulars (as full and detailed as possible) of all payments for any additional works to which the contractor may consider himself entitled and of all extra and additional works ordered by the Engineer which he has executed during the preceding months and no claim for payment for any such works will be considered which has not been made within such time as may be possible for the Engineer to physically check the said extra or additional work done by the contractor. Provided always that the Engineer shall be entitled to authorise payment to be made for any such works notwithstanding the contractor's failure to comply with this condition, if the contractor has at the earliest practicable opportunity, notified the Engineer that he intends to make a claim for such works.

12. Plant, temporary works and materials:

12.1. Exclusive use for the works:

All Construction Plant, Temporary Works and materials provided by the Contractor shall when brought on to the site be deemed to vest in the Employer and the Contractor shall not remove the same without the consent in writing of the Engineer's representative. Provided that nothing contained in these conditions shall prevent the Employer from retaining on the site for the due completion of the Works any item of construction plant, Temporary Works and materials after the happening of any event, which gives to the Engineer the right to exclude the Contractor from the site and proceed with the completion of the Works. Upon the completion of the Works, or certification by the Engineer that the plant, Temporary Works or materials are no longer required for the Works, the same shall be deemed to re-vest in the Contractor, who may then remove them from the site of work within the period stipulated by the Engineer.

12.2. <u>Removal of plant etc.</u>:

Upon completion of the works, the Contractor shall remove from the site all the said construction plant and temporary works remaining thereon and any unused and surplus materials provided by the Contractor and rubbish of every kind and leave the whole of site and Works clean and in a workmanlike condition to the satisfaction of the Engineer. If the Contractor fails to remove any of the said construction plant, temporary works or unused materials or rubbish within such reasonable time after the completion of the Works as may be allowed by the Engineer, then the Employer may sell the same and shall after deducting from the proceeds, the costs, charges and expenses of and in connection with such sale, pay the balance if any to the Contractor.

12.3. <u>Employer not liable for damage to the plant etc.</u>: The Employer shall not at any time be liable for the loss or damage of said construction plant, temporary Works or materials.

12.4. Employer's plant and equipment:

Not applicable

13. Measurement:

13.1. Quantities:

The quantities set out in the Schedule of Quantities and Rates are the estimated quantities and are liable to altered or omitted to any extent.

13.2. <u>Works to be measured:</u>

The Engineer shall ascertain and determine by measurement, the value of the work done in accordance with the Contract. From time to time during the execution of the works and whenever required by the Engineer or his Representative, detailed measurements of any part or parts of the Work shall be taken jointly by the Engineer's Representative and the authorised representative of the Contractor. If any work is likely to be covered up or put out of view the Contractor shall give due notice to the Engineer's Representative to enable him to examine and measure such work before it is covered up or put out of view (see Clause No.8.c of 'Conditions of Contract'). The Contractor shall provide qualified staff and appropriate equipment to assist the Engineer or his Representative in taking such joint measurements and shall furnish all particulars required by either of them. The measurements will be recorded by the Engineer's Representative of the Contractor at the time of recording the measurements.

If the Contractor has any difference of opinion as to the recorded measurements, he shall submit, in writing, to the Engineer, within one week from the date of the measurement, the details as to the points of differences claimed, which will be examined and decided upon by the Engineer separately.

Should the Contractor or his authorised representative fail to forthwith attend for taking the measurements along with qualified staff and appropriate equipment after having been intimated by the Engineer or his Representative,

and/ or

fail to countersign the measurements in the Measurement Books,

and/ or

fail to submit to the Engineer, in writing, within one week from the date of the measurement, the details of the points of differences claimed, if any, then the measurements taken and recorded by the Engineer's Representative shall be taken to be the correct measurements which shall be final and binding on the Contractor and the Contractor shall have no right to dispute the same.

Should the Contractor fail to give due notice to enable the Engineer's Representative to examine and measure works before the same are covered up or put out of view, such work will not be measured and the Contractor shall have no right to claim payment for the same.

The authorised representative of the Contractor is also required to countersign the Progress Books, cement register, material register and all other record books, in which the Engineer's Representative records the progress in connection with the contract work. In case the contractor's representative does not countersign the above records, the records maintained by the engineer's representative shall be treated as final and binding on the contractor.

13.3. <u>Method of measurement:</u>

The Works shall be measured net, notwithstanding any general or local custom except

where otherwise specifically described or prescribed in the Contract.

14. PRICE VARIATION & PRICE ADJUSTMENT:Not applicable

The Contractor will not be paid Price Variation for work under this Contract.

15. Certificates and Payments:

(a) Mode of payment:

Mode of payment for civil works:

- The Contractor shall submit to the Engineer after the end of each month his bills for the Works executed upto the end of the month together with particulars of other amounts to which he is entitled under the Contract. The minimum amount of an interim bill shall be of <u>Rupees Ten(10) lakhs.</u> However, in exceptional cases, the Engineer/ Engineer's representative at his discretion, may issue an interim bill even if the amount is less than the above.
- 2. These bills shall be submitted on a printed Proforma to be prepared at the cost of the Contractor as per the Proforma-III(A) or III(B).
- 3. In a cycle of three interim bills, two consecutive bills will be based on estimated value of work done as certified by the Engineer (referred to as estimated interim bills) and the third bill (referred to as measured interim bill) will be based on detailed measurements as certified by the Engineer.
- 4. For the purpose of estimated interim bill, the amount to be billed will be worked out by the Engineer's Representative and the Contractor shall submit the bill accordingly.
- 5. The measured bill shall be based on detailed measurements of the Works taken jointly by the Engineer's Representative and the authorised representative of the Contractor, subject to the provisions of Clause No.13.2 of 'Conditions of Contract'.
- 6. If the Contractor has any difference of opinion as to the estimated value of work/ measured quantities of work billed, he may indicate the same by way of a separate Annexure to the bill and not by altering the estimated value of work/ measured quantities of work recorded by the Engineer's Representative. The differences claimed by the Contractor will be examined and decided upon by the Engineer separately in terms of the contract.
- 7. All payments against interim bills shall be treated as 'on account' payments subject to adjustment at any time until the date of payment of final bill.
- 8. The Employer/ Engineer reserve the right to adjust the amount of any bill against the Contractor's dues to the Employer in connection with this contract or in connection with any other dealings of the Contractor with the Employer.
- 9. In case of interim bills based on estimated value of work, one hundred percentages (100%) of the amount certified by the Engineer shall generally be paid by the Employer within ten (10) working days from the date of certification of the bill by the Engineer.
- 10. In case of interim bills based on detailed measurement of work Eighty percentage (80%) of the amount certified by the Engineer shall generally be paid by the Employer within ten (10) working days from the date of certification of the bill by the Engineer and the balance twenty percentage (20%) of the amount will be paid by the Employer within twenty-one (21) working days from the date of

certification of the bill by the Engineer.

- 11. Every effort will be made by the Employer for making payments to the contractor within the stipulated period. However, if for any reasons, payments are delayed by the Employer beyond the stipulated period after satisfactory submission of Contractor's claim comprising of all the relevant documents, no interest shall be payable for such delayed payments.
- 12. The Contractor's final bill shall be passed for payment after the Engineer certifies completion/ substantial completion of the work and the Contractor complies with all the Conditions of the Contract excluding the Condition regarding Defect Liability Period.
- 13. The date, on which a cheque of payment is handed over to the Contractor by the Employer, will be considered as the date of payment for all purposes.
- 14. The Engineer may at any time make any correction or modification to any certificate, which shall have been issued by him and shall have powers to withhold any certificate if the works or any parts thereof are not being carried out to his satisfaction.
- 15. In case the Contractor fails to prepare and submit interim or final bills, the Engineer reserves the right to prepare and certify the bills for payment/ recovery as the case may be.

(b) <u>Refund of security deposits:</u>

- i. Upon the Engineer certifying in writing that the Works have been completed the four percent (4%) Additional Security Deposit mentioned in Clause No.6.2.1.(b) and Extra Additional Security Deposit mentioned in clause no. 6.2.1(d) (if applicable) herein will be refunded to the Contractor, provided there are no breaches of any conditions of the contract as on the date of completion and only after final bill for the work has been certified (excluding any claims referred to arbitration & pending settlement).
- ii. Upon the expiry of the Defect Liability Period, the Initial Security Deposit mentioned in Clause No.6.2.1(a) and the three percent (3%) Retention Money mentioned in Clause No.6.2.1.(c) will be refunded to the Contractor, provided always that if at such time if any work remain to be executed by the Contractor ordered during the Defect Liability Period pursuant to Clause 10 hereof, the Employer shall be entitled to recover from the Security Deposit and the Retention Money the actual expenditure incurred by the Employer in the completion of such works or if such works have yet to be completed, the Engineer's estimate of the cost of completion of such works, plus any other amounts due from the Contractor.

(c) <u>No interest payable:</u>

No claim for interest from the contractor will be entertained by the Employer in respect of any deposits or with respect to any moneys or balances which may be in the hands of the Employer owing to any dispute between the Employer or the Engineer and the Contractor, or with respect to any delay on the part of the Employer in making monthly or final payments or otherwise.

16. Remedies and Powers:

16.1. Employer's lien: The Employer shall have a lien on and over all or any moneys that may

become due and payable to the Contractor under these presents, and/or also on and over the deposit or security amount or amounts paid under the Contract and which may become repayable to the Contractor under the conditions on that behalf herein contained for or in respect of any debt or sum that may become due and payable to the Employer by the Contractor either alone or jointly with another or other, and either under this or under any other contracts or transactions of any nature whatsoever between the Employer and the Contractor.

16.2. Liquidation and re-entry:

In the event of the Contractor going into liquidation or passing an effective resolution for winding up or upon the Contractor becoming bankrupt or making an arrangement with or assigning in favour of his creditors or upon his assigning this Contract or upon an execution having been levied on the Contractor's goods or upon the Engineer certifying under his hand to the Contractor that in his opinion the Contractor.

- i) has abandoned the Contract, or
- ii) has suspended the progress of the Works for seven days after receiving from the Engineer written notice to proceed without any lawful excuse under these conditions, or
- iii) has failed to make proper progress with the Works for seven days after receiving from the Engineer written notice to employ more men, and/ or items of Plant equipment and/ or materials, or
- iv) has failed to remove materials from the site or re-execute work seven days after receiving from the Engineer written notice that the said materials or Works were rejected by the Engineer, or
- v) has failed to give the Employer or the Engineer proper facilities for inspecting the Works or any part of them for three days after receiving from the Employer or the Engineer written notice demanding the same, or
- vi) has failed to complete all or any part of the Work by the time or extended time for completion, or
- vii) has failed to submit any work or material to proper tests for three days after receiving a written notice from the Engineer requiring the same, or
- viii) has failed to give proper account of the materials issued to him, or
- ix) has removed from the Site without the Engineer's written permission any plant or material brought to the site, or
- x) has committed repeated breaches of any of the conditions of the contract or Specifications for the materials and workmanship, or
- xi) has failed to complete the work within twenty five percent (25%) of the contracted completion period over the completion period as stipulated under Clause No. 9.5 herein above.

then the Employer after giving fourteen (14) days' notice in writing to the Contractor, may enter upon the site and the Works and expel the Contractor therefrom and may use the materials and plant upon the premises for completion of the Work and employ any other Contractor to complete or may himself complete the Works and upon such entry the Contract shall be determined save as to the rights and powers conferred upon the Employer and the Engineer hereby. The Engineer's Certificate under this clause shall be conclusive proof as between the Contractor and the Employer of the statements contained therein.

16.3. Damages and forfeiture of security deposit:

In case of failure on the part of the Contractor at any time during the currency of the Contract to comply with any of the conditions herein contained or in case of any breach of any of the terms and Conditions of the Contract or if the Employer shall enter and determine the Contract under relevant Clause above no right of action for any work done or for materials or plant of which the Employer may have taken possession in accordance with relevant Clause in any other respect shall arise until the Engineer has certified that the Work has been satisfactorily completed and the costs of completion and penalties due for delay in completion and the periodical payments which have been made to the Contractor have been ascertained and the amount thereof certified by the Engineer in writing. The Contractor shall be liable to make good to the Employer the difference, if any, between the costs of the completion of the Works by the Employer or through other Contractors as aforesaid and the costs on the basis of the Schedule of Quantities and Rates hereunder and all other charges and expenses as shall or may in anyway be incurred or sustained. The Employer shall be at liberty to retain the said sums from any amount that shall become due and payable to the Contractor under this or any other contract without prejudice to the provision hereof. The Employer shall be entitled to forfeit the Security Deposit lodged by the Contractor with the Employer and the Retention Money retained by the Employer under Clause 6.2 above or to assess the loss or damage which the Employer has suffered by reason of such failure or breach and to appropriate the said Security Deposit towards such loss and damage without recourse to a Court of Law and without prejudice to any right of recovery by and any other means. If however, upon this being done, it appears from the Engineer's certificate that the aggregate amount of the cost of construction and the penalty if any payable by the Contractor is less than the sum which will be justly due to the Contractor in respect of the work actually executed by him upon the basis of the rates and prices hereunder written then the Employer shall pay the balance to the Contractor within a reasonable time after the issue of such certificates and if it so appears that such amount is more the sum aforesaid then the balance shall be paid by the Contractor to the Employer.

16.4. Extras Expenses:

Any extra expenses in addition to the amount specified in the Schedule of Quantities and Rates which may be incurred by the Employer in the performance of the Works, required owing to the neglect or omission on the part of the Contractor or his workmen during the execution of the Contract shall be deducted from any sums due or which may thereafter become due to the Contractor, or the Contractor may be called upon to pay the amount of such extra expense to such person or persons as the Employer may appoint to receive the same and in the event of the Contractor failing to make such payment the said amount shall be recoverable from him in such manner as the Employer may determine.

17.Law and Language:

The Contract shall be interpreted and have effect in accordance with the Law of India and no suit or other proceeding relating to this Contract shall be filed or taken up by the Contractor in any Court of Law except in Mumbai.

The Language for communications shall be English in which the Tender / contract is written.

18.Engineer Decision Final

The whole of the work under this contract shall be carried out under the direction of the

T.No.E-48/ 2021; Technical Bid; Page:56.

Engineer and his decision upon all questions relating to the details of construction or the meaning of the drawings, conditions of contract, Specifications, Schedule of quantities and rates and the methods of carrying out the work shall be final and any dispute arising under in connection with this contract or the carrying out thereof including any question as to construction and meaning of this contract or any clause therein shall be final and binding upon the Contractor whether such decision shall have given by way of certificate or otherwise and whether it shall have been given during the progress of the work or after completion of the same.

19.Notice to Statutory bodies

The Contractor shall give the notices to traffic police, municipal corporation, police, and other statutory and non-statutory authorities, etc. that may be required by law and obtain all requisite licences for temporary obstructions, enclosures and for any other purposes whatsoever and pay all fees, taxes and charges which may be leviable on account of his/ their own operations in executing the contract.

The contractor shall also give notices to Central Industrial Security Force (CISF), Mechanical Engineering Department, Port Department and Port Fire and Safety Officer of Mumbai Port Trust and shall abide by their terms and conditions.

20.Safety of existing services:

The Contractor shall take due care and adopt such measures to ensure that the existing underground utility services of Mumbai Port Trust as well as other Public Utility Bodies viz. TATA, BEST, MTNL, MCGM etc. are not damaged during the execution of the work. Exact location and nature of a service shall be ascertained by the contractor from the concerned agencies by taking trial pits at strategic points as directed by the Engineer or his representative. The work in the vicinity of such services shall be carried out to meet the specific requirements of the concerned authority to which the service belongs. Any damage caused to a service, irrespective of the fact that the utmost precautions are taken to avoid damage shall be at the entire risk and cost of the Contractor

21.Contractor's site office:

The contractor will be allowed, rent free, the use of such ground, as is available at or near the site of work, for his site office, Laboratory& store, as in the opinion of the Engineer's Representative may be absolutely necessary for the execution of works. In case if the contractor desires to have store/ office in MbPT residential buildings and in the absolute discretion of the Engineer, such rooms will be allotted to the contractor subject to the availability and recovery of rental charges as per MbPT rules. The electricity charges shall be recovered at the prevailing MbPT rates from the running bills. If allotted such units shall be vacated within 30 days of the completion of Completion Period failing which penal rent as per MbPT rules will be recovered from the contractor. The maintenance of such units shall be the sole responsibility of the contractor.

22.Removal of Surplus Excavated Materials & Debris:

All the surplus materials/ debris/ scrap materials/scrap etc. and debris arising out of the work as ordered by the site Engineer shall be removed by Contractor by making necessary arrangement to dispose it of anywhere out of Mumbai Port Estate. The material shall not be dumped anywhere in Mumbai Port Trust Estate. If any of such materials are found dumped anywhere in Mumbai Port Trust Estate, a fine of Rs. 25,000/- per lorry load will be recovered from the Contractor.

23.Records:

The contractors Site Engineer shall record, keep and maintain progress book/DPR, work instruction book, materials, instruction register, hindrance register, work diary, and all such other records as per CVC guidelines. Such records shall be updated daily and submitted for verification by the Engineer.

24.Facilities to be provided by the Contractor:

1. Vehicle:Not applicable

2. Site Office for MbPT Engineer in-charge: Not applicable

25.Adjustments for Changes in Legislation:

The contract price shall be adjusted to take account of any increase or decrease in cost resulting from a change in the laws (including the introduction of new laws and the repeal or modification of existing laws) or in the judicial or official government interpretation of such law, made after cut-off date (i.e. 28 days prior to submission of tender), which affect the contractor in the performance of his obligations under the contract.

If the contractor suffers (or will suffer) delay and / or incurs (or will incur) additional cost as a result of these changes in the laws or in such interpretations made after the cut-off date, the contractor shall give notice to the Engineer and shall be entitled to (i) an extension of time for any delay (to be established by the contractor) and (ii) payment of such costs arising out of such changes in legislations.

26.Force Majeure

- (A) In this clause, 'Force majeure' means an exceptional event or circumstances:
 - a) Which is beyond party's (Employer or contractor) control
 - b) Which such party could not reasonably have provided against before entering into the contract.
 - c) Which, having arisen, such party could not reasonably have avoided or overcome and
 - d) Which is not substantially attributable to the other party

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions a) to d) above are satisfied.

- War, hostilities (whether war to be declared or not), invasion, act of foreign enemies
- Rebellion, terrorism, revolution, insurrection, military or usurped power or civil war,
- Riot, commotion, disorder, strike or lockout by persons other than contractor's personnel and other employees of the contractor and sub-contractors,
- Munitions of war, explosive materials, ionising radiations or contaminations by radio-activity, except as may be attributable to the contractor's use of such munitions, explosives, radiations or radio-activity and
- Natural catastrophes such as earthquakes, tsunami, hurricane, typhoon or volcanic activity.
- (B) No Breach of Contract:

The failure of the party to fulfil any of its obligations hereunder shall not be considered to be breach of, or default under this contract in so far as such inability arises from any event of Force Majeure, provided that the party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this contract.

- (C) Measures to be taken:
 - A party affected by an event of Force Majeure shall take all reasonable measures to remove such party's inability to fulfil its obligations hereunder with a minimum of delay.
 - A party affected by an event of Force Majeure shall notify other party of such event as soon as possible, and in any event not later than 14 days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of the normal conditions as soon as possible.
 - The parties shall take all reasonable measures to minimise the consequences of any event of force majeure.

27.Use of MbPT weigh bridges:

The contractor shall be permitted free use of Mumbai Port Trust weigh bridges for weighment of material.

28.As made drawing and progress photographs:

The Contractor shall at his cost and expenses supply to the Employer prints of colour photographs of progress & completed work from time to time. Minimum 100 photographs shall be submitted for entire work. The photographs shall be of size 8" x 10" each. The album shall be handed over to the Employer. No prints or soft copy shall be supplied to any person or persons without the previous permission of the Employer in writing.

29.Mobilisation Advance:

Not applicable

30.Claim, dispute and Arbitration - Not applicable.

31.Space for material storage, Labour Camp & Residential Accommodation

31.1 Residential Accommodation/ labour camp: Not applicable

31.2 Space for Material storage : Open space will be provided wherever available free of cost.

32.TERMINATION

32.1 Termination for Default

(a) The Employer, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Contractor, may terminate the Contract in whole or in part:

- if the Contractor fails to execute the works or deliver any or all of the material within the period specified in the Contract, or within any extension thereof granted by the Employer pursuant to Clause 9.6;
- > if the Contractor fails to perform any other obligation under the Contract; or
- if the Contractor, in the judgment of the Employer has engaged in fraud and corruption, as defined in Clause 33, in competing for or in executing the Contract.
- (b) In the event the Employer terminates the Contract in whole or in part, pursuant to Clause 32.1(a), the Employer may execute or procure, upon such terms and in such manner as it deems appropriate, material or works or related services similar to those undelivered or not performed, and the Contractor shall be liable to the Employer for any additional costs for such similar material or works or related services. However, the Contractor shall continue performance of the part of the Contract which is not terminated.

32.2 Termination for Insolvency.

The Employer may at any time terminate the Contract by giving notice to the Contractor if the Contractor becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Contractor, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Employer

32.3 Termination for Convenience.

- (a) The Employer, by notice sent to the Contractor, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Employer's convenience, the extent to which performance of the Contractor under the Contract is terminated, and the date upon which such termination becomes effective.
- (b) The material or works or related services that are complete and ready for shipment / execution within twenty-eight (28) days after the Contractor 's receipt of notice of termination shall be accepted by the Employer at the Contract terms and prices. For the remaining material or works or related services, the Employer may elect:
 - to have any portion completed and delivered at the Contract terms and prices; and/or
 - (ii)to cancel the remainder and pay to the Contractor an agreed amount for partially completed material or works or related services and for materials and parts previously procured by the Contractor.

32.4 Liquidation and Re-Entry:

In the event of the contractor going into liquidation or passing an effective resolution for winding up or upon the contractor making an arrangement with or assigning in favour of his/their creditors or upon his assigning this contract or upon execution being levied on the contractor goods or upon the Employer certifying under his hand and in his opinion the contractor has

- i) Abandoned the contract or
- ii) Suspended the progress of the work for seven days after receiving from the Employer's written notice to proceed without any lawful excuse under conditions, or

- iii) Failed to make proper progress with the work for seven days after receiving from the Employer's written notice to employ more men, or
- iv) Failed to remove materials from site or pull down the rebuilt work for seven days after receiving from the Employer's written notice that the said materials or works are condemned and rejected by the Employer under Clause8 (d), or
- v) Failed to give the Employer proper facilities for inspecting the works or any part of them for three days after receiving from the Employer, written notice demanding the same, or Failed to submit any work or materials to proper test for three days after receiving written notice from the Employer requiring the same, or
- vi) Failed to complete all or any part of the work by the time or extended time for completion, or
- vii)Failed to complete all or any part of the work by the time or extended time for completion.

Then the Employer may enter upon the site and works and expel the contractor there from and may themselves use the material and plant upon the premises for the completion of the workand employ any other contractor to complete or may themselves complete the work, upon such entry the contract shall be determined save the rights and power conferred upon the Employer hereby. The Employer's certificate under this clause shall be conclusive proof as between the contractor and Employer of the statement contained in it.

33.Corrupt or Fraudulent Practices

The Employer requires that Tenderers/Suppliers/Contractors under this contract, observe the highest standard of ethics during the procurement and execution of this contract. In pursuance of this policy, the Employer:

- (a) defines, for the purpose of these provisions, the terms set forth below as follows:
- "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
- "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among Tenderers (prior to or after tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.
- (b) will reject a proposal for award of work if he determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- (c) Will declare a Tenderer ineligible, either indefinitely or for a stated period of time, to be awarded a contract/contracts if he at any time determines that the Tenderer has engaged in corrupt or fraudulent practices in competing for, or in executing, the contract.

(d) Submission of fraudulent documents will be treated as major violation of the tender procedure and in such cases the EMD/BG of the bidder shall be forfeited, apart from blacklisting the firm for the next 3years.

34.ADVERTISEMENT

Without the written permission of the Employer, the contractor shall not advertise in newspaper and/or in electronic media and/or shall not display on any hoarding, fencing, building etc. in connection with this contract.

35.MANAGEMENT MEETINGS

The Engineer or the contractor may require the other to attend the management meeting to review the plans for remaining work and to deal with matters revised in accordance with early warning procedure.

The Engineer shall record the Business of Management meetings and is to provide copies of record to those attending the meeting. The responsibilities of the parties for actions to be taken are to be decided by the Engineer.

36.Third Party Inspection: Not applicable

37.Integrity Pact

The Contractor has to formally execute Integrity Pact Agreement (as per Annexure 7) with Mumbai Port trust after award of workwhich is **to be executed on Rs 100/- stamp paper**.

38.Execution of works inside Dock/ restricted areas:

- 1. Since the works to be executed inside in the restricted areas, the access to the site will be from Dock Gates/ Security Gates. The Contractor shall arrange to obtain from time to time the necessary temporary Dock Entry Permits for himself and his workmen from the concerned authorities upon being requested by the Contractor to do so. The Contractor shall comply with the customs, CISF and police formalities from time to time. When the Entry Permits are issued to the Contractor in favour of a group of persons, the group shall wear distinctive cotton arm bands for proper identification.
- 2.The Contractor will be held fully responsible for the rightful and proper use of the Temporary Entry Permits that may be issued by the authorities to him, for himself, his workmen, sub-contractors, transport contractors, etc. in connection with the contract work. The temporary Dock Entry Permits that are issued to the Contractor shall be kept by Contractor in his records on expiry of the validity period of the permit or on completion of work or when the person on whose name the permit is issued ceases to be employed on the contract work or whenever directed by the Engineer whichever event above mentioned is earlier.
- **3**. In case of loss of any of the Temporary Entry Permits by the Contractor, or by his workmen, or the sub-contractors, or by the Transport Contractor, etc. the Contractor shall immediately report such loss in writing to the concerned authorities. Contractor will be held full responsible for any misuse of such lost permits.

- **4.**The use of the Temporary Dock entry permit for purposes other than the performance of the Contract will be a criminal offence.
- **5.** Black listing Policy of the Traffic department uploaded on website will remain applicable for this contract.

Chief Engineer Mumbai Port Trust

MUMBAI PORT TRUST Civil Engineering Department

Tender No.48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU,GWMOT.

TECHNICAL SPECIFICATIONS

SECTION-I: Specifications for allied works

1. Excavation:

The excavations shall be in any soil, asphalt, road metal and rubble packing. The Contractor should ascertain the nature of these strata by trial bores or pits at his own expenses before tendering. Useful excavated materials as may be required by the Engineer's representative will be stacked within a lead of 50 m.

The Contractor shall observe fully the safety requirements, as mentioned in IS - 3764 - "Safety Code for excavation work".

The contractor shall provide and work at his own cost all pumps, engines and machinery required to keep the trenches for the drains or foundations, and all other excavations, clear of water, whether subsoil water, storm water, or leakage from tanks, walls drains, sewers or pipes, so that there may be no accumulation of such water and that no setting out may be done, no masonry be laid, no concrete deposited, no joints made and no measurements taken in water. The pumping shall be continued so long after execution of any portion of the work and repeated so often as the Engineer's representative may consider necessary. The pumps and power applied must be such as the Engineer's representative may determine to be sufficient at any particular time, or he may himself supply pumps and power at the Contractor's expense, or he may stop the work together until he is satisfied.

2. Rubble:

Rubble stone shall be of the approved quality. The rubble packing shall consist of good hard basalt stone hand packed and properly rammed and consolidated to required thickness. The stones shall be hand set as close as possible and to a uniform depth. The width of the upper part of the stones shall not be more than 200 mm or less than 150 mm unless otherwise directed. The interstices shall be filled with stone chips, removing the projections above the rubble layer with care, so as not to loosen the whole. The rubble packing shall be thoroughly watered and rammed. Where specified it shall be rolled with a road roller of approved capacity as directed. The rubble packing shall be blinded by 50 mm metal before being rolled. Where waterproof paper is to be laid on top of the rubble packing a small quantity of murrum (not to form a layer in itself) should be spread smoothly without any extra cost.

3. **CEMENT:** Cement to be used for cement concrete works shall be

OPC 43 grade, confirming to IS:12112 OR OPC 53 grade, confirming to IS:12269.

- 3.1 Generally, ordinary Portland cement of 53 grade complying with the requirements of IS 12269 shall be used in all works. The cement which has set or partially set shall not be used.
- 3.2 Each consignment of cement shall be accompanied by a certificate from the manufacturer showing that the cement offered has been tested and analyzed, and such test and analysis comply in all respects with the Indian Standard Specification. The cement shall be purchased from manufacturer or distributor of M/s. L&T, Ambuja, ACC &Vasavadutta Cement. However, the equivalent cement may be allowed to use with the prior approval of the engineer in charge.
- 3.3 The contractor shall advise the Engineer-in-charge of receipt of each delivery, and shall forward to him the manufacturer's certificate together with the invoice stating the quantity delivered the name and address of the manufacturer.
- 3.4 Each consignment of cement shall, after delivery to site, be subjected to all the tests and analyses required by IS:269. Samples shall be collected as directed by the Engineer-incharge and the tests carried out at the field laboratory or an approved laboratory in Mumbai. The cement from which the samples have been executed shall not be used in any works before completion of the testing and analysis and until it has been accepted as satisfactory by the Engineer-in-charge. The costs of all the tests on cement are deemed to be included in the rates entered in the Bill of Quantities for related items of the work. The Engineer-in-charge may reject any cement if the results of such tests are not satisfactory, notwithstanding the manufacturer's certificate. All rejected cement shall be immediately removed from the site at the contractor's own cost.
- 3.5 The contractor shall be responsible for keeping all the cement in sound and acceptable condition. Any cement, which deteriorates while in the stock and is rejected as unsuitable by the Engineer-in-charge shall be removed from the site and replaced by the Contractor at his own expense.
- 3.6 In order to ensure due progress, the contractor shall at all times maintain on the site at least such stock of cement as the Engineer-in-charge may from time to time consider necessary.
- 3.7 Cement in bulk shall be transported to the site in properly designed and approved bulk carriers. The contractor shall provide suitable unloading and storage facilities. The contractor shall submit full details of unloading, handling and storage facilities for the approval of the Engineer-in-charge before the Contractor receives any cement in bulk.
- 3.8 If the cement is brought in the bags, then following to be observed for strict compliance.

Cement in original bags with description of item, quantity, quality and manufacturers name shall be unloaded undercover and stored in a perfectly watertight and well ventilated building having a floor raised not less than 30 cm. from the ground. An air space shall be left between the floor and the bottom layer of the bags. Each consignment shall be identified by a serial number and date of delivery. Cement shall be issued from the store in the delivery. Cement shall be issued from the store in the delivery. Cement shall be issued from the store in the store for the longest period of time. The age of cement at the time of delivery to the site shall not be more than 2 (two) months and the cement shall be used in the works within 3 (three) months thereafter.

4. SAND:Sand to be used on works shall conform to the requirements of the Indian Standard Specification No.3123 for "Coarse and Fine Aggregates from natural sources for concrete". Sand shall be of approved quality, clean, sharp and free from injurious amounts of dust, mica, shells, soft particles, shale, alkali, organic matter, silt, loam or other deleterious substances. It shall conform as nearly as possible to the grading shown in Table III of I.S. 3123. Sand shall not contain more than 4% of silt and other deleterious matter by weight or 12% by volume. Sand shall be washed or screened, if necessary at no extra cost.

5. Concrete Aggregate:

- 5.1. Aggregate shall comply with the requirement of IS: 3123 "Coarse and fine aggregates from natural sources for concrete". The Loss Angeles abrasion value shall not be more than 35 percent.
- 5.2 Aggregate shall be hard, strong, durable, clean and free from any adherent coatings or other deleterious matter and shall be obtained from an approved source. Aggregates, which are chemically reactive with alkalies of cement, shall not be used. Aggregates, which are not clean, shall be washed in clean fresh water to the satisfaction of the Engineer-in-charge.
- 5.3 All aggregates shall be subject to inspection and testing. Sampling and testing shall be carried out in accordance with IS: 23126 (part I to VIII) "Methods of Test for Aggregates for Concrete". All costs and expenses incurred in complying with this requirement shall be borne by the Contractor. Before work is begun the contractor shall inform the Engineer-in-charge about the sources(s) of aggregates. The contractor, at his own cost, shall submit to the Engineer-in-charge representative samples of various aggregates from each source of supply for tests and approval. Only aggregates from sources of supply, which pass the requisite tests and are approved by the Engineer-in-charge, may subsequently be used in the works.
- 5.4 The grading of the fines in reinforced concrete shall be within the limits of grading zones I and II as defined in IS:3123 "Coarse and Fine Aggregate from Natural sources for concrete" - Table 4. Fine aggregate for use in concrete shall be washed if order by the Engineer-in-charge.
- 5.5 Unless otherwise specified on the Drawings, all coarse aggregates in reinforced concrete shall be graded aggregates of 20mm nominal size and down.
- 5.6. Aggregates shall be stored at the site on clean, well-drained areas which are not liable to flooding. The various sizes and types of aggregates shall be well separated and the layout and siting of the storage areas shall be submitted to the Engineer-in-charge for approval prior to the starting of construction.
- 5.7 Any aggregate brought to the site which is not approved by the Engineer-in-charge shall be immediately removed from the site by the contractor at his own cost.
- 5.8. All aggregates shall be subject to inspection and testing, sampling and testing shall be carried out in accordance with IS:23126 (Part I to VII) "Methods of Test for Aggregates for concrete". All costs and expenses incurred in complying with this requirement shall be borne by the Contractor.

The grading of individual aggregates shall be as under:

	Table 1.	
a. 20mm Aggregate:		Permissible limit
Sieve Size		
20 mm		90-100 %
10mm		25-55%
4.75mm	0-10%	
	Table 2.	
ii) 12.5 mm Aggregate:		Permissible limit
Sieve Size		
20mm		100 %
16mm		-
12.5mm	90-100%	
10mm		40-125 %
4.75 mm	0-10%	
	Table 3.	

iii) Sand (Fine Aggregate: or crushed stone to sand size without powder).

10 mm		100 %
4.75 mm		90-100 %
2.36 mm		75-100 %
1.112 mm	55-90 %	
600 micron		35-59 %
300 micron		12-30 %
150 micron		0-10 %

The FM of sand used in the mix shall be more than 2.3

Contractor can use stone crushed to sand size provided the grading matches to requirement and the same is free from powder. It can also be used in combination with sand for which the mix design shall have to be got approved.

6. Water:

Clean fresh water only shall be used for mixing all concrete, grout and mortar. The water shall be free from any deleterious matter in solution or in suspension and be obtained from an approved source. The quality of water shall conform to IS:456.

The contractor shall make adequate arrangements to deliver and store sufficient water at the works for use.

7. Reinforcement:

a. The mild steel to be used in reinforced cement concrete work shall be tested quality and shall comply with the requirements of Indian Standard Specification No.432. High strength deformed bars shall conform to I.S.17126. The contractor shall produce test certificates from the manufacturers of steel. In addition to these certificates, tests shall be carried out at an approved laboratory and should the result of tests made in accordance with the provisions of the Indian Standard Specification show that the steel does not comply with this specification, the Engineer's representative will reject the lot / lots from which the sample or samples were taken and the same shall not be used in the works but shall be removed there from and the work already executed with such bars may be ordered to be demolished.

In addition to the laboratory test as stated above, the sample pieces of reinforcement bars from each lot of the steel brought at site shall be weighed and the weight per running meter of bar shall be recorded by the Engineer's representative, in the presence of contractor's representative. If the weight of the bar is within tolerance limits as specified in the relevant I.S., the same may be allowed to be used in the work. The payment shall, however, be restricted to the actual weight as recorded above or theoretical weights as per I.S. code whichever is less.

All steel used for reinforcement shall be free from loose scales of rust, which must be removed with stiff wire brush. Steel bars must also be free from oil or paint.

The steel shall be properly braced, supported and otherwise held in position so as to get proper cover and to prevent displacement while concrete is put in. The correct number and sizes of reinforcing bars, stirrups and binders shall be provided and placed in position strictly according to the drawings or as may be ordered by the Engineer's representative, from time to time. This must be looked after with proper care and checked over by a competent Foreman personally and finally before placing the concrete.

b. Reinforcing Steel TMT 500

The reinforcement bars shall be corrosion resistant having tensile strength of Fe 500 N/sq.mm. This shall conform to manufacturer's specification. The reinforcement shall be purchased from manufacturer or distributor of M/s. Steel Authority of India Ltd. (SAIL) or M/s. TISCO or M/s.RINL. However, the equivalent steel may be allowed to use with the prior approval of the engineer in charge.

The reinforcement binding wire shall conform to IS:2120 "Mild Steel Wire for General Engineering Purpose", with size 1 mm or more.

Each consignment of Reinforcement brought at site shall be accompanied by a Manufacturer's Batch test certificate.

Reinforcement bars shall be stored on site on timber or concrete supports, suitable space and of sufficient height to keep steel clear of the ground. The reinforcement shall be stored separately size wise.

The testing shall be carried out as per Approved Quality Assurance Plan. The cost of all above tests on Reinforcement shall be deemed to be included in the rates entered in the Bill of Quantities of related items of the work.

Minimum cover to reinforcement shall be equal to that specified or shown on the drawings. Where two bars cross the outer one shall have the minimum cover, unless specified otherwise.

All steel reinforcement before the concrete is poured shall be cleaned and made free from dust, loose scales, oil, rust, grease or any other deleterious material. Particular care shall be taken to avoid contamination of reinforcement with mould oil.

No concrete shall be deposited until all reinforcement has been inspected and approved by the Engineer-in-charge. There shall be in attendance on each concreting gang a competent steel fixer who shall ensure that the reinforcement and other embedded fittings are kept in position before placing and compacting of the concrete.

8. Formwork:

Steel plates for formwork to be used in connection with reinforced cement concrete work shall be strongly and firmly erected. The Form Work must be plane, smooth and free from holes, open joints and other imperfections. They shall be coated with suitable mould oil to prevent the concrete adhering to the surface of the mould. Proper precautions must be taken to see that all the joints in shuttering are water tight and the same should be covered with G. I. Strips, plastic paper etc. to prevent the escape of cement slurry. At exceptional places, wooden Form Work may be permitted by the Engineer's Representative. The timber should be of sufficient thickness and scantlings should be of such good quality as not to wrap, deflect, or deform the same.

The formwork shall be properly strutted and braced in and be strong enough so as to be perfectly rigid and unyielding during the operation of filling, ramming and vibrating the concrete with vibrator. The props of the slabs shall be braced laterally.

The dimensions and constructions of the form work, shall be to the entire satisfaction of the Engineer's representative and shall be such as to bring out the completed work to the required dimensions and with perfect smooth finish.

Before filling the forms, care shall be taken to see that the reinforcements are in their proper positions and thoroughly secured from being disturbed during the filling and ramming of the concrete and that the moulds are absolutely free from dried up cement or concrete, pieces of wood rags, projecting nails or other rubbish.

All precautions must be taken to prevent the leakage of cement slurry during vibration and the consequent honeycombing. Any honey combed concrete members may require to be dismantled or repaired at the discretion of the Engineer's representative, at no extra cost to MbPT.

Stripping of Form Work shall be not prior to 3 days for the in situ vertical members and 1 day for precast elements like dhappa, Kerb Stone, Divider Block etc.

9. Concrete:

i) The concrete shall be composed of water, Portland Cement, or Portland Pozzolana Cement, sand and coarse aggregate.

All sand and coarse aggregate used on the works shall be carefully and accurately measured in suitable gauge boxes and in quantities to the entire satisfaction of the Engineer's representative and the cement to be added to the aforesaid mix shall be either by one or two full bags, the water being added to the dry mix in a manner in which it can be properly controlled and measured.

The cement shall be measured by weight or by bags. One bag of cement weighing 50 kg.shall be considered equal to 0.034 cu.m. in volume. Concrete mixing:

The concrete shall be mixed in an efficient power driven batch mixer. The capacity of the drum shall as far as possible be such that only whole bags of cement are used in each batch. Mixing shall continue for at least 2 minutes after all the materials including water, are placed in the drum and before any part of the batch is discharged. The drum shall be

revolved not less than 14 and not more than 112 revolutions per minutes. The drum shall be completely emptied before receiving materials for the succeeding batch. The volume of the mixed material of each batch shall not exceed the mixer manufacturer's rated capacity of the drum. The drum shall be thoroughly washed when mixing operations cease for any period longer than 1 hour. Hand mixing of concrete, if permitted by the Engineer's representative shall be carried out in the following manner.

The specified quantity of sand shall be spread out first making a level heap about 150 mm deep on a watertight platform or trough, at least 2.7 m X 3.7 m in size, with three sides of sufficient depth to prevent the materials being shovelled off during the operation of mixing. On the top of the sand the specified quantity of cement, with an addition of 10% to allow for hand mixing, shall be spread. All the dry sand and cement shall be turned over with square ended shovels at least three times until the mixtures is of uniform colour. Each shovelful should leave the shovels with a spreading action as well as turning. The specified quantity of coarse aggregate shall now be added and the whole mixture turned over again at least three times. The specified quantity of water shall then be added slowly through a rose attached to watering can when the process of turning the mixture over is being carried out. The mixing shall be continued until the whole batch has reached an even consistency and the mortar is spread evenly through the batch. The mixing should not take more than 15 minutes after the addition of water. One whole bag of cement with an addition of 10% shall be used in each batch.

ii) Placing of concrete:

Mortar or concrete which has partially set before having been placed in situ shall not be taken into used again either by itself or after mixing with additional materials or water.

All concrete must be deposited in the forms within ten minutes after leaving the mixer and the concrete must be worked round the various reinforcements carefully by means of rods and small beaters and trowels, care being always taken to see that no reinforcement is disturbed from its position and no voids are left, the sides of the forms being gently tapped by spades, wooden mallets and trowels to ensure proper filling and a uniform smooth outside surface. Approved power vibrators must be used for consolidating concrete in positions as approved by the Engineer's representative.

iii) Curing:

The concrete exposed surfaces should be kept damp or covered with water for at least two weeks to ensure slow and proper setting.

iv) Concrete Strength Test:

From each day's concreting a set of 6 concrete cubes shall be taken as per IS : 516 for each grade of concrete. However not more than 2 cubes shall be taken from a single batch. Batches for sampling shall be randomly selected by the Engineer's representative. Of these 6 cubes thus made 3 cubes (each cube representing concrete of different batch) shall be tested at 7 days and the remaining 3 cubes at 212 days. The test strength of sample shall be the average of the strength of 3 cubes.

Grade of concrete	Minimum 7 days strength in N/mm ²	28 days' strength in N/mm ²
M15 / (1:2:4)	10.0	15
M20 / (1:1.5:3)	13.5	20

The compressive strengths shall be as under.

The testing shall be carried out in any of the Testing Laboratory as directed by the Engineer's representative. The cost of cubes and transportation of the cubes will have to be borne by the contractor. The testing charges shall be reimbursed to the contractor only if the test results are satisfactory.

The code of practice to be referred to shall be the Indian Standard Code of Practice for plain and reinforced concrete for General Building Construction (Revised) No.I.S.456 and IS 516. In the event of unsatisfactory results of the tests, the contractors shall be required to take such measures as will be directed by the Engineer's representative, free of cost to the Port Trust.

10. Cement mortar:

The cement mortar for all masonry work whether it be of brick or stone or for plaster shall be as specified in the Schedule of Quantities & Rates / Drawings. The cement and sand to be used for cement mortar shall be carefully gauged in suitable sized boxes thoroughly mixed in a dry state on a clean wooden/ steel platform and mixed again after addition of the requisite quantity of fresh water. It shall be prepared in such quantity as can readily be used up and mortar which has partially set shall under no circumstances be used by mixing additional materials or water.

11. Brick masonry:

Bricks shall be best locally available common burnt clay building bricks having an average crushing strength of not less than 35 kg. per sq.cm. when tested in accordance with IS 3495 (Part I). The bricks shall be conventional FPS bricks of approved dimensions 230 mm x 115 mm x 75 mm ($9'' x 4\frac{1}{2}'' X 3''$) with tolerance of upto (+) or (-) 12% on the nominal metric dimensions. The dimensions of the bricks will be tested in accordance with para 5.2.1 of IS 1077-1976. The bricks shall satisfy the requirements in regard to water absorption and efflorescence in accordance with paras 6.2 and 6.3 of IS 1077.

No broken bricks shall be used except as closers. Cement and sand are be as specified earlier. Cement mortar for brick masonry work shall be as specified above.

The bricks shall be laid with the frogs facing upward. The vertical joints shall break joint with course below and above but they shall be directly over one another in alternate course to prevent the necessity of brick bats. The joints are not to exceed 10mm in thickness and are to be full of mortar, well finished up and neatly struck. The work shall be kept wet while in progress to the entire satisfaction of the Engineer's representative till the mortar is properly set. On Sundays and other Holidays when the work is stopped the top of all unfinished masonry shall be kept flooded with water and labourers shall be employed for the purpose.

12. Cement Plaster:

For plastering, all joints in brick masonry work shall be raked out to a depth of at least 20 mm and all R.C.C. and concrete surfaces shall be thoroughly roughened to the entire satisfaction of the Engineer - in - charge and the area to be plastered shall be washed and wetted thoroughly before plastering is commenced. The cement mortar shall be used within 30 minutes after it leaves the mixing board. Internal plaster shall be finished smooth and external sand face or rough cast as directed. Before work is started, patches of plaster 120 mm X 150 mm must be put, approx. 3 m apart as gauges to ensure an even

thickness and the cement plaster must be applied in even squares or strips. Care must be taken to keep the whole surface thoroughly wetted for at least a week. The joints between R.C.C. frame work and masonry walls shall be carefully filled in with cement mortar.

Sand faced plaster shall be carried out in one or two coats as specified. Two coats sand faced plaster shall be applied as follows: The first coat of cement mortar in proportion of (1:3) shall be applied uniformly all over the surface to be plastered to a thickness of 12 mm with a trowel and flat board and in exact plumb. This coat shall be allowed to rest for not less than half an hour. Indentations shall then be made in the form of waves by a broom over the surface to form a key for the second coat. The first coat shall be cured for at least four days.

The second coat of cement mortar shall be applied in the proportion of (1:3) using clean sand screened through a mesh of not less than 1.5 mm and not more than 3 mm equal size to a uniform thickness by trowel and flat board in exact plumb.

The surface shall be tapped with cork piece or rubber sponge to give a desirable uniform sandy granular appearance.

13. Structural steel work:

- i) <u>Steel</u>: The steel to be used for the main structural members shall be completely in accordance with the provisions and conditions of the Indian Standard Specification No.226 for 'Structural Steel (Standard quality). The design, fabrication and erection of the structural steel work shall be in accordance with the Indian Standard Specification No.1200 for "code of practice for the use of structural steel in general building construction".
- ii) <u>I.S. Sections</u>: All structural work except where otherwise stated shall be of rolled steels and all sections shall be of Indian Standard Specifications unless shown or unless expressly approved by the Engineer's representative.
- iii)<u>Tests</u>: The contractor shall forward to the Engineer's representative the manufactures test certificate for each consignment of steel received by him. The Engineer's representative reserves the right to carry out further test if he considers it necessary in accordance with the provisions of the Indian Standard Specifications. If such test is to be carried out, instructions to do so will be given by the Engineer's representative before the steel arrives on the works to enable the tests to be carried out before fabrication is commenced.
- iv) <u>Fabrication</u>: Unless otherwise directed by the Engineer's representative, all steel work shall be fabricated, assembled and joined by welding in shops before despatch to site to the maximum extent possible and as may be reasonably transported.

All angles, plates, bars etc. shall be straightened or shaped while cold by means of pressure and not by hammering. The ends of the structural members will generally be neatly sawn or cropped to length and whenever specially directed, shall be chipped or filled or planed. Edges of plates cut by shearing or by flame shall be finished in a workmanlike manner.

14. Painting:

The whole of the steel work with the exception of galvanised work shall be scraped to

bare metal and thoroughly cleaned of all scales and rust. Before fabricating, all parts in contact or in accessible after assembly will be painted with one coat of zinc chromate primer. After fabrication, all parts and members which are not to be embedded in concrete shall be given one prime coat of zinc chromate primer in the shop. After erection at site all parts and members which are to be embedded in concrete will be given one coat of cement wash. Other parts which are to remain exposed shall be painted with two coats of approved paint. The whole surface of steel work will be thoroughly painted and open spaces in joints and connections etc. will be applied before the previous one is completely dry. No painting will be done in wet weather unless under cover and properly protected.

15. Drainage works:

i) General:

- a. The sewer, storm water drains hereafter called "Drains" in the subsequent clauses shall be to the alignment and gradient shown on the plans and sections.
- b. The pipes before being laid shall be thoroughly cleaned specially the inside of the pipes. Cracked pipe shall altogether be rejected.
- c. The socket ends of pipes shall always face upstream of effluent flow.
- d. The drains shall run in perfect straight lines between manholes as shown on plans and sections.
- e. When trenches opened for laying the drains, water pipes or any other work are over 1 M in depth or even less than that in low bearing soil ground or near heavy or important building or Railway sidings, their sides shall be closely and securely supported by suitable timbering.
- f. The drains, manholes, water gullies, Inspection Chambers and all joints of pipes must be made thoroughly sound and water tight and any joint which may be proved to be leaky at any time during the progress of the works or the contractor's subsequent period of maintenance shall be immediately made sound by the Contractor at his own cost who shall prove all works to be water tight by filling it with water to such height, as the Engineer's representative may determine. Any additional precautionary measures or appliances that may be found necessary to ensure the water tightness of the water gullies, Inspection Chambers, manholes and the joints of pipes shall be adopted by the contractor without extra charge, the responsibility of making them completely water tight resting upon the contractor.
- g. Trenches shall be excavated to the following widths according to the size of drain to be laid and for that width and depth alone will the contractor be paid if the excavation is to be paid separately.

Width of trenches:

Size of pipe	Upto required depth, width of excavation
150 mm	650 mm
230 mm	750 mm

300 mm	1235 mm
450 mm	965 mm

Size of Pipe	Widths of foundation concrete Bedding and rubble packing
150 mm	450 mm
230 mm	610 mm
300 mm	690 mm
450 mm	1220 mm

If the contractor excavates wider trench, he will do so at his own expenses.

Excavations for manholes, inspection chambers and water gullies will be taken to the required depth and will be the size of concrete bedding on plan.

- h. Where excavations made in excess of the limits delineated on the drawings, either by error or by accident, the voids so formed shall be filled in with lime concrete or rubble masonry or otherwise at the discretion and to the satisfaction of the Engineer's representative and at the expense of the contractor.
- i. The contractor shall excavate all such work as Engineer's representative may require in order to locate the position of water pipes, drains, sewer, or any other services met with, in or about any excavation, whatever shall, if the Engineer's representative deem it practicable be properly maintained by the contractor, and by means of shoring, strutting, planking over padding or otherwise as the Engineer's representative may direct. They shall be protected by the contractor from damage during the progress of the work, or if damaged, such damage together with all matters and things resulting from the same, shall be made good and effectually remedied by the contractor as the Engineer's representative may decide and at the expenses of contractor. In the event of the failure on the part of the contractor to carry out to the satisfaction of the Engineer's representative any of the above protective provisions, the Engineer's representativemay, with or without notice to the contractor to adopt such measure as he may deem necessary at the expense and risk of the contractor. If, however, the Engineer's representative considers it impractical for the contractor to maintain any such services and that the exigencies of the work necessitate the breaking down, removal of diversion of any such services, then the cost of breaking down or removing any such drains or sewers and of providing such chutes, pumps or other appliances for the raising and temporary passage of the water or sewage and the cost of pumping out or otherwise removing, shall be borne by the contractors. The cost of breaking down and removing any such water pipes or gas pipes and of rebuilding, replacing, diverting or reinstating any such services shall be paid to the contractor as provided by the contract. The Engineer's representative's opinion as to the amount of the charges shall be final and binding upon the contractor.
- j. Wherever shoring may be deemed necessary by the Engineer's representative the contractor shall provide the same in the best possible manner with best materials and to the satisfaction of the Engineer's representative. The contractor shall employ such kind or kinds of shoring as the Engineer's representative may consider the exigencies of the work to require and it is to be distinctly understood that the work "shoring" is to comprise all classes of such work and all appliances and appurtenances including polling boards, sheet piling and runners (Whether the joints be butt, groove and tongue, feather edge and

groove, bird's mouth and double splay, rebated or otherwise), together with waling, struts, props, raking and other shores; blocks, wedges, iron dogs, bolts, screws, nails and everything that may be required for due execution of the work. The rates for laying pipes, constructing manholes and constructing water gullies shall be held to include the cost of shoring, and no separate allowance shall be made on account of the necessity of shoring.

k. The contractor shall provide and work at his own cost all pumps, engines and machinery required to keep the trenches for the drains of foundations, and all other excavations clear of water, whether subsoil water, storm water, or leakage from tanks, walls drains, sewers or pipes so that there may be no accumulation of such water and that no setting out may be done, no masonry may be laid, no concrete deposited, no joints made and no measurements taken in water. The pumping shall be continued so long after execution of any portion of the work and repeated so often as the Engineer's representative may consider necessary. The pumps and power applied must be such as the Engineer's representative may determine to be sufficient at any particular time, or he may himself supply pumps and power at the contractor's expense, or he may stop the work altogether until he is satisfied.

16. R.C.C. Drainage pipes:

The RCC pipes shall be conforming to IS: 4512.

The R.C.C. pipes shall be carefully laid in position at the required level and their abutting faces shall be coated with hot bitumen in liquid condition by means of a brush. The wedge shaped groove in the end of the pipe shall then be filled with a sufficient quantity of a special bituminous plastic compound or bitumen soaked spun yarn. The collar shall then be slipped over the end of the next pipe butted well against the bituminous plastic ring by suitable appliances approved by the Engineer - in - charge so as to thoroughly compress the plastic compound into the grooves, care being taken that the concentricity of the pipes and the levels are not disturbed during this operation.

The collars shall then be placed symmetrically over the end of the two pipes and the space between the inside of the collar and the outside of the pipe filled with a (1:1) mixture of cement and sand tempered with just sufficient water to have a consistency of the semi dry conditions well packed and thoroughly rammed with caulking tools. The joints shall be finished off with a fillet sloping at 45[°] to the sides of the pipe. The finished joints shall be protected and cured for at least four days or as directed.

17. Man-holes:

- (i) These shall be constructed on drains in the form and of the dimensions shown on the drawing or as directed.
- (ii) Wherever a pipe enters or leaves a manhole, bricks on edge must be cut to a proper form and laid around the upper half of the pipe so as to form an arch. All round the pipe there shall be of a joint of cement mortar 12mm thick between it and the bricks. The ends of all pipes shall be properly built in and neatly finished off with cement mortar.
- (iii) Cast iron frames are to be bedded in cement mortar on the brick work with splayed fillet all round and in such position that the top may be 12mm above the original

surface of the pavement. The covers are to be placed in position and the whole left neat and dry.

In case the specifications for any works under this contract is not covered by the above specifications, the relevant IS code shall be applicable for such works.

18. General:

- 18.1 All materials used in the works shall be of the best quality of their respective kinds, obtained from sources and suppliers approved by the Engineer-In-Charge and shall conform to the latest issues of relevant Indian Standards specifications. Any materials not fully specified and for which no relevant Indian Standard may be available shall be the best of its kind and as approved by the Engineer-In-Charge.
- 18.2 Samples of all materials to be used for the works shall be got approved from Engineer-In-Charge before these are brought to site.
- 18.3 While submitting the samples for approval the Contractor also supply information regarding the name of the manufacturer and manufacturer's specifications.
- 18.4 No material shall be used in the works without prior approval of the Engineer-In-Charge.
- 18.5 All materials brought to site shall be stored and protected in such a manner that these remain in perfect condition until these are to be used in the works. Storage, protection and handling of material shall be as per relevant Indian Standards and where such standards are not available, it shall be as per instructions of Engineer-In-Charge.
- 18.6 The Contractor shall maintain complete record of all materials received on the site or in stores and working area and shall make copies of such records available to the Engineer-In-Charge.
- 18.7 All materials rejected by Engineer-In-Charge shall be removed from the site immediately and shall be replaced by the Contractor at his own cost.

Mode of Measurements

19. Method of Measurements:

i) <u>General</u>:

The quantities given in the Schedule of Quantities and Rates are approximate. Payment will be made for the actual quantities of work ordered & executed and as jointly measured by the Engineer's representative & the contractor.

The Quantities shall be net as they are finished and fixed in the works. The rates and prices shall include whatever allowance is considered by the Contractor to be necessary for waste, sinkage working area, construction slopes, batters, etc.

ii) <u>Excavation</u>:

Rates for excavation shall cover excavation in any strata including old foundations etc. as per items provided in the Bill of Quantities & Rates.

Measurements for the excavation shall be for exact width, length and depth shown or figured on the drawings or as specified.

The rates are to be inclusive of excavation for working spaces, shuttering and shoring, bailing/pumping out water, back filling.

iii) Rubble packing, Sub-base & Water Bound Macadam etc.:

The measurements shall be for consolidated thickness. No extra payment will be made for sinking/settlement into the earth or layer below.

iv) Concrete work:

The measurement of Concrete works shall be as per the dimensions of the elements cast at site in cubic meter.

All concrete work shall be measured and paid for the net design and unfinished dimensions. Increase in dimensions caused by the plaster finish will not be taken into account. No deductions shall be made nor any extra paid for chamfers provided. Deductions will not be made for pipes and fittings.

In case of junctions of two or more concrete members only one of the members will be measured full and no claims for overlap of other members shall be allowed.

Rates for all concrete items shall be inclusive of necessary scaffolding, moulding, and form work, designing, mixing and placing of concrete, vibrating, finishing, curing and testing of concrete etc.

v) Masonry work:

Brick / stone masonry will be paid for the actual cubic contents in cubic meters. No deductions will be made for pipes and fittings.

vi) <u>Reinforcement</u>:

Reinforcement bars, Dowel bars, Tie Bars fixed in accordance with the drawings and specifications will be measured as the net calculated weight upto two decimals on the basis of standard weight as per I.S.I. Structural Engineers Hand Book No.1 (Revised) and I.S.17126-1966. (Revised). The rates shall include for cutting and wastage, straightening, short and long lengths, rolling margin, bending, fixing, binding wire etc. However, all spacers bars, saddles, etc. shall be provided as per site instructions and shall be separately measured and paid under reinforcement item only. Laps as shown on drawings or as approved at site shall be measured and paid.

Samples pieces of bars from each lot brought at site shall be weighed and the weight per metre jointly recorded. The payment shall be restricted to the actual recorded weight or theoretical weight as per I.S. whichever is less.

vii) <u>Cement plaster</u>:

Measurement for plaster shall be the actual area of surface to be provided with plaster.

viii)<u>Painting</u>:

These shall be paid for the actual area painted.

ix) Structural steel work:

Weights of steel sections calculated on the basis of standard weights will be considered for payment. Lengths of sections will be taken to the nearest centimetres. No deduction will be made for holes of bolts or rivets. All base plates, gusset plates in their cut shape, holding down bolts, nuts will be considered for payment. No payment will be made for washers.

x) Part rates:

The Engineer may sanction part rates for partly executed work under any item of the Schedule of Quantities and Rates as may be deemed proper and fit by him. For this purpose, the Contractor shall submit written application for grant of part rates, furnishing calculations in support of the part rates requested.

- xi) <u>Roofing Sheets:</u> Roof sheets shall be paid for the actual surface area of Roofing laid. No payment will be made for the Overlaps.
- xii) For any other item of work for which mode of measurement is not specified above mode of measurement shall be in accordance with IS 1200.

20.0 Technical Specifications: Workmanship

General:

a. A high standard of workmanship in all trades will be required. The Contractor shall ensure that only skilled and experienced tradesmen are employed.

b. The contractor shall be responsible for supply, use and maintenance of all construction plant and equipment and he shall ensure that it is suitable for the work and is maintained in such manner as to ensure safe and efficient working. The Engineer-In-Charge may direct unsuitable plant to be removed from the site and replace plant and to his satisfaction at the cost of the Contractor.

c. The Contractor's supervisory staff shall be fully experienced in the type of works being carried out under this contract.

20.1 Excavation:

All excavations shall be carried out in conformity with the directions laid hereunder and in a manner approved by the Employer. The work shall be so done that the suitable materials available from excavation are satisfactorily utilized as decided upon beforehand.

While planning for excavations, the contractor shall take adequate precautions causing no damages of existing various cables or pipe lines etc. The damages shall be made good at contractor's risk and cost.

The excavations shall conform to the lines, grades sides slopes and levels shown on the drawings or directed by the Employer. The contractor shall not excavate outside the scope or below limits of excavation. Subject to the permitted tolerances, any excess depth excavated below the specified levels shall be made good at the cost of the contractor with suitable material of similar characteristics to that removed and compacted as given hereunder.

All debris and loose material on the slopes of cuttings shall be removed. No back filling shall be allowed to obtain required slopes excepting that when boulders or soft materials are encountered in cut slopes, these shall be excavated to approved depth on instructions of the employer and the resulting cavities filled with suitable material and thoroughly compacted in an approved manner.

All the excavated materials disposed of as directed by the Employer as specified. The rate of excavation shall include disposal, leveling in layers etc.

20.2 Soling

- 20.2.1 Rubble stone for soling shall be laid flat touching to each other. Voids/Pockets are to be filled with quarry run kapachi material.
- 20.2.2 Trap rubble stone used for soling shall be hand packed as closed as possible and bedded firmly with broadest face downwards and greatest length across. Voids shall be filled with stone chips or murum. Soling shall be watered and compacted to the satisfaction of Engineer-in-Charge.

20.3 Concrete:

20.3.1 General:

Concrete shall be provided of grade as specified in BOQ. The concrete hereinafter specified shall be ready mix concrete that shall be used for concreting works as well as reinforced concrete works. In exceptional cases the mixing at site shall be permitted at the desecration of Engineer-in-charge, in such case the concrete shall be mixed on clean and watertight platform. Sand, cement shall be mixed thoroughly, coarse aggregates shall be spread over it and by turning over and by twist from center to side till homogeneous mix is obtained. Concrete shall be placed in layers not exceeding 15 Cm. and shall be thoroughly compacted using needle vibrator to avoid honey combing. Concrete shall be cured for minimum period of 7 days for initial setting.

20.3.2 Concrete Proportions:

Concrete shall be design mix concrete. The mix design shall be submitted to Engineer in charge for his approval at least before 30 days of commencement of concrete activities. The concrete shall be composed using the mix proportions as worked out in the Mix Design. If source of material is changed new design is to be prepared and got approved. The all in aggregate shall consist of stone aggregate of 20 mm and down size and course sand to be blended as per the direction of the Engineer in charge to obtain maximum density and strength.

20.3.3 Following aspects are required to be observed while using Ready Mix Concrete:

- a) The concrete shall be transported by mechanized transit mixer.
- b) No addition of water at site will be permitted

c) Every load of concrete shall be supplied with batch report stating quantity of each ingredient. The detailed mix design of ready mix concrete shall be submitted in advance and it shall comply to all relevant IS specifications and specifications laid in this tender.

The concrete shall be laid in correct line and level as specified and as directed by Engineer-in-charge. The testing of concrete cubes and other tests shall be carried out as per IS Specifications.

20.3.4 The class of concrete shall be in accordance with the following table:

			TABLE 12.1			
	Min. Crus	shing Streng Cm	th KG/Sq.	Minimum Cement Content in KG		
Grade of Concrete	Target strength for mix proportio ning	Works Tests		Per Cubic meter.	Maximum Free Water Cement Ratio	
	28 days	7 days	28 days.			
M-10	15.77	70	100	220*	0.6	
M-15	20.77	105	150	240*	0.6	
M-30	38.25	210	300	320*	0.45	
M-40	48.25	280	400	400* subject to maximum of 425 Kgs per Cum	0.40	

* Only for escalation computation purposes, the quantity of cement used, shall be worked out with the value indicated with * mark, ir-respective of value obtained in concrete mix design or the quantity of cement actually consumed.

- 20.3.5 When the proportions are submitted to the Engineer-in-charge which the considers will produce concrete having the properties required by the foregoing table and elsewhere in the Specifications, such proportions shall be known as the declared but no agreement by the Engineer-in-charge to such declared proportions shall relieve the contractor of any of his responsibilities to use in the works at all times only concrete having properties as laid down in the foregoing table and elsewhere in the specifications and in all respects satisfactory to the Engineer.
- 20.3.6 No deviation from declared proportions will be allowed unless and until the Engineer-incharge shall give his written authorization for the adoption of revised proportions for any class of concrete, this provision shall also apply to any revised proportions so authorized.
- 20.3.7As the work progresses, inspection of cement, aggregate reinforcing steel and testing of the concrete strength will be done by the Engineer-in-charge. The Contractor's concrete plant and material stores shall be made accessible to the Engineer-in-charge at all times

for inspection and taking samples. The contractor shall facilitate in all possible ways the inspection and testing of samples by the Engineer-in-charge. Labour shall be provided by the contractor for testing. Cost of testing shall be borne by the contractor.

- 20.3.8 The proportioning of ingredients of concrete per batch of concrete shall be performed by an approved weight batching plant.
- 20.3.9 The RMC shall be transported from the batching plant to its place of works by transit mixer as rapidly as possible and in such a manner that there shall be no separation or loss of its ingredients. No concrete shall be permitted to the used in the works after initial set has taken place. The use of concrete distributing chutes at an angle of more than 45 degrees from the horizontal will not be permitted without the sanction of the Engineer-in-charge.
- 20.3.10 Authorization to pour concrete shall be obtained from the Engineer-in-Charge. In no case shall concrete be dropped or thrown from a height of more than 2 metres.
- 20.3.11 If Contractor shall agitate the place the concrete thoroughly into place by means of a sufficient number of approved mechanical vibrators of adequate power and having a frequency of not less than 6000 impulses per minute. Concrete once vibrated shall not be vibrated again. The Contractor shall ensure that the concrete is thoroughly worked around the reinforcement and against external shutters so that all entrained air is expelled and the concrete surface when exposed is found good and free from air pockets, honeycombing or other defects. Retamping of concrete or mortar, which has partially hardened, shall not be permitted.
- 20.3.12 In the event of rainstorm or any other severe conditions arising, concreting shall be stopped and appropriate temporary stop ends, vee grooves, etc. placed as may be necessary. During wet weather, the concrete shall be adequately protected as soon as put into position.
- 20.3.13 The contractor shall always have in readiness approved framed sheeting, tarpaulin, etc. for the protection of newly placed concrete during inclement weather. Should any concrete be damaged due to rainstorm or other weather conditions, the Engineer-in-charge may order the cutting out and replacement of the damaged concrete, all at the expenses of the Contractor.
- 20.3.14 All concrete shall be protected during hardening from the harmful effects of sunshine, moisture and frying winds.
- 20.3.15 Compliance with the strength requirement of concrete accordingly to above Table shall be judged by the 28 days tests carried out on cubes taken at the works as per provisions of relevant BIS Code.
- 20.3.16 Should the test cubes fail to meet the minimum specified crushing strength for each class of concrete, the Engineer-in-charge may take one of the following decisions:
- a. Instruct the contractor to carry out such addition tests and/or works to ensure the soundness of the structure at the contractor's expense. This will include, but not limited to, taking of 100mm diameter core samples for testing at locations to be decided by the Engineer-in-charge from hardened concrete.

- b. The Engineer-in-charge may accept the work. Any decision to accept the work shall be entirely at the discretion of the Engineer in-charge who may make a reduction in the rate of the appropriate item.
- c. Reject the work and instruct that the section of the works to which the failed cubes related shall be cut out and replaced at the Contractor's expense.

The minimum cement content in the mixes shall be subject to the approval of the Engineer-in-charge.

20.3.17 Strength Tests:

Work test cubes are to be made, cured and tested in accordance with BS 112121 or equivalent to Indian Standards. They are to be made in groups of 3 under the supervision of the Consultant \ Engineer in charge, each group being made from the same batch of concrete. The concrete is to be compacted in layers by vibration which is to be applied until compaction to refusal in complete.

20.3.17.1 The frequency at which cubes are to be made and the strength to be achieved are as under as per IS 456.

Qty of concrete in the work in M3	Number of samples
1 - 5	1
6 - 15	2
16 - 30	3
31 - 50	4
51 and above	4 plus one additional samples for each additional 50 cum or part thereof.

TABLE 12.2

Each cube is to be tested and is to have a minimum crushing strength as indicated in table. Records of strength of cubes at 7& 212 days shall be maintained.

- 20.3.17.2 Test cubes shall be made in accordance with IS: 516 "Method of Tests for strength of Concrete" except that all test cubes unless otherwise ordered by the Engineer-in-charge shall be compacted by vibration. The contractor shall provide suitable portable vibration tables for compaction of cubes. Test cubes shall be cured and stored as provided in IS: 516. Test cubes shall be stored under the same conditions as the units to which they relate.
- 20.3.17.3 Not less than nine test cubes shall be taken at each section of the work and/or each day's work. For the purpose of this specification "Section" of the work shall be as defined by the Engineer-in-charge.

When in a continuous operation the concrete pour exceeds 100 cum, nine test cubes shall be taken for every 100 cum and proportionately for part thereof.

- 20.3.17.4 All sampling and testing of concrete shall be carried out in accordance with IS :1199 "Method of sampling and analysis of concrete" unless otherwise specifically provided in the specification.
- 20.3.17.5 Three out of each batch of nine cubes will be tested by the Engineer-in-charge for crushing strength and weight at seven days and the remainder at 212 days or at such other time as the Engineer-in-charge may determine.
- 20.3.17.6 The cost of all sampling materials, test cubes and all preliminary testing and works tests including transportation whatsoever shall be borne by the Contractor.

20.4Shuttering.

Form shall be true to shape, lines and dimensions of the concrete work as shown on the Drawing. The contractor shall fix all the form work in perfect alignment. The form work shall be securely braced so as to be able to withstand, without appreciable displacement, deflection or movement of any kind, the weight of the construction or movement of any kind, the weight of the construction or movement of any lines should be watertight to prevent leakage of cement slurry from the concrete. Wedges and clamps are to be used wherever practicable.

20.5 Curing of Concrete:

Immediately after casting, the concrete shall be protected against harmful effects of weather, including rain, running water, shocks, vibration, traffic, rapid temperature changes and drying out process. The concrete shall be covered with wet sacking, hessian or other similar absorbent material approved by Engineer-in-charge soon after the initial set and shall be kept continuously wet for a period of not less than 21 days from the date of casting.

20.6 Dry Rolled Lean Concrete: Not Applicable

20.7 Reinforcement Steel TMT 500:

- 20.7.1 Pertaining to concrete described earlier as well as IS:456, "Code of practice for plain and reinforced concrete".
- 20.7.2 Bar bending schedule shall be prepared by the contractor and shall be submitted to the Engineer-in-charge in quadruplicate for approval at least two weeks before the bars are to be bent. The Engineer-in-charge will check and return one copy for the Contractors use, with amendments if any. The cost of preparing schedules will be deemed to be included in the rates for reinforcement in the Bill of Quantities. Any approval given by the Engineer-in-charge shall in no case, relieve the Contractor from being responsible for the accuracy and correctness of bar bending schedules
- 20.7.3 Bends, cranks or other labour on reinforcement shall be carefully formed in exact accordance with the Drawings or bar bending schedules, otherwise all bars shall be truly straight. Bends shall be made cold round a former having a diameter four times the diameter of the bars.

Stirrups and binders shall be bent to the radious of the bars against which they are to be bent. Bending shall be in accordance with IS: 2502 "Code of practice for bending and fixing of bars for concrete reinforcement". Heating of bars will not be allowed. Bars incorrectly bent shall be used only if means for straightening and rebending have been approved by the Engineer-in-charge. No reinforcement bar shall be bent when in position without the Engineer's approval whether or not it is partly embedded in hard concrete. Bar bending schedules shall be prepared as per IS:2502.

- 20.7.4 All bars shall be bound tightly together, where they cross, with black annealed steel wire 1mm or over in diameter. The free ends of the binding wire shall be inwards.
- 20.7.5 The number, size and form of all reinforcement shall be in exact accordance with the drawings. The reinforcement shall be placed, fixed and maintained in the forms within a tolerance of 5mm during the placing and compaction of the concrete. Horizontal bars shall be suspended or supported with concrete blocks to prevent them from sagging. Such spacer blocks shall have dimensions exceeding 75mm and shall be precast from concrete of the same class as the concrete in which they are to be embedded except that the largest size of aggregate shall be 10mm. Each block shall be cured for 10 days or more. Each block shall be secured to the reinforcement with wire or spring clip embedded on the centre of the block so that it shall not be in contact with the shuttering or subsequently cause rust marks on the concrete. Where necessary spacer bars, supporting steels and distance pieces shall be supplied and fixed by the contractor to maintain the reinforcement rigidly in the correct position and to the satisfaction of the Engineer-incharge. Any ties or stirrups connecting the bars shall be tied so that the bars are properly braced, inside of their curved parts in actual contact with the bars round which they are intended to fit. The cost of providing tying wire as well as stools and chairs and concrete spacer blocks shall be deemed to be covered in the rates for reinforcement steel.
- 20.7.6 Where splicing and/or overlapping in reinforcement are required, the bars shall be provided with such splices or overlaps as are shown on the drawings or directed by the Engineer-in-charge.
- 20.7.7 Butt welding of reinforcing steel bars shall only be used where specified or shown on the Drawing unless permission in writing has previously been given by the Engineer-in-charge. Where butt welding is carried out the ends of the bars shall be prepared with single 45 degree V and a backing plate shall be used. The minimum root face will be one quarter of the bar diameter.
- 20.7.12 Minimum cover to reinforcement shall be equal to that specified or shown on the drawings. Where two bars cross the outer one shall have the minimum cover, unless specified otherwise.
- 20.7.9 All steel reinforcement before the concrete is deposited shall be cleaned, free from dust, loose scales, oil, rust, grease or any other deleterious material. Particular care shall be taken to avoid contamination of reinforcement with mould oil.
- 20.7.10 No concrete shall be deposited until all reinforcement has been inspected and approved by the Engineer-in-charge. There shall be in attendance on each concreting gang a competent steel fixer who shall ensure that the reinforcement and other embedded fittings are kept in position before placing and compacting of the concrete.

20.8 Pavement Quality Concrete: - Not applicable

21. Workmanship not specified:

Workmanship for the items not specified should be as per relevant IS codes and shall be got approved from the Engineer-in-charge.

22. Defective Work:

Any work found to be substandard or defective shall be rectified /redone to meet with requisite standard and specification to the entire satisfaction of Engineer In- Charge. No payment shall be made for rejected works.

23. Structural steel work:-

i) <u>Steel</u>: The steel to be used for the main structural members shall be completely in accordance with the provisions and conditions of the Indian Standard Specification No.226 for 'Structural Steel (Standard quality). The design, fabrication and erection of the structural steel work shall be in accordance with the Indian Standard Specification No.800 for "code of practice for the use of structural steel in general building construction".

ii) <u>**I.S. Sections:**</u> All structural work except where otherwise stated shall be of rolled steels and all sections shall be of Indian Standard Specifications unless shown or unless expressly approved by the Engineer's representative.

iii) <u>**Tests</u>:** The contractor shall forward to the Engineer's representative the manufactures test certificate for each consignment of steel received by him. The Engineer's representative reserves the right to carry out further test if he considers it necessary in accordance with the provisions of the Indian Standard Specifications. If such test is to be carried out, instructions to do so will be given by the Engineer's representative before the steel arrives on the works to enable the tests to be carried out before fabrication is commenced.</u>

iv) <u>Fabrication</u>: Unless otherwise directed by the Engineer's representative, all steel work shall be fabricated, assembled and joined by welding in shops before despatch to site to the maximum extent possible and as may be reasonably transported.

All angles, plates, bars etc. shall be straightened or shaped while cold by means of pressure and not by hammering. The ends of the structural members will generally be neatly sawn or cropped to length and whenever specially directed, shall be chipped or filled or planed. Edges of plates cut by shearing or by flame shall be finished in a workmanlike manner.

24. <u>SPECIFICATIONS FOR OIL PAINTING, COLOUR WASHING, POLISHING ETC</u> 24.1. OIL PAINTING : MATERIALS

a) <u>WHITE PAINT : (IS:103)</u>

It shall be best mineral white zinc of approved make and double boiled linseed oil properly ground and mixed with a small quantity of turpentine (IS:533). A little Victoria blue may be added, if directed.

b) DOUBLE BOILED LINSEED OIL (IS:77)

It shall be of approved make limpid pale and brilliant mellow and sweet to the taste with very little smell and shall be boiled twice.

(A) **<u>Preparation of paint</u>**:

The paint shall be prepared of white zinc moist, double boiled linseed oil, turpentine, driers and pigments. The base must be thoroughly ground in oil and mixed to the required thickness for work with oil and spirits or turpentine. This shall then be passed through a fine sieve or fine canvas before using. The consistency shall be that of cream so as to work easily. When tinted pints are required the pigment should first be ground on a flat stone or in a colour mill with oil until it is thoroughly mixed and then rendered fluid by the addition of oil or spirits or turpentine and mixed with the base that has already been prepared. A small quantity of proper tint shall first be prepared to serve as a guide. The proportion of the various materials for preparing paint shall be as under :-

Type of paint	Proportion of Materials			Pigment and drier
	White Zinc Moist Linseed Oil Turpentine			
Zinc Paint	50 kg.	27 to 36 litres	9 litres	As required

Ready mixed paints of approved brand and manufacturers and conforming to relevant I.S. only shall be used.

(B) **<u>Preparation of Putty :-</u>**

Putty shall be made of best whiting and oil, the whiting to be specifically dry and passed through a sieve of 45 meshes to 2.54 cm. and to be mixed with as much linseed oil as will form it into a stiff paste. This after being thoroughly mixed should be left for 12 hours and worked up in small quantities until quite smooth.

(C) <u>Preparation of the surface</u> :-

(i) <u>General</u>: The surface to be painted shall be well scraped, chipped (if required) rubbed down with sand paper and cleaned of all the old paint to the satisfaction of the Engineer's representative. The surface must be made absolutely dry and smooth. Whenever required the old paint from walls, doors, steel work etc. shall be removed completely in the following manner :-

The flame of the blow lamp shall be directed against old paint till it becomes plastic. Thereafter the (plastic) paint shall immediately be scraped out completely. When the old paint has been completely removed from the surface, the surface shall be thoroughly sand papered and rendered smooth before applying a coat of paint. The old paint may also be removed by paint remover, caustic soda etc. where burning is not suitable.

- (ii) <u>Wood work</u> : In wood work all holes, cracks and nail heads shall be stopped with putty and the irregularities reduced with sand paper.
- (iii) <u>Steel work</u> : All iron and steel work shall be first thoroughly cleaned from rust and dust and loose scales by scrappers and wire brushers.

(D) Application of Paint :-

After thus preparing the surface, two coats of approved paint shall be applied for wood work over a pink primer (IS : 3536). When coloured paints are applied the primer coat shall be of a lighter shade and the finishing coat of the shade desired. For steel work, the primer coat shall be a single coat of yellow zinc chromate (IS : 104) which should be applied before the two coats of White Zinc paint. For all new work 3 coats of paint shall be applied. Painting a protective coating work shall be as per IS : 1487 – Part I.

All coats of paint shall be applied properly with approved brushes and each coat of paint shall be allowed to dry before the next is applied. All except the last coat shall be slightly rubbed down with sand paper. No hair marks shall be left on the surface or in corners of pannel, angles of mouldings, etc.

•In case of use of readymade oil paint, synthetic enamel paint, they shall be of 1st quality amongst the list of approved brand/manufacturer for civil work conforming to the B.I.S. issued and amended from time to time as may be approved by the Chief Engineer

24.2 VARNISHING : (IS : 524, 525 and 348)

(A) MATERIALS :-

Ready prepared varnishes of approved make conforming to the following specifications shall be used :-

- (i) The materials shall be clear and transparent, the varnish shall be suitable for use on interior work and shall give uniform and glossy coating free from stains.
- (ii) In respect of colour, it shall be pale.
- (iii) The material shall become surface dry in not more than six hours and hard dry in not more than 18 hours.

Varnish may be prepared with the following recipe :-

Copal: 3 partsOil of Turpentine: 5 partsLinseed Oil: 2 parts

(B) PREPARATION OF THE SURFACE :

The wood work shall first be cleaned, rubbed down with sand paper and made perfectly smooth and dry. All irregularities in the surface shall then be stopped with hot weak glue size and the surface and papered again.

(C) APPLICATION :-

The varnish should be applied in very thin coats with special fine haired varnishing brushes and not with ordinary paint brushes. Three coats shall be applied.

24.3. FRENCH POLISHING (IS 348)

(A) MATERIAL :-

The contractor shall procure ready mixed french polish of approved quality. Whenever french polish is required to be prepared its recipe shall be as under:-

Methylated spirit	4.50 litres
Ichaporilac (Shellac)	0.45 Kg.
Camphor	0.11 Kg.
Bedana	0.11 Kg.
RumaMastaki	0.11 Kg.
Revonchi	0.11 Kg.
Incense	0.11 Kg.
Chandros	0.22 Kg.

(B) WORKMANSHIP :-

The surface shall be first thoroughly sand papered and made smooth and then 3 coats of french polish shall be applied. Each coat of french polish shall be allowed to dry before the next one is applied and all except the last coat to be slightly rubbed down with sand paper.

24.4. WHITE WASHING & COLOUR WASHING (IS 6278)

(A) <u>PREPARATION :-</u>

To be prepared from fresh burnt white stone lime or shell lime. The lime to be dissolved in a tub with sufficient quantity of water (1 Kg. of lime to 5 litres of water) and the whole well and thoroughly mixed and strained through a clean cloth, clean gum arabic dissolved in hot water to be then added in the proportion of 0.68 Kg. of gum arabic to 50 Kg. Of lime. Rice size may be used in place of gum. Indigo (Neel) upto 3 gm per kg. of lime shall be added and the wash stirred well.

(B) PREPARATION OF THE SURFACE :-

The surface shall be thoroughly cleaned by repeated scraping and rubbing down with sand paper. Holes, cracks etc. shall be suitably filled.

(C) <u>APPLICATION</u> :-

Each coat shall be applied with a brush in a workman like manner. Two coats shall normally be applied but on portions where the plaster has been freshly done three coats shall be applied. Each coat shall be allowed to dry before the next one is applied.

24.5. Deleted

24.6. OIL BOUND DISTEMPER (IS 428)

The walls shall be given two coats of oil bound distemper on one priming coat of glue size or petrifying liquid or patent primer in accordance with specifications of approved manufacturer. The colour shade of the distemper shall be as selected by the Engineer's representative. Distemper shall not be mixed in larger quantity than is actually required for a Day's work and hot water shall be used in preparing the mixture.

The surface to be painted shall be thoroughly cleaned by sand papering. A coating of warm glue shall first be applied, but if the surface of the plaster is rough, a coat of spanish white of chalk mixed with a solution of glue shall be applied to render the surface smooth. The coating when dry, shall be rubbed as clean and as even as possible. Inequalities and holes shall be filled with putty of plaster of Paris which shall be allowed to set hard before the distemper is applied. Distemper shall be applied in accordance with specifications of manufacturer in dry weather, with a broad stiff brush and only after the first coat has thoroughly dried, the second coat shall be applied on. The first coat shall always be of a lighter tint and shall be applied with care. The second coat shall be the exact shade as directed by the Engineer's representative and all the surfaces of walls to be distempered shall not show any difference in the shades, or any patches of uneven application of coats, or hair marks from the brush left on the distemper or puddle in corners of panels, angles of moulding etc. The oil bound distemper shall be of an approved make such as 'NOBLE', "Jenson & Nicholson", "British Paints", "GoodlassNerolac", "Asian Paints", "Garware" or of an equivalent approved make.

•In case of use of readymade oil bound distemper they shall be of 1st quality amongst the list of approved brand/manufacturer for civil works conforming to the B.I.S. issued and amended from time to time as may be approved by the Chief Engineer

24.7. Deleted

24.8 PLASTIC EMULSION PAINT (IS 5411)

Plastic emulsion paint as per I.S. of approved brand and manufacturer and of the required shade shall be used.

<u>Preparation of the surface</u>: - The surface shall be thoroughly cleaned with sand paper and dusted. All cracks and holes shall be properly filled and sand papered.

<u>Application</u>: The number of coats shall be as stipulated in the item. The paint will be applied in usual manner with brush or roller. The thinning of emulsion is to be done with water and not with turpentine. The quantity of water to be added shall be as per manufacturer's instructions. Each coat shall be allowed to dry before the next one is applied.

The surface on finishing shall present a flat velvety smooth finish.

•In case of use of readymade plastic emulsion paint, they shall be of 1st quality amongst the list of approved brand /manufacturer for civil work conforming to the B.I.S. issued and ammended from time to time as may be approved by the Chief Engineer

For Sr. No. 1 to 8 above

- •Before starting of the work, the contractor shall obtain details regarding colour and shades as approved by the Chief Engineer or his assistant
- •All existing internal and external white washing / colour washing, painting and cement paint on wall, ceiling, columns, beams, varandahs, weather shades, railings etc. shall be thoroughly cleaned of loose scales, dirt etc. Before applying flat paint internally, the uneven plaster surface shall be levelled. Oil bound distemper / Oil paint / Santex matt /

flat paint, white wash etc. shall then be applied in approved shades giving two or three shades as specified flat paint shall be applied in two coats over a coat of primer. The work shall be carried out over a coat of primer. The work shall be carried out according to manufacturer's specifications. Before applying the paint, the existing painting work shall be removed carefully and surfaces shall be washed thoroughly to ensure a clean surface free of all colour. Painting with readymade synthetic enamel paint to doors, windows, dado and steel works, white washing, polishing shall be done according to the specifications and items. On all the steel works, primer coat of zinc chromate (Yellow) anti – corrosive paint shall be applied before applying two coats of ready mix synthetic enamel in approved make, colour and shades.

- •The contractor will have to take adequate precautions and make necessary arrangements so as to protect the furniture, window glasses etc. from the dropping of paint, polish, colour washing, white washing etc. and leave the premises clean and tidy by cleaning them at the end of each day's work.
- •The painting work on previously painted should be properly scrapped filled with manufacturers putty and levelled before applying primer various surfaces, the existing paint will be required to be scrapped with the suitable paint remover.
- •For all iron and steel work, a coat of yellow zinc chromate anti -corrosive paint as primer will however have to be given over the entire surface after cleaning, etc. before applying two coats in ready mixed synthetic enamel paint.
- •The entire work shall be carried out in a workman like manner and contractor shall obtain the specific permission from the Engineer – in – charge before applying primer coat and each finishing coat and has to keep a record of such activity duly approved by site in charge.

25.SANITATION:

I - DRAWING:

General floor plans and sectional elevations showing the position of all sanitary and water fittings and fixtures and the arrangement of all plumbing work in house drainage and alignment and gradient of the new effluent carrying underground sewer drain including positions of inspections chambers and manholes shall be prepared by the contractor as directed.

Details, wherever required showing the plumbing work in plan, elevation or section shall be shown as directed. The contractor on preparation of such drawings shall get them approved by the Engineer's representative before commencement of the work.

The Engineer's representative shall have the powers to alter, modify or correct the drawing as considered necessary and to increase or decrease the quantity of sanitary work to be carried out.

II - GENERAL SPECIFICATION:

The drainage work in general shall be in accordance with IS 1742, 783, 1726 and 404 The sewer storm water and house water drains hereafter called "Drains" in the subsequent clauses shall be to the alignment and gradient shown on the plans and sections. The pipes before being laid shall be thoroughly cleaned specially the inside of the pipes. Cracked pipe shall altogether be rejected.

The socket ends of pipes shall always face upstream of effluent flow. The drains shall run in perfect straight lines between manholes as shown on plans and sections.

When trenches opened for laying the drains, water pipes or any other work are over 1 M in depth or even less than that in low bearing soil ground or near heavy or important building or Railway sidings, their sides shall be closely and securely supported by suitable timbering

The trenches shall not be filled in until the joints have been tested and the alignment of the drains and connections into and from the manholes and their positions are examined and certified by the Engineer's representative and the MCGM.

All open channels in floors of buildings and in the pavement shall be semicircular in section and properly sloped as shown on drawings and as described, specified and provided for in the Schedule of Quantities and Rates.

The whole of the sanitary work comprising provision of drainage and water supply arrangements including all sanitary and water fittings and fixtures complete in all respects shall be carried out in accordance with the rules and regulations of the Municipal Corporation of Greater Mumbai and to the entire satisfaction of the Engineer's representative whose decision in all matters concerning choice of all materials to be used and the method or manner of workmanship to be adopted and the period of time to be stipulated for the execution of the work as a whole or for any and every stage shall be final and binding on the contractor. The work of drainage shall be carried out through a licensed plumber and completion certificate shall be obtained by the contractor from the MCGM if required.

The drains, manholes, water gullies, Inspection Chambers and all joints of pipes must be made thoroughly sound and water tight and any joint which may be proved to be leaky at any time during the progress of the works or the contractor's subsequent period of maintenance shall be immediately made sound by the Contractor at his own cost who shall prove all works to be water tight by filling it with water to such height, as the Engineer's representative may determine. Any additional precautionary measures or appliances that may be found necessary to ensure the water tightness of the water gullies, Inspection Chambers, manholes and the joints of pipes shall be adopted by the contractor without extra charge, the responsibility of making them completely water tight resting upon the contractor.

III - SANITARY PIPES, FITTINGS AND FIXTURES:

Stoneware Pipes and Fittings (IS 651)

Stoneware pipes and fittings shall be of best quality stoneware, salt glazed thoroughly burnt throughout the whole thickness of a close and even texture, free from air holes blisters, crack and other imperfections and the surfaces external and internal shall be smooth and perfectly glazed. They shall be preferably of 'Burn & Co.' 'PPW' or any other equivalent approved make conforming to the requirements of the Indian Standard Specification No.651.

A piece of stoneware pipe of area about 50 sq.cm. from any part of the pipe, shall not absorb after 48 hours' immersion in water more than 6 per cent of its own dry weight.

The stoneware pipe shall be capable of resisting an internal hydraulic pressure of 1.3 kg/sq.cm. without showing signs of leakage.

Internal	'Minimum'	'Minimum'	'Minimum'	'Minimum'	'Length'	'Minimum'
diameter of	Mean -	Mean -	internal -	Jointing	grooving -	depth of
pipe	thickness of	thickness of	depth of	Space	on spigot	grooving
	barrel	Socket	Socket			
100 mm	12 mm	12 mm	50 mm	10 mm	75 mm	1 to 2 mm
150 mm	16 mm	16 mm	57 mm	12 mm	86 mm	1 to 2 mm

The pipes to be used, shall be generally, of the dimensions specified below: -

The breaking weight of the stoneware pipes shall not be less than 772 kg. And the Engineer's representative may for his satisfaction take a test to determine the yield point of any or every pipe by any known method in Engineering practice.

Joints in stoneware pipes shall be made perfectly air and watertight by caulking of a tarred gasket of hemp or spun yarn, sealed and neatly finished with cement mortar.

Cast Iron Pipes & Fittings: (IS 1729)

- (i) All cast iron pipes and fittings shall be truly cylindrical and of diameter specified, of a uniform thickness smooth and with strong and deep sockets free from flaws, air bubbles, cracks, sand holes and other defects. They shall not be brittle but shall allow ready cutting, chipping and drilling. The cast iron pipes shall conform to IS : 1729.
- (ii) Where used above ground, the thickness and weight of cast iron pipes shall not be less than those shown in the following table or as per I.S.:

Diameter	(Stock 3.6 mm Thickness of metal not less than	Weight per 1830 mm length (including socket and beaded spigot or flanges, the socket not to be less than 6 mm thick) not
		less than
62 mm	3.2 mm	11.8 Kg.
80 mm	3.2 mm	15.4 Kg.
100 mm	5 mm	24.5 Kg.
100 mm	3.2 mm	14 Kg.
(Rain water pipes)	(Socket 3.6 mm)	

- (iii) All cast iron pipes and fittings shall be treated with two coats of Dr. Angus Smith's composition or other approved means of preventing oxidation before being used. This treatment will be in addition to the painting to be carried out as per schedule of quantities and rates.
- (iv) Joints in cast iron pipes used above ground shall be caulked joints made with gasket of hemp or spun yarn & sealed with white putty neatly finished with neat cement mortar and perfectly air & watertight.
- (v) The C.I. pipes and fittings shall be first cleaned with sand paper, then painted with a coat of solvent of approved quality to remove the black colour of the pipes and there

after pipes and fittings shall be painted with a coat of zinc chromate. The remaining two coats of paints shall be off white zinc base and approved colour.

- (vi) The gap between the C.I. pipes and fittings and the external wall shall be properly filled in with cement grouting (1:3), smooth finished. The rate for the C.I. pipe shall include the cement grout which will not be paid separately.
- (vii) All plug bends of building, drainage pipes shall be provided with inspection and cleaning caps, the covers for which shall be fixed with nuts and screws. the portions embedded in the walls shall be in one piece.
- (viii) If sockets of pipes are eared with projecting ears to facilitate fixing of the pipes satisfactorily to walls w.i. clamps may be omitted at sockets, if so directed by engineer's representative.

R.C.C. Drainage Pipes: The pipes shall be of reinforced cement concrete of the best class available and approved by the Engineer's representative. They shall be manufactured in the manner described by the Indian Hume Pipe company with regard to its strength, durability, smoothness and water tightness and conform to the relevant IS: 458.

V – WATER SUPPLY & FITTINGS

G. I. Pipes and fittings:-

- (i) All supply pipes shall be of the best quality "C" class or "B" class as specifically mentioned in the items of the Schedule of Quantities and Rates. Galvanised wrought iron pipes shall be tested in accordance with Municipal requirements. The specified diameters are internal diameters. The pipes and fittings shall be of 'Tatas' or 'Indian Tube Co.' or any other equivalent approved make conforming to the I.S.S. All water supply pipes and brass and gun metal water fittings shall bear I.S.I. marks, and if not available, they should conform to relevant I.S. and tested by Municipal Corporation of Greater Mumbai.
- (ii) All brass or chromium plated fittings shall be of makes to be approved by the Engineer
 in charge and of the best quality procurable heavy cast or drawn brass thoroughly annealed and seamless and to be Municipal tested.

VI-FIXTURES :

All white glazed porcelain sanitary fixtures such as W.C. pans, wash hand basins, urinals, fire clay sinks etc. shall be of Bombay Potteries, Parrys, Parshuram or equivalent approved make. They should be of vitreous china ware conforming to IS 2556 - Part I to X

Water closet: - Indian type and Orissa pattern water closet pan shall be earthenware with hard durable white glazed finished and shall have similarly finished separate traps and squatting plates and generally shall be as described, specified and provided for in the Schedule of Quantities and Rates. Complete with all accessories such as

flushing cistern etc. of the best quality.

European style water closet pans shall be of smooth white glazed finished with hinged polished teakwood seat and lid with chromium plated hinges complete in all respect as described and provided for in the Schedule of Quantities and Rates with all accessories such as flushing cistern, traps etc. of the approved quality.

Wash hand basin shall be of white glazed porcelain. They shall be provided with all accessories as detailed in the Schedule of Quantities and Rates.

Lip type urinals shall be of approved manufacture such as "Bombay Potteries and tiles" or "Johnson" or any other approved make. They shall be flat back or corner type and unless otherwise specified of approx. size 0.43 m high, 0.36 m broad and 0.27 m projection with flushing rim nozzle raised foot trades "P" or "S" traps, C.I. flushing cistern etc. as specified in the Schedule of Quantities and Rates.

The marble partitions for the urinals shall be best quality available of the specified sizes and thickness, machine polished and of approved shade and colour. It shall be free from cracks, crevices and ugly veines. It shall present an even, smooth surface and shall be cut truly and square.

All white glazed porcelain items shall be free from cracks, indentations, and other glazing defects. No chipped porcelain fixtures will be allowed to be used.

• The W.C. Pans, urinals, wash hand basins shall be of 'PARRYWARE', 'HINDWARE' or any other equivalent make as approved by the Engineer-in-charge.

VII-THE WORK OF MAKING CONNECTIONS :

The contractor shall carry out all necessary excavation and exposed the MbPT water main for sufficient length as directed. The actual connection will be made departmentally only after receipt of all the necessary materials, C.I. pipes special etc., as may be required for making the connection. The reinstatement of the area after the connection is made will have to be done by the contractor at no extra cost or same may done departmentally at a contractor's cost as may be directed by Engineer's representative.

All sanitary fixtures such as wash hand basins, mirrors etc. shall be fixed with approved sizes of TW blocks or rawl plugs as may be directed and no separate payment will be allowed for these.

The specification of the materials which are not given herewith shall be in accordance with a latest relevant IS.

Additional Specifications:

- 1. All dismantling, demolition, removing items are inclusive cost of scaffolding.
- 2. All serviceable items removed from dismantling work and having salvageable value excluding steel shall be transported to MbPT yard at no extra cost to MbPT or as directed. Steel to be removed under rebate item.

- 3. Debris removed under demolition/dismantling work shall be removed immediately out of MbPT estate at no extra cost to MbPT.
- 4. Contractor shall hire all required machinery cranes, JCB, Compressor. mobile lift cranes etc. with no extra cost to MbPT.
- 5. Epoxy material require for the work shall be of Dr. Beck, Sunanda, Krishna chemicals, Roff Chemicals. Polymer shall be of Sunanda Chemicals, Krishna Chemicals. Contractor shall submit manufacturer's catalogue and take approval of the chemicals before commencement of the work.
- 6. For all roofing items, overlaps will not be paid separately. Overlap should be of approved dimensions as per IS Specification. Contractor should submit details of overlaps in advance for approval.
- 7. Contractor shall submit sample of Turbine Roof Ventilator for approval with catalogue.
- 8. Concrete items are inclusive of shuttering and formwork etc.
- 9. In case of encased steel columns/beams contractor shall weld shear connector to steel beam with no extra cost.
- 10. All tiling work in dado is inclusive of cost of cement sand back coat plaster in CM (1:3).
- 11. Granite will be used in window/door framing in addition to dado.
- 12. Details of reinforcement of water gully will be provided separately at the time of construction.
- 13. Pre-painted Al-zinc alloy coated (Galvalum) steel sheets to be fixed under It. No 26
 - > Galvalum sheets shall comply with the specifications of IS 15965.
 - Contractor shall give Manufacturer Certificates for compliance of the specifications and Warrantee Certificate.
 - Detailed Technical Parameters of the pre-painted Al-zinc alloy coated (Galvalum) steel sheets

SI No	Parameter	Requirements
1	Thickness	0.50 mm
2	Thickness tolerance	+ or03 mm
3	Substrate	High Grade Aluminum Zinc Coating, PPGL
4	Paint Top	SDP (High Gloss Super Durable Polyester)
5	Paint Bottom	RMP (Regular Modified Polyester)
6	Solvent resistance Top	100 DR Pass
	coat	
7	Scratch Resistance	Top Coat- 2 Kg Minimum
		Bottom Coat -1.5 Kg Minimum
8	Gloss	High Gloss
9	Salt Spray Test	100 Hrs Pass
10.	Guard Film	Company fitted Branded Guard Film
11	Crest Height	30+ or -2mm
12.	Pitch of Roofing Profile	181+ or – 2.5 mm

Installation Requirements:

- a) Truss, purlins should be painted before fixing the sheets.
- b) Use of neutral cure silicone rubber sealants only wherever required.
- c) Guard film shall be removed immediately after installation of the installation/fixing.
- d) No debris to be ensured on the roof after installation
- e) Overlaps should be as below
- f) Use of power saw with a metal-cutting blade to cut the sheets.
- g) Do not allow sheets to come in contact with cement.
- h) Use of Accessories like Plain Ridge, Corner flashing, Gable Flashing, DeepTrimes and Down take pipes is mandatory.
- 14. Payment Terms: Payment will be made only upon completion of the work for the quantity executed at site and as per clause No 13 & 15 of General Conditions of Contract. Material Advance is not applicable.

CHIEF ENGINEER

Annexure-1

Letter of Application (On the Letter Head of the Bidder)

To: The Chief Engineer, Mumbai Port Trust, ShoorjiVallabhdasMarg, **Mumbai**- 400 001.

Sub: Tender No. E.-48/2021 - Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.

Sir,

1. We hereby request to be qualified with the Mumbai Port Trust as a Tenderer for the subject work under Tender No.E. 48/2021 Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.

2. We authorize Mumbai Port Trust or its authorized representatives to conduct any investigations to verify the statements, documents and information submitted and to clarify the financial and technical aspects of this application. For this purpose, we hereby authorize (any public official, engineer, bank, depository, manufacturer, distributor. etc.) or any other person or firm to furnish pertinent information deemed necessary and requested by Mumbai Port Trust to verify statements and information provided in this application or regarding our competence and standing.

3. The names and positions of persons who may be contacted for further information, if required, are as follows:

Name	:
Designation	:
Telephone	:
E-mail id	:

4. We declare that the statements made and the information provided in the duly completed application are complete, true and correct in every detail. On verification at any time in the future if it is found that information furnished with this application and statements made therein are not true, incomplete or incorrect, we hereby authorize Mumbai Port Trust to reject our application.

5. We agree for unconditional acceptance of all the terms and conditions set out in the bid document and also agree to abide by this bid response within the validity period of the subject tender.

6. I/We understand that Mumbai Port Trust reserves the right to reject any application without assigning any reason thereof.

7. It is hereby confirmed that I/We are entitled to act on behalf of our corporation/company/ firm/organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Dated this _____ Day of ____ 2021

(Signature) (In the capacity of) Duly authorized to sign the Bid Response for and on behalf of:

(Name and Address of Company) Seal/Stamp of bidder

T.No.E-48/ 2021; Technical Bid; Page:97.

Mumbai Port Trust Civil Engineering Department

Tender No. E- 48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU,GWMOT.

Undertaking by the Tenderer

Τo,

The Board of Trustees of the Port of Mumbai.

I/We M/s._____ have gone through the tender document carefully and hereby confirm as under.

1) The tender documents as described in the Tender Notice and elsewhere in thetender document for the work of <u>Tender No. E- 48/2021</u> for "Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT."

2) sealed as described <u>without</u> any defacement, addition, alternation or interpolation. All such addition or alteration has been indicated separately in our tender covering letter with all the relevant Annexures and Preforms duly filled in.

3) I/We have submitted our tender with Earnest Money Deposit as described in the Clause No.2 of 'Instructions for Preparation and submission of tender' and submitted the bid as per clause 5 of Tender Notice.

4) I/We have not indicated anywhere in the first cover i.e. Packet-I, the amount of our price bid of work.

5) I/We have not made any counter stipulation and conditions and I/We agree that in the event of any such counter conditions my/our tender will be summarily rejected and such offer will not be evaluated and considered at all by you.

6) I/We hereby declare that, all information furnished by me/us with this tender is true to the best of my/our knowledge, belief and in case, if it is found that, the information furnished is not true or partially true or incorrect, I/We agree that my/our tender shall be summarily rejected without prejudice to the right of the Board of Trustees of Port of Mumbai to take further action into the matter.

7) I/We have not made any payment or illegal gratification to any person/ authority connected with the bid process so as to influence the bid process and have not committed any offence under the PC Act in connection with the bid.

Witness's Signature	:	Tenderer's : Signature	
Name	:	Name :	
Designation	:	Designation :	
Address	:	Address :	
Tel. No.	:	Tel. No. :	
Date	:	Date :	

(On Letterhead of the Bidder)

То

The Trustees of the Port of Mumbai.

Sub: <u>E.48 / 2021</u>"Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU,GWMOT".

BID SECURITY DECLARATION

(Ref: Clause No. 2.4 of Tender Notice)

I/we undertake that in case, I/we withdraw or modify the subject bid during the period of validity on or being awarded the contract, I/we fail to sign the contract or to submit the security deposit and performance Security before the deadline defined in the bid document. I/we will be suspended for period of 3 years for being eligible to submit bids for contracts with Mumbai Port Trust.

Tenderer's
Signature:
Name:
Address:
Tel. No.:
Mobile):
Date:

N.B.: *Strike out whichever is not applicable.

[Note: In case of a Joint Venture, the Bid-Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid.]

Mumbai Port Trust Civil Engineering Department

Tender No. E- 48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU,GWMOT.

Information to be furnished by the Tenderer

(Ref: Clause Nos. 2 of the Tender Notice)

- 1. Name of the Tenderer : 2. **Registered Office Address** : 3. Telephone & Mobile Nos : 4. Email Address & Fax Nos. : 5. Signatory to the Tender : (on whose name Power of Attorney has been issued) Name : Position held in the firm : Mobile No. :
- 6. Permanent Income Tax Account No. : (PAN) of the firm
- 7. Registration No. for GST on Works : Contracts.
- 8. Experience of similar works executed by the tenderer (Ref. clause No. 1.2 of Tender Notice).

Name of Three similar works completed during last seven years ending 31.07.2021		Name of Two similar works completed during last seven years ending 31.07.2021		Name of One similar work completed during last seven years ending 31.07.2021
1)	O R	1)	O R	1)
2)		2)		
3)				

Note-: 1.Similar works" means "the works of construction or repairs of building/ sheds.

2. Complete details along with supporting documents of the above work to be furnished as per Annexure-5.

- 9. List of other Documents to be furnished by the tenderer:
 - i) Power of Attorney of signatory to Tender (Notary attested copy) Certified/ attested copies of following documents
 - ii) Names, Addresses & ages of partners and Deed of Partnership OR Memorandum and Articles of Association of the Company
 - iii) Latest Annual Report with Balance Sheet, Profit & Loss Account statement (Certified by Chartered Accountant)
 - iv) Copy of PAN card issued by Income Tax authorities.
 - v) Copy of TDS certificate from the previous employer or Form 26 AS of IT department as evidence to establish the work experience
 - vi) Copy of GST Registration

Tenderer'sSignature	:
Name	:
Designation	:
Address	:

Tel. No.	:
Date	:

Mumbai Port Trust Civil Engineering Department

Tender No. E- 48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.

Average Annual Financial Turn-over of the Tenderer During Last Three Years Ending on 31.03.2021

(Ref: respective Clause of the Tender Notice)

Name of the Tenderer:

Financial Year	Financial Turnover Rs. in Lakhs
2018 - 2019	
2019- 2020	
2020- 2021	
Average Annual Turnover =	

Note : Seal and Signature of Charted Accountant is must.

Chartered Accountant's Signature	:	Tenderer's Signature	:
Name	:	Name	:
Designation	:	Designation	:
Address	:	Address	:

Membership No.	:		
Tel. No.	:	Tel. No.	:
Date	:	Date	:

Mumbai Port Trust Civil Engineering Department

Tender No. E- 48/2021

Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU,GWMOT.

Experience of 'Similar Works' executed by the Tenderer

(Ref: Clause No. 2 of 'Tender Notice')

1.	Name of work	:	
2.	Name & Address of the Employer	:	
3.	Name& Email address of Contact Person of	:	
	Employer		
<u> </u>			
4.	Telephone & Mobile Nos of the Employer	:	
_		_	
5.	Location of work site	:	
6.	Scope of works carried out		
7.	Contract Value	:	
	Actual completed value of work executed	:	
	by Tenderer		
		:	
9.	Actual Start Date of work:		
10	Cale adula Comunication Data of works	:	
10.	Schedule Completion Date of work:		
11	Actual Completion Date of work:		
_		ľ	
12.	Delay in completion of work with reasons.	:	

<u>Note</u>: Tenderers shall fill the above proforma separately for each work. The tenderer has to enclose the scanned copy of original employer's certificate to confirm satisfactory performance, scope of works, completion date & completion cost of work.

Tenderer'sSignature	:
Name	:
Designation	:
Address	:

Tel. No.	
Date	:

Annexure-7

ELECTRONIC CLEARING SERVICE MANDATE FORM

To:				From: (Firm's Name & Address)
(Na	me of Department)M	1umbai Por	rt Trust	
	Sub Ref		ment through Ni der No *****	EFT/RTGS/ECS system
Kin	dly arrange the paym	ent of our	bills/EMD throug	gh NEFT/RTGS/ECS system.
The	details of our banke	rs are as ur	nder:	
1.	MBPT Registration I Party's Bill No. or ar in terms of which pa	y other ref	ference	:
2.	Bank's Name			:
3.	Bank's Address & Telephone Number			:
4.	9 digit MICR Code No. of the Bank Branch			:
5.	IFSC Code			:
6.	Type of Account (Saving/Current/Cash Credit)			:
7.	Ledger Folio No.			:
8.	Account No. alongwith proof (photocopy of blank CANCELLED cheque)			:
9.	Permanent Account	Number		:
10.	Mobile Number			:
11.	Landline No.			:

I/We hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all due to reasons of incomplete or incorrect information, I/We would not hold the Mumbai Port Trust responsible.

Date :

AUTHORISED SIGNATORY COMPANY SEAL AND STAMP

Certified that the particulars furnished above are correct as per our records.

Bank's Stamp Date : Signature of the Authorised Official of the Bank

NOT APPLICABLE FOR THIS TENDER INTEGRITY PACT BETWEEN MUMBAI PORT TRUST (MbPT) hereinafter referred to as "The Principal" ANDhereinafter referred to as "The Bidder/Contractor"

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for Tender No. **E 48/2021Provision of Shelter For Foam Pumps and Foam Tank, and other allied works at Second Chemical Berth, PIRPAU, GWMOT.** The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources, and of fairness / transparency in its relations with its Bidder(s) and /or Contractor(s).

In order to achieve these goals, the principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principal mentioned above.

Section 1 - Commitments of the Principal.

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
 - (a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - (b) The Principal will, during the tender process, treat all BIDDERs with equity and reason. The principal will in particular, before and during the tender process, provide to all bidder(s) the same information and will not provide to any bidder(s) confidential/ additional information through which the bidder(s) could obtain an advantage in the relation to the process or the contract execution.
 - (c) The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s) / Contractor(s)

(1) The Bidder (s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

- a. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit, which he/she is not legally entitled to, in order to obtain in exchange any advantage or during the execution of the contract.
- b. The Bidder(s) /Contractor(s) will not enter with other Bidders in to any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids, or any other actions to restrict competitiveness, or to introduce cartelization in the bidding process.
- c. The Bidder(s)/Contractor(s) will not commit any offence, under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition, or personal gain, or pass on to others, any information or document provided by the Principal, as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The bidder(s)/contractor(s) of foreign origin shall disclose the name and address of the agents / representatives in India if any. Similarly, the bidder(s)/contractor(s) of Indian Nationality shall furnish the name and address of the foreign principle if any. Further details as mentioned in the "Guidelines on Indian agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/ Contractor(s). Further, as mentioned in the guidelines all the payments made to the Indian agents/ representative have to be in Indian rupees only. Copy of the "Guidelines on Indian agents of Foreign Suppliers" as Annexed and marked as Annex- "A".
- e. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries, in connection with the award of the contract.
- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- Section-3 Disqualification from Tender process and exclusion from future contracts. If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression, through a violation of Section-2, above or in any other form, such as to put his reliability or credibility in question, the principal is entitled to disqualify the Bidder(s)/ contractor(s), from the tender process, or take action as per the procedure mentioned in the "Guidelines on Banning of Business dealings". Copy of the "Guidelines on Banning of Business dealings" is annexed and marked as Annexure "B".

Section-4 Compensation for damages.

- 1. If the Principal has disqualified the Bidder(s), from the tender process prior to the award, according to Section-3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
- 2. If the Principal has terminated the contract according to Section-3, or if the Principal is entitled to terminate the contract according to Section-3, the Principal shall be entitled to demand and recover from the Contractor, liquidated damages of the contract value, or the amount equivalent to Performance Bank Guarantee.

Section-5 Previous transgression

- 1. The Bidder declares that, no previous transgressions occurred in the last 3 years, with any other company, in any country, confirming to the anti-corruption approach or with any other Public Sector Enterprise in India, that could justify his exclusion from the tender process.
- 2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process for action can be taken as per the procedure mentioned in "Guidelines on Banning of Business dealings".

Section-6 Equal treatment of all Bidders/Contractors/Subcontractors

- 1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors, a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- 2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- 3. The Principal will disqualify from the tender process all Bidders, who do not sign this pact or violates its provisions.

Section-7 Criminal charges against violation Bidder(s)/Contractor(s)/Sub-contractor(s)

If the principal obtains knowledge of conduct of a Bidder/Contractor or Subcontractor, or of an employee, or a representative, or an associate of a Bidder, Contractor, or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion, in this regard, the Principal will inform the same to the Chief Vigilance officer.

Section-8 Independent External Monitor/ Monitors

- 1. The principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor, is to review independently and objectively, whether and to what extent, the parties comply with the obligations under this agreement.
- 2. The Monitor is not subject to instructions, by the representative of the parties and performs his functions neutrally and independently. He reports to the Chairman, MbPT.
- 3. The Bidder(s)/Contractor(s) accepts that, the monitor has the right to access, without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access, to the project documentation. The same is applicable to Subcontractors. The monitor is under contractual obligation, to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality.
- 4. The Principal will provide to the Monitor, sufficient information about all meetings, among the parties related to the Project, provided such meetings could have an impact, on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the management to discontinue, or take corrective action, or to take other relevant action. The Monitor can in this regard submit non- binding recommendations. Beyond this, the Monitor has no right to demand from the parties, that they act in a specific manner, refrain from action or tolerate action.
- 6. The Monitor will submit a written report, to the Chairman, MbPT within 8 to 10 weeks, from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 7. Monitor shall entitle to compensation on the same terms as being extended to / provided to Independent Directors on the MBPT Board.
- 8. If the Monitor has reported to Chairman, MbPT, a substantiate suspension of an offence, under relevant IPC/PC Act, and the Chairman, MbPT has not, within reasonable time, taken visible action to proceed against such offence, or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

Section-9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the contractor 10 months after the last payment under the contract, and for all other bidders & three months the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid, despite the lapse of this Pact, as specified above, unless it is discharged/determined by Chairman, MbPT.

Section-10- Other Provisions

- This agreement is subject to Indian Law, Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Mumbai, Maharashtra.
- Changes and supplements as well as termination notices, need to be made in writing. Side agreements have not been made.
- If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.
- Should one or several provisions of this agreement, turn out to be invalid, the
 remainder of this agreement remains valid. In this case, the parties will strive to
 come to an agreement, to their original intensions.

CHIEF ENGINEER

MUMBAI PORT TRUST

(For & on behalf of the Principal)

(For & On behalf of Bidder/ Contractor) Office seal

Place: Mumbai Date: Place: Mumbai Date:

Witness-2:(for Bidder/ Contractor) Name and Address

.....

.....

Witness-1: (for Principal)

DY. CHIEF ENGINEER (MOT & MSRC) MUMBAI PORT TRUST

T.No.E-48/ 2021; Technical Bid; Page:109.

Annexure A of Integrity Pact

GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS

- 1.0 Valid Authorized Dealership Certificate from the Foreign Principal/O.E.M. should be submitted by the Indian Agent/Dealer and such firm's name shall be added to the Approved List of O.E.M. and Authorized Dealers.
- 2.0 Registered address of the foreign principal and their Indian Agent should appear in the Authorized Dealership Certificate.
 - i) The tenderer shall submit an undertaking along with their tender offer that they have not made any payment or illegal gratification to any person/authority connected with the tender process so as to influence the tender process and have not committed any offense under the Prevention of Corruption Act in connection with the tender.
 - ii) The tenderer shall disclose any payments made or proposed to be made to any intermediaries (agents etc.) in connection with the tender.
- 2.1 MbPT standard payment terms are as per mutually agreed INCO terms. Agency Commission: MbPT does not agree to pay any agency commission either in Indian or in Foreign Currency.
- 2.2 Failure to furnish correct and detailed information as called for in paragraph 2.0 above may render the concerned tenderer's offer liable for rejection OR in the event of a contract materializing, the same may be liable for termination by MbPT. Besides, a penalty of payment of a named sum OR banning business dealings with MbPT may be levied.

Sr. No.	Description
1.	Introduction
2.	Scope
3.	Definitions
4.	Initiation of banning / suspension
5.	Suspension of business dealings
6.	Ground on which banning of business dealing can be initiated
7.	Banning of business dealings
8.	Removal from list of approved agencies – Suppliers/ contractors etc.
9.	Procedure for issuing Show cause notice
10.	Appeal against the decision of Competent Authority
11.	Review of the decision by the competent authority.
12.	Circulation of the names of agencies with whom business dealings have been banned.

GUIDELINES ON BANNING OF BUSINESS DEALINGS CONTENTS

1. Introduction

- 1.1 The Board of Trustees of the Port of Mumbai (The Board / MbPT), incorporated by The Major Port Trusts Act, 1963, as amended by Major Port Trusts (Amendment) Act, 1974 and is an authority within the meaning of article 12 of Constitution of India.MbPT has also to safeguard its commercial interests, MbPT deals with agencies, who have a very high degree of integrity, commitments and sincerity towards the work undertaken. It is not in the interest of MbPT to deal with Agencies who commit deception, fraud or other misconduct in the execution of contracts awarded / orders issued to them. In order to ensure compliance with the constitutional mandate, it is incumbent on MbPT to observe principles of natural justice before banning the business dealings with any Agency.
- 1.2 Since banning of business dealings involves civil consequences for an Agency concerned, it is incumbent that adequate opportunity of hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case.

2. Scope

2.1 The General Condition of Contract (GCC) of MbPT generally provide that MbPT reserves the rights to remove from list of approved suppliers/ contractors or to ban business dealings if any Agency has been found to have committed misconduct and also to suspend business dealings pending investigation.

- 2.2 Similarly, in case of sale of material there is a clause to deal with the Agencies / customers / buyers who indulge in lifting of material in unauthorized manner.
- 2.3 However, absence of such a clause does not in any way restrict the right of MbPT to take action / decision under these guidelines in appropriate cases.
- 2.4 The procedure of (i) Removal of Agency from the List of approved suppliers / contractors (ii) Suspension and (iii) Banning of Business Dealing with Agencies has been laid down in these guidelines.
- 2.5 These guidelines apply to all departments of MbPT.
- 2.6 It is clarified that these guidelines do not deal with the decision of the Management not to entertain any particular Agency due to its prior / inadequate performances or for any other reason.
- 2.7 The banning shall be with prospective effect, i.e. future business dealings.

3. Definitions

In these Guidelines, unless the context otherwise requires

- (i) Party/ Contractor/ Supplier/ Purchaser/ Customer shall mean and include a public limited company or a private limited company, a firm whether registered or not, an individual, a co-operative society or an association or a group of persons engaged in any commerce, trade, industry etc. Party/ Contractor / Supplier/ Purchaser / Customer in the context of those guidelines is indicated as 'Agency'
- (ii) 'Inter-connected Agency' shall mean two or more companies having any of the following features:
 - (a) If one is a subsidiary of the other.
 - (b) If the Director(s), Partner(s), Manager(s) or Representative(s) are common.
 - (c) If management is common.
 - (d) If one owns or controls the other in any manner.
- (iii) 'Competent Authority' and 'Appellate Authority' shall mean the following:
 - a) For MbPT Banning

The Head of the Department shall be "Competent Authority" for the purpose of these guidelines. Chairman, MbPT shall be 'Appellate Authority' in respect of such cases except banning of business dealings with Foreign Suppliers of imported material.

- b) For banning of business dealings with Foreign Suppliers of imported material, MbPT's HOD Committee (MHC) shall be the 'Competent Authority'. The Appeal against the Order passed by MHC shall lie with Chairman as First Appellate Authority.
- c) In case the foreign supplier is not satisfied by the decision of the First Appellate Authority, it may approach Chairman as Second Appellate Authority.

- d) MbPT Board shall have overall power to take *suo-moto* action on any information available or received by him and pass such order(s) as he may think appropriate, including modifying the order(s) passed by any authority under these guidelines.
- iv) 'Investigating Department' shall mean any Department Investigating into the conduct of the Agency and shall include the Vigilance Department, Central Bureau of Investigation, the State Police or any other department set up by the Central or State Government having powers to investigate.
- List of approved Agencies Parties / Contractors / Suppliers/ Purchasers/ Customers shall mean and include list of approved registered Agencies – Parties/ Contractors / Suppliers / Purchasers / Customers etc.

4. Initiation of Banning / Suspension

Action for banning/ suspension business dealing with any Agency should be initiated by the department having business dealing with them after noticing the irregularities or misconduct on their part. Besides any department, Vigilance Department may also be competent to initiate such action.

5. Suspension of Business Dealings

- 5.1 If the conduct of any Agency dealing with MbPT is under investigation by any department (except Foreign Supplier of imported material), the Competent Authority may consider whether the allegations under investigation are of a serious nature and whether pending investigation, it would be advisable to continue business dealings with the Agency. If the Competent Authority, after consideration of the matter including the recommendation of the Investigating Department, if any, decides that it would not be in the interest to continue business dealings pending investigation, it may suspend business dealings with the Agency. The order to this effect may indicate a brief of the charges under investigation. It is decided that inter-connected Agencies would also come within the ambit of the order of suspension, the some should be specifically stated in the order. The order of suspension would operate for a period not more than six months and may be communicated to the Agency as also to the Investigating Department. The Investigating Department may ensure that their investigation is completed and whole process of final order is over within such period.
- 5.2. The order of suspension shall be communicated to all Departmental Heads. During the period of suspension, no business dealing may be held with the Agency.
- 5.3 As far as possible, the existing contract(s) with the Agency may continue unless the Competent Authority, having regards to the circumstances of the case, decided otherwise.
- 5.4 If the gravity of the misconduct under investigation is very serious and it would not be in the interest of MbPT, as a whole, to deal with such an Agency pending investigation, the competent Authority may send his

recommendations to Chief Vigilance Officer (CVO), MbPT Head of Department (HOD) along with the material available. If HOD considers that depending upon the gravity of the misconduct, it would not be desirable to have any dealings with the Agency concerned an order suspending business dealing may be issued by the Competent Authority, copy of which may be endorsed to the Agency concerned. Such an order would operate for a period of six months from the date of issue.

- 5.5 For suspension of business dealing with foreign suppliers of imported material, following shall the procedure.
- i) Suspension of the foreign suppliers shall apply throughout MbPT.
- ii) Based on the complaint forwarded or received directly by Vigilance Department, if Gravity of the misconduct under investigation is found serious and it is felt that it would not be in the interest of MbPT to continue to deal with such Agency pending investigations. Vigilance Dept. may send such recommendation on the matter to HOD to place before MHC consisting of the following:
 - 1. Head of Finance Department.
 - 2. Head of Executing Department.
 - 3. Head of User Department.
 - 4. Head of Legal Department.

The Committee shall expeditiously examine the report, give its comments/recommendations within twenty-one days of receipt of the reference by HOD.

- iii) If MHC opines that it is a fit case for suspension, MHC may pass necessary orders which shall be communicated to the foreign supplier by HOD.
- 5.6 If the Agency concerned asks for detailed reasons of suspension, the Agency may be informed that its conduct is under investigation. It is not necessary to enter into correspondence / argument with the Agency at this Stage.
- 5.7 It is not necessary to give any show cause notice or personal hearing to the Agency before issuing the order of suspension. However, if investigations are not complete in six months' time, the Competent Authority may extend the period of suspension by another three months, during which period the investigation must be completed.

6 Ground on which Banning of Business Dealing can be initiated

- 6.1 If the security consideration including questions of loyalty of the Agency to the State, so warrants.
- 6.2 If the Director / Owner of the Agency, Proprietor or partner of the firm is convicted by a Court of Law for offences involving moral turpitude in relation to its business dealing with the Government or any other public sector enterprises or MbPT, during the last five years.
- 6.3 If there is strong justification for believing that the Directors Proprietors, Partners, owner of the Agency have been guilty of malpractices such bribery, corruption, fraud, substitution of tenders, interpolations, etc.
- 6.4 If the Agency continuously refuses to return/ refund/ the dues of MbPT without showing adequate reason and this is not due to any reasonable dispute which attract proceeding in arbitration of Court of Law.
- 6.5 If the Agency employs a public servant dismissed / removed or employs person convicted for an offence involving corruption or abetment of such offences.

- 6.6 If business dealing with the Agency have been banned by the Govt. or any other public sector enterprises.
- 6.7 If the Agency has resorted to Corrupt, fraudulent practices including misrepresentation of facts.
- 6.8 If the Agency uses intimidation / threatening or brings under outside pressure on MbPT or its Official in acceptance/ performances of the job under the contract.
- 6.9 If the Agency indulgence in repeated and / or deliberate use of delay tactics in complying with contractual stipulations.
- 6.10 willful indulgence by the Agency in Supplying sub-standard material irrespective of whether pre-dispatch inspection was carried out by MbPT or not.
 - 6.11 Based on the findings of the investigation report of CBI/Police against the Agency for malafide/unlawful acts or improper conduct on his part in matters relating to MbPT or even otherwise;
 - 6.12 Establishment litigant nature of the Agency to derive under benefit.
 - 6.13 Continued poor performance of the Agency in several contracts.
 - 6.14 It the Agency missuses the premises of facilities of MbPT forcefully occupies tampers or damages the properties including land, water resources forests/ trees, etc.

(Note: The examples given above are only illustrative and not exhaustive. The Competent Authority may decide to ban business dealing for any good and sufficient reason).

7. Banning of Business Dealings.

- 7.1 Normally, a decision to ban business dealings with any Agency should apply throughout the MbPT. However, the Competent Authority can impose such ban if in the particular case banning of business dealings will serve the purpose and achieve its objective and banning throughout the MbPT is not required in view of the local conditions and impact of the misconduct/ default. Any ban imposed shall be applicable across the MbPT.
- 7.2 For banning, the proposal should be sent by Head of Executing Department to the CVO setting out the facts of the case and the justification of the action proposed along with all the relevant papers and documents except for banning of business dealings with Foreign suppliers of imported material.

The Vigilance Department shall process the proposal for a prima-facie view in the matter by the Competent Authority nominated for MbPT-wide banning.

The CVO shall get feedback about that agency from the HOD, based on this feedback, a prima-facie, decision for banning/ or otherwise shall be taken by the Competent Authority.

If the prima-facie decision for banning has been taken, the Vigilance Department shall issue a show-cause notice to the agency conveying why it should not be banned throughout MbPT. After considering the reply of the Agency and other circumstances and facts of the case, a final decision for banning shall be taken by the Competent Authority.

7.3 There will be a Standing Committee to be appointed by HOD for processing the cases of Banning of Business Dealings except for banning of business dealings with foreign suppliers. However, for procurement of items/ award of contracts, to meet the requirement of Department, the committee shall be consisting of HOD from Executing, Finance, Law& User Department. Member from Executing Department shall be the convener of the Committee. The functions of the Committee shall, inter-alia include.

- i) To study the report of the investigating Agency and decide it a prima-facie case for MbPT-wide / Local unit, wise banning exists, if not, send back the case to the Competent Authority.
- ii) To recommend for issue of show cause notice to the Agency by the concerned department.
- iii) To examine the reply to show cause notice and call the Agency for personal hearing if required.
- iv) To submit final recommendation to the Competent Authority for banning or otherwise.
- 7.4 If the Competent Authority is prime-facie of view that action for banning business dealings with the Agency is called for, a show cause notice may be issued to the Agency as per paragraph 9.1 and an enquiry held accordingly.
- 7.5 Procedure for Banning of Business Dealings with Foreign supplier of imported material.
- i) Banning of the agencies shall apply throughout the MbPT including subsidiaries.
- ii) Based on the complaint forwarded by HOD or received directly by Vigilance Department, an investigation shall be carried out by Vigilance Department. After investigation depending upon the gravity of the misconduct Vigilance Department may send their report to HOD to be placed before MHC consisting of the following: -
- (i) Head of Finance Department.
- (ii) Head of Executing Department.
- (iii) Head of User Department.
- (iv) Head of Legal Department.

The committee shall examine the report and give its comments/ recommendations within 21 days of receipt of the reference by HOD.

- iii) If MHC opinion that it is a fit case for initiating banning action, it will direct HOD to issue show-cause notice to the agency for replying within a reasonable period.
- iv) On receipt of the reply or on expiry of the stipulated period, the case shall be submitted by HOD to MHC for consideration & decision.
- v) The decision of the MHC shall be communicated to the agency by HOD.

8. Removal from List of Approved Agencies- Suppliers/ Contractors, etc.

- 8.1 If the Competent Authority decides that the charge against the Agency is of a minor nature, it may issue a show-cause notice as to why the name of the Agency should not be removed from the list of approved Agencies- Suppliers/ Contractors, etc.
- 8.2 The effect of such an order would be that the Agency would not be disqualified from competing in Open Tender Enquiries but Limited Tender Enquiry may not be given to the Agency concerned.

8.3 Past performance of the Agency may be taken into account while processing for approval of the Competent Authority for awarding the contract.

9. Show-cause Notice

- 9.1 In case where the Competent Authority decides that action against an Agency is called for, a show-cause, notice has to be issued to the Agency, Statement containing the imputation of misconduct or misbehavior may be appended to the show-cause notice and the Agency should be asked to submit within 15 days a written statement in its defense.
- 9.2 If the Agency requested for inspection of any relevant document in possession of MbPT, necessary facility for inspection of documents may be provided.
- 9.3 The Competent Authority may consider and pass an appropriate speaking order.
 - a) For exonerating the Agency if the charges are not established.
- b) For removing the Agency from the list of approved Suppliers/Contractors, etc.
 - c) For banning the business dealings with the Agency.
- 9.4 It is to ban business dealing, the period for which the ban would be operative may be mentioned. The order may also mention that the ban would extend to file interconnected Agencies of the Agency.

10. Appeal against the Decision of the Competent Authority

- 10.1 The Agency may file an appeal against the order of the Competent Authority banning business dealings, etc. The appeal shall lie to Appellate Authority. Such an appeal shall lie preferred within one month from the date of receipt of the order banning business dealing etc.
- 10.2 Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the Agency as well as the Competent Authority.

11. Review of the Decision by the Competent Authority

Any petition/ application field by the Agency concerning the review of the banning order passed originally by HOD under the existing guidelines either before or after filling of appeal before the Appellate Authority or after disposal of appeal by the Appellate Authority, the review petition can be decided by the HOD upon disclosure of new facts/ circumstances or subsequent development necessitating such review. The Competent Authority may refer the same petition to the Standing Committee for examination and recommendation.

12. Circulation of the names of Agencies with whom Business dealings have been banned.

12.1 Depending upon gravity of misconduct established, the Competent Authority of the corporate office, may circulate the names of Agency with whom business dealings have been banned, to the Government Departments, other Public Sector Enterprises, etc. for such action as they deem appropriate.

- 12.2 If Government Departments or a Public Sector Enterprise request for more information about the Agency with whom business dealings have been banned, a copy of the report of Inquiring Authority together with the copy of the order of the Competent Authority/ Appellate Authority may be supplied.
- 12.3 If Business dealings with any Agency have been banned by the Central of State Government of any other Public Sector Enterprises, MbPT may without any further enquiry or investigation issue an order banning dealing with the Agencies and its inter connected Agencies.

NON - DISCLOSURE AGREEMENT

THIS NON-DISCLOSURE AND CONFIDENTIALITY AGREEMENT ("<u>Agreement</u>") made at Mumbai the _____, day of _____, 2021

By and between:

The Board of Trustees of the Port of Mumbai, incorporated by Major Port Trust Act, 1963, as amended by Major Port Trust (Amendment) Act, 1974 having its Office at Port House/Vijaydeep, Soorji Vallabhdas Marg, Ballard Estate, Mumbai - 400001(hereinafter referred to as "PRINCIPAL") which expression shall unless repugnant to the context or meaning hereof, be deemed to include its successors and assigns of the First Part;

And

______ (hereinafter referred to as **"Bidder/Contractor"** which term shall include its successors and assigns), of the Second Part.

(PRINCIPAL and Bidder/Contractor are individually referred to as a "Party" and collectively as "Parties")

WHEREAS:

1. PRINCIPAL is engaged in execution of Contract of Civil Engineering and related works of Mumbai Port Trust.

2. BIDDER/CONTRACTOR is engaged in implementation of Civil/ Labor intensive/ Housekeeping works at MbPT.

3. **PRINCIPAL** is desirous of execution of Civil/Labor intensive/Housekeeping works at MbPT from BIDDER/CONTRACTOR. In course of discussion, implementation and providing the Services, Parties will have access to the confidential and / or proprietary data / information of each other. In consideration thereof parties undertake to respect the confidentiality of this confidential information under the terms and conditions set out hereunder.

4. The party disclosing the confidential information is hereinafter referred to as the "Furnishing Party" and the party receiving the confidential information is hereinafter referred to as **"Recipient/Receiving Party"**.

NOW THIS AGREEMENT WITNESSETH AND IT IS HEREBY AGREED BY & BETWEEN THE PARTIES HERETO AS FOLLOWS:

1. The proprietary and confidential information to be accessed by and received by the parties shall be subject to the terms and conditions set out herein below:

Any and all oral, written, electronic, graphic or machine – readable information including, but not limited to, that which relates to patents, patent applications, research, product plans, products, developments, inventions, processes, designs, drawings, engineering, formulae, markets, software (including source and object code), hardware configuration, computer programs, algorithms, business plans, agreements with third parties, services, customers, business, financial, and operational and any other information or data, or a combination of any of them accessed by or supplied to the "<u>Receiving Party</u>" by, or at the direction of the "<u>Furnishing Party</u>" including any copies, excerpts, notes, memoranda, summaries, analysis or compilations or a combination of two or more of these generated by the Receiving Party (collectively, the "<u>Information</u>"), will be treated as confidential as provided in this Agreement.

2. For purposes hereof, "Information" shall not include:

(a) Information in the public domain at the time that it was provided by the Furnishing Party or which subsequently came into the public domain other than as a result of breach of this Agreement;

(b) Information obtained from a third party who is authorized to do so;

(c) Information independently developed by the Receiving Party without reference to the Information; or

(d) Information in the possession of the Receiving Party prior to its disclosure by the Furnishing Party to the Receiving Party.

T.No.E-48/ 2021; Technical Bid; Page:119.

3. All Information:

(a) Shall remain the property of the Furnishing Party;

(b) shall be treated as confidential by the Receiving Party, and the Receiving Party shall take such action as shall be necessary or desirable to preserve and protect the confidentiality of the Information and in any event using means not less than those used to protect its own confidential information;

(c) Shall be used solely for purposes as provided in this Agreement, and for no other purpose; and

(d) shall not be disclosed to any third party other than the Receiving Party and such of its officers, directors, employees, financial advisors, accountants or attorneys necessary on a "need to know" basis (each an "<u>Authorized</u> <u>Person</u>") without the Furnishing Party's prior written consent, and provided that each such employees/personnel/consultants has agreed to maintain the confidentiality of the Information in accordance with the terms hereof;

Provided however, that prior to disclosing the Information, the Receiving Party shall require each person who receives the Information to be cognizant of and to comply with the terms and conditions of this Agreement.

4. In the event that the Receiving Party or any of its Authorized Persons becomes legally compelled (including, without limitation, by law, rule, regulation or governmental regulatory or administrative or similar agency as part of a judicial or administrative proceeding including, without limitation, by deposition, interrogatory, request for information or documents, subpoena, civil or criminal investigative demand or otherwise) to disclose any of the Information, the Receiving Party shall provide the Furnishing Party with immediate written notice of such requirement so that the Furnishing Party may seek a protective order or other appropriate remedy or waive compliance with this paragraph. If Furnishing Party fails to obtain injunction or protective order and the Receiving Party provides information due to statute, regulation, Court directive or order of a statutory authority, Receiving Party shall not be held liable to the Furnishing Party for any loss or damage or otherwise.

5. The Receiving Party will only disclose the Information to the personnel / consultants of the Receiving party who have a need to know the Information for their work in connection with the Transaction, provided that each such employees/personnel/consultants has agreed to maintain the confidentiality of the Information in accordance with the terms hereof.

6. The Receiving Party recognizes that a breach of this Agreement may cause irreparable harm to the Furnishing Party and that actual damages may be difficult to ascertain and in any event may be inadequate. Accordingly, the Receiving Party agrees that in the event of such breach, the Furnishing Party may be entitled to injunctive relief in addition to such other legal including criminal prosecution for such breach or equitable remedies as may be available. Receiving party shall be responsible and liable to the Furnishing party for any unauthorized disclosure or any breach of the terms and conditions herein contained. Receiving party hereby indemnifies and agrees to keeps the Furnishing party saved, defended, harmless and indemnified from and against all costs, charges, expenses and damages whatsoever except exponential or consequential damages.

7. The Receiving Party will not use nor permit the use of the Furnishing Party's names, logos, trademarks or other identifying data, or otherwise discuss or make reference to the Furnishing Party, in any notices to third parties or in any press release or other public announcement or advertisement, however characterized, without the Furnishing Party's prior written consent.

8. This Agreement shall terminate on the earlier occurrence of (a) Parties entering into a definitive agreement for or (b) parties decide not to enter into business relation for the document management solutions services. Upon termination of this Agreement, the Receiving Party shall, as per the direction of the Furnishing Party either, return or destroy all Information, and no Information shall be stored by the Receiving Party in any form. Notwithstanding the return or destruction of the Information or the termination of this Agreement, the Receiving Party shall continue to be bound by its obligations of confidentiality hereunder for two (2) years from the date hereof.

9. This Agreement constitutes the entire agreement between the parties relating to the subject matter hereof, and all prior agreements, understandings, writings, or negotiations, whether written or oral, are hereby superseded. No failure or delay by either party in exercising its rights hereunder shall operate as a waiver thereof. This Agreement may not be waived or amended except by written agreement of both parties.

10. If any provision of this Agreement is held to be invalid, void or unenforceable, all other provisions shall remain valid and be enforced and construed as if such invalid provision were never a part of this Agreement.

11. The parties agree that any dispute, controversy or claim arising out of or relating to this Agreement or any related agreement or other document or the validity, interpretation, breach or termination thereof, including claims seeking redress or asserting rights under applicable law, shall, be governed by and interpreted in accordance with the laws of India and that any action in any way arising out of this Agreement shall be commenced in an appropriate court having jurisdiction in Mumbai. The prevailing party in any suit hereunder shall recover all related costs, expenses and reasonable legal fees

12. The parties warrant that the signatory signing the Agreement on behalf of the respective parties is duly authorized to do so and irrevocably bind the parties.

IN WITNESS WHEREOF,

BIDDER/CONTRACTOR	

The duly	constituted	Attorney of and on	behalf of BIDDEF	R/CONTRACT	OR has hereunto subscribed a	nd set their
hands	and	common	seal	of	BIDDER/CONTRACTOR	and
the						

Of the Board of the Trustees of the **Port of Mumbai** for and on behalf of the Board has set his hand seal and common seal of the Board hath has been hereunto affixed on the day and year first above written.

SIGNED, SEALED AND DELIVERED

By the above named

Shri _____

In presence of

SIGNED, SEALED AND DELIVERED

By the above named

Shri

For and on behalf of the Board of

Trustees of the Port of Mumbai in

The presence of _____

The Common seal of the Board

Of Trustees of the Port of Mumbai

Was affixed in the presence of

Shri____

Secretary MBPT

Proforma-I

Ref: Clause No.6.1 of 'Conditions of Contract'

Generalised Draft of Contract Agreement

This Agreement made at Mumbai the _____ day of _____ 2020 between THE BOARD OF TRUSTEES OF THE PORT OF MUMBAI incorporated by Major Port Trusts Act, 1963 as amended by Major Port Trust (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 Mumbai its successors and assigns) of the **ONE PART** And

(Name of Proprietor) of Mumbai carrying on proprietary business in the firm name and style of ______ having his office at

(Name of Partners) all of Mumbai carrying on business in partnership in the firm name and style of ______ and having their/ his office at

(Name of Firm) a company registered under the Indian Companies Act, 1956 and having its registered office at _______ & having registered with the Income Tax Department of Govt. of India No. _______ (hereinafter called "the Contractor/s" which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include the person named his or her heirs executors and administrators and his or her permitted assigns) the person named the survivor or survivors of them, their respective executors, and administrators of such last survivors and their/ his or her assigns/ the company named its successors and permitted assigns) of the **OTHER PART**.

AND	WHER	REAS at th	e request	of th	ne Cont	ractors	5,				(Name of
Bank	and	Branch),	Mumbai	has	given	Bank	Guarantee	for	Rs)	only	(Rupees towards
furthe	er seci	urity for th	e due perf	orma	nce of	this co	ntract by the	Con	tractors.	/	0	

Please strike out which is not required.

AND WHERAS the contractor and the Board have further agreed that this agreement will remain in force even in case of any extension / renewal of the contract on the same terms and conditions and at the same rates accepted by the Board by the letter of its Chief Engineer dated ___ day of _____ 2019.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1. In this Agreement the words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of Contract hereinafter referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.

FIRST COVER (Separate Booklet)

- i. Tender Activity Sheet & Tender Information.
- ii. Content of Tender document.
- iii. Tender Notice.
- iv. Instructions for Online Bid submission.
- v. Instructions for Preparation and Submission of Tender.
- vi. General Conditions of Contract.
- vii. Specifications
- viii. Annexure '1 to 8'.
- ix. Proforma I to IV

SECOND COVER

(Separate Booklet)

- i) Directions to Tenderer for filling in the Schedule of Quantities and Rates
- ii) Preamble to Schedule of Quantities and Rates
- iii) Schedule of Quantities and Rates
- iv) Form of Tender.
- 3. In consideration of the payments to be made by the Board to the Contractor/s as hereinafter mentioned the Contractor/s DOTH / DO HEREBY CONVENANT with the Board to carry out and complete within the stipulated period (time being of the essence of this contract) the work of _______ and all other ancillary work as described in the Drawings, in accordance with the specifications and in conformity in all respects with the provisions of the Contract and to maintain/ guarantee the same as provided in the General Conditions of Contract/ Specifications (hereinafter collectively called "the Contract work").
- 4. The BOARD DOTH HEREBY CONVENANT to pay to the Contractor/s in consideration of the Contractor/s carrying out and completing within the stipulated period (time bearing of the essence of this contract) the contract work to the entire satisfaction of the (Designation of HOD) of the Board in all respects the contract price at the time and in the manner prescribed by the Contract.

IN WITNESS WHEREOF	, the Contractors
	the duly Constituted Attorney of and
for and on behalf of the	Contractors has/ have hereunto subscribed and set his/ their hand
and seal/s the Commor	n Seal of the Contractors hath been hereunto affixed and the
(Designation of HOD) of	the Board of Trustees of the Port of Mumbai for and on behalf of
the Board has set his han	d and seal and the Common Seal of the Board hath been hereunto

affixed the day	and year first above written.	
-----------------	-------------------------------	--

THE SCHEDULE `X' ABOVE REFERRED TO (The Schedule of letters)

(LETTERS FROM THE Contractor/S)

(LETTERS FROM THE CHIEF ENGINEER /ADDL. CHIEF ENGINEER OF THE BOARD TO THE Contractor)

SIGNED, SEALED AND DELIVERED BY	
the above named for and on behalf of	
<u>OR</u> SIGNED, SEALED AND DELIVERED by the above named	Signature of Contractor
on behalf of themselves and for and on behalf of	
in the presence of	Signature of Contractors
<u>OR</u> The Common Seal of affixed pursuant to a resolution of the Board of Directors	
dated the day of 20 in the presence of	
Directors of the said Company	DIRECTOR
SIGNED, SEALED AND DELIVERED BY	
(Name & Designation of HOD) for and on behalf of the Board of Trustees of the Port of Mumbai in the presence of	(Designation of concerned HOD)
The Common Seal of the Board of Trustees of the Port of Mumbai was affixed in the presence of	
Secretary Mumbai Port Trust	
Pre-requisites for execution of Contract Agreement: Initial and Additional Security Deposits have been lodged by the	ne Contractor.

<u>Proforma –II</u>

Ref: Clause No.6.2 of 'Conditions of Contract'

Form of Bank Guarantee towards Security Deposit Guarantee Bond

In consideration of the Board of Trustees of the Port of Mumbai incorporated by the Major Port Trusts Act, 1963 as amended by Major Port Trust (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 Mumbai, its successors and assigns) having agreed to exempt _____ _____ (Name of the Contractor) (hereinafter called the "contractors") from the demand under the terms and conditions of the contract vide the Board's Chief Engineer's letter No. dated made between the contractors and the Board for execution of the work 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 Bank Guarantee for а 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 _______ (Name of the Bank & Branch) do hereby 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.______) only.

3. We ______ (Name of the Bank and Branch) undertake to pay to the Board any money so demanded not withstanding 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 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 the 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 the 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 Chief Engineer of the said Board 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 at 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 _________ (Name of the Bank and Branch) further agree with the Board 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 or to extend the time of performance by the said contractors the said contract or to extend the time of performance by the said contractors the said contract or to extend the time of 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 the 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 change in the constitution of the Bank or the Contractor(s).

7. It is also hereby agreed that the courts in Greater Mumbai would have exclusive jurisdiction in respect of claims, if any, under this guarantee.

8. We, ______ (Name of 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 i.e. six months from the date of validity of Bank Guarantee).

Dated _____ day of _____ 20

for (Name of the Bank)

Signature & Name & Designation.

Seal of the bank

NOTES:

- 1. The Guarantee shall be from the Mumbai branch of a Scheduled/ Nationalised Bank and encashable in Mumbai branch.
- 2. The Contractor should fill in all the details, get the draft verified by the Bank and submit the draft in duplicate for approval within 7 days from the date of receipt of the tender acceptance letter.
- 3. After approval of the draft, the Contractor should get the Guarantee executed on Stamp Paper and submit the executed Guarantee along with his Partnership Deed or Memorandum of Articles of Association of the Company etc. within 7 days of receipt of approved draft. The Contractor should also send along with the executed Guarantee, a letter from the Bank certifying the authorisation of the signatory to the Guarantee.****

Proforma-III(A)

(Ref: Clause No.15-a-2 of 'Conditions of Contract') SPECIMEN BILL FORM 1 (For Estimated Bill)

Interim (Estimated) Bill No.:							
For the period ending:		Deadline for making payment 100% by:					
	For the period end	ling CE's Voucher No	. & Date				
Last Measured Bill No.: Last Estimated Bill No.: This Estimated Bill No.:							
 Name of work and Tender No. Name of the Contractor: Acceptance letter No. & date: Contract price: ` 							
(5) Measurement Book No.:		Page No.:					
(6) Abstract Book No.:		Page No.:					
	Upto Last Certificate	Amount Since Last Certificate	Upto date				
Gross certified value of work: <u>Less</u> : Cost of materials supplied by the employer and consumed on the work:							
	Total:						
<u>Add</u> : Advances granted: (i) (ii) etc.							
	Total:						
Less: Deductions/ Recoveries: (i) (ii) etc.							
Net Pa	ayment:						
Payment to be made this bill (Rounded o	ff): `						
Officer preparing the Certificate:	Signature: Name: Designation: Date:						
Contractor:	Signature: Name: Date:						
Officer making the payment:	Signature: Name: Designation: Date:						
Note: Contractor should submit separa		escribed format alor	ng with above measured bi				

Note: Contractor should submit separate GST Invoice in the prescribed format along with above measured bill format.

Proforma-III(B)

(Ref: Clause 15-a-2of 'Conditions of Contract') SPECIMEN BILL FORM 2 (For Measured / Final Bill)

Interim/Final (Measured Bill):		Deadline for making payment:					
Bill No.:			80% by:				
For the period ending:			20% by:				
Fo	r the period	ending	CE's	Voucher No.	& Date		
Last Measured Bill No.:							
Last Estimated Bill No.:							
This Measured Bill No.:							
 Name of Work and Tender No.: Name of Contractor: Acceptance letter No. & Date: Contract Price: ` Measurement Book No.: Abstract Book No.: 		-	e No.: e No.:				
Sr. Description Quantities ex No. of Item Upto last Since la Measured Measur Certificate Certifica	ed Date	Unit Ra	Upto last Measured Certificate	Amount Since last Measured Certificate Rs.	Upto Date Rs.		
Gross certil	ied value of	work:					
Payment to be made this bill (Rounde	d off): Rs.						
Officer preparing the Certificate:	Signatu Name: Designa Date:						
Contractor:	Signatu Name: Date:	re:					
Officer making the payment:	Signatu Name: Designa Date:						
ote: Contractor should submit separate	e GST Invoi	ce in the	prescribed fo	ormat along v	vith above		

measured bill format.
