

MUMBAI METRO RAIL CORPORATION LIMITED



DETAILED TENDER DOCUMENT

Name of Work	Civil Maintenance Contract for R & R Sites, MMRCL Transit Office and Civil & Electrical Work at MMRCL Hallmark Business Plaza 2nd & 8th Floor Offices and other allied works under Mumbai Metro Line III of MMRCL.
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2023

NIT Ref. No. : MMRC/Planning/NIT/Maintenance/23/02

Contractor

MMRCL

INDEX

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NOTICE INVITING TENDER

The ED (PLANNING), MMRCL, Mumbai on behalf of MD, MMRCL invites online percentage rate bids from eligible contractors having registration in appropriate class of CPWD, M.E.S., Railway, MCGM, State P.W.D. and other Govt. Departments dealing with building works for the following work: -

NIT No.	:	MMRC/Planning/NIT/Maintenance/23/02
Name of Work	:	Civil Maintenance Contract for R & R Sites, MMRCL Transit Office and Civil & Electrical Work at MMRCL Hallmark Business Plaza 2nd & 8th Floor Offices and other allied works under Mumbai Metro Line III of MMRCL.
Estimated Cost	:	₹ 1,99,60,233/-
Earnest money	:	₹ 1,99,602/-
Period of completion	:	24 Months (Including Monsoon)

Bid Form shall be available online from 18/01/2023.

Last date of submission of bid up to 03.00 PM on 08/02/2023.

Corrigendum/Addendum if any will be issued only on following websites.

The bid forms and other details can be obtained from the website <https://mmrcl.ewizard.in>

Press notice is also available on www.mmrcl.com

प्रबंध निदेशक, मुंबई मेट्रो रेल कॉर्पोरेशन लिमिटेड की ओर से, कार्यकारी निदेशक (योजना), निम्नलिखित कार्य के लिए के.लो.नि.वि. (सी.पी.डब्ल्यू.डी), एमईएस, रेलवे, एमसीजीएम, राज्य पीडब्ल्यूडी और अन्य सरकारी विभागों के उचित वर्ग में अनुमोदित तथा पात्र ठेकेदारों से ई-निविदा आमंत्रित की जाती है।

एनआईटी क्र. : MMRC/Planning/NIT/Maintenance/23/02

कार्य का नाम : एमएमआरसीएल के मुंबई मेट्रो लाइन III के तहत आर एंड आर साइटों, एमएमआरसीएल ट्रांजिट कार्यालय और अन्य संबद्ध कार्यों पर सिविल कार्य और एमएमआरसीएल हॉलमार्क बिजनेस प्लाजा 2 और 8 वीं मंजिल कार्यालयों में सिविल और इलेक्ट्रिकल कार्य के लिए रखरखाव अनुबंध।

अनुमानित लागत : ₹ 1,99,60,233/-

बयाना राशी : ₹ 1,99,602/-

कार्य पूरे होने की अवधि : 24 महीने (वर्षा ऋतु सहित)

बोली प्रपत्र 18/01/2023 से ऑनलाइन उपलब्ध होंगे।

निविदा जमा करने का अंतिम तिथि व समय 08/02/2023 दोपहर ३ बजे तक।

शुद्धिपत्र तथा परिशिष्ट (यदि कोई) सिर्फ निम्नलिखित वेबसाइट पर प्रकाशित किया जायेगा।

बोली प्रपत्र और अन्य विवरण वेबसाइट <https://mmrcl.ewizard.in> से प्राप्त किए जा सकते हैं।

प्रेस विज्ञप्ति www.mmrcl.com पर भी उपलब्ध है

व्यवस्थापकीय संचालिका मुंबई मेट्रो रेल कॉर्पोरेशन लि. यांच्या वतीने, कार्यकारी संचालक (नियोजन), खालील कामासाठी सीपीडब्ल्यूडी, एम.ई.एस., रेलवे, एम.सी.जी.एम, सार्वजनिक बांधकाम विभाग आणि इतर इमारतीशी संबंधित शासकीय विभागांमार्फत योग्य वर्गामध्ये नोंदणी केलेल्या पात्र कंत्राटदारांकडून ऑनलाईन टक्केवारी दर निविदा आमंत्रित करत आहेत:-

एनआईटी क्र. : MMRC/Planning/NIT/Maintenance/23/02

कामाचे नाव : एमएमआरसीएलच्या मुंबई मेट्रो लाइन III अंतर्गत आर एंड आर साइट्स, एमएमआरसीएल ट्रांजिट ऑफिस आणि इतर संबंधित सिव्हिल कामांसाठी देखभाल करार आणि एमएमआरसीएल हॉलमार्क बिजनेस प्लाजा 2-्या आणि 8व्या मजल्यावरील ऑफिसमधील सिव्हिल आणि इलेक्ट्रिकल कामांसाठी देखभाल करार

अंदाजी किंमत : ₹ 1,99,60,233/-

बयाणा रक्कम : ₹ 1,99,602/-

कार्य पूर्ण करण्याची अवधि : 24 मास (पावसाळ्यासहित)

निविदा 18/01/2023 पासून ऑनलाईन उपलब्ध होईल.

निविदा सादर करण्याची अंतिम दिनांक 08/02/2023 दुपारी ३ वाजे पर्यंत

शुद्धिपत्रक / परिशिष्ट (जर असल्यास) फक्त खालील वेबसाइटवर प्रकाशित होणार.

निविदा फोर्म आणि इतर तपशील वेबसाइट <https://mmrcl.ewizard.in> वरून प्राप्त होईल

प्रेस नोटिस www.mmrcl.com या वेबसाइट वर उपलब्ध आहे

PART-A

**INFORMATION AND INSTRUCTIONS TO BIDDERS FOR e-TENDERING FORMING
PART OF BID DOCUMENT**

1. The ED (PLANNING) on behalf of the Managing Director, MMRCL invites online the bids from contractors having registration in appropriate class of CPWD, M.E.S., Railway, MCGM, State P.W.D. and other Govt. Departments dealing with building works in two-bid system for the following work:

Sr No.	NIT No.	Name of Work and Location	Estimated Cost put to bid	Earnest Money	Period of Completion	Last date & time of submission of bid, EMD, e-tendering processing fee and other documents	Time and date of opening of technical bid
1	2	3	4	5	6	7	8
	MMR C/Planning/NIT/Maintenance/23/02	Civil Maintenance Contract for R & R Sites, MMRCL Transit Office and Civil & Electrical Work at MMRCL Hallmark Business Plaza 2nd & 8th Floor Offices and other allied works under Mumbai Metro Line III of MMRCL	₹ 1,99,60,233/-	₹ 1,99,602/-	24 Months (Including Monsoon)	08/02/2023 03:00 PM	08/02/2023 04:00 PM (If Possible)

The date and time of opening of financial bid shall be conveyed later to bidders qualified in technical bid.

NOTE: The tender document can be seen on website <https://mmrcl.ewizard.in> free of cost. However, a non-refundable tender fee of ₹5,900/- (₹5,000/- Fee plus ₹900/- (GST @ 18%)) shall be payable. The Date and Time of Pre-Bid Meeting will be scheduled on 25/01/2023 @ 1500 pm at MMRCL's Hallmark Business Plaza Building 8th Floor's Conference Hall.

2. Contractors who fulfil the following requirements a to f shall be eligible to apply. Joint ventures are not accepted.
- a. Should have satisfactorily completed the works as mentioned below during the **last Five years** ending previous day of last date of submission of bids.
- i. Three similar works each costing not less than **₹ 79,84,093/-**
Or
two similar works each costing not less than **₹ 99,80,117/-**
Or
one similar work costing not less than **₹ 1,59,68,186/-**

Similar work shall mean works of civil work, civil maintenance work and allied work contract executed under separate single work order carried out in govt. or semi govt. organizations or in Multi-National Companies or in corporate offices. The work shall include repair and maintenance of building civil works including water supply, sanitary installations, plumbing and drainage works.

- b. Should have had average annual financial turnover of **amount not less than ₹ 1 Crores** during the last three years ending 31st March 2022. (Scanned copy of Certificate from CA to be uploaded)
 - c. Should not have incurred any loss in more than two years during the last five years ending 31st March 2022 (Scanned copy of Audited Profit and Loss Statement of last 5 Financial Years i.e. 2017-18, 2018-19, 2019-20, 2020-21, 2021-22 (if finalized) to be uploaded)
 - d. Should have a solvency of **₹ 79,85,000/-** (Scanned copy of original solvency to be uploaded as per Form B)
 - e. The bidder should own constructions equipment as per list required for the proper and timely execution of the work. Else, he should certify that he would be able to manage the equipment by hiring etc. and submit the list of firms from whom he proposes to hire.
 - f. The bidder's performance for each work completed in the last Five years and in hand should be certified by an officer not below the rank of Executive Engineer or equivalent.
3. The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
 4. Information and Instructions for bidders posted on website shall form of bid document.
 5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website **<https://mmrcl.wizard.in>** or **www.mmrcl.com**.
 6. Work shall be executed according to various conditions of contract mentioned in the bid document (Annexed).
 7. During Execution, the agency should supply & install the fire extinguishers through fire extinguisher manufacturers/authorized distributor/licensed dealers & agents
 8. All electrical works shall be executed by a licensed electrician/supervisor.
 9. But the bid can only be submitted after depositing Tender Fee and EMD online on tender wizard through Payment Gateway.
 10. Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website. Bidders can contact the tender wizard help desk at 8951944383, 08040482100.
 11. The intending bidder must have valid class-III digital signature to submit the bid.
 12. Contractor can upload documents in the form of JPG format and PDF format.
 13. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).

14. The Technical bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bid of contractors qualifying the technical bid shall be communicated to them at a later date.
15. MMRCL reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
16. Evaluation Criteria: The details submitted by the bidders will be evaluated in the following manner:
 - a. The initial criteria prescribed above in 2 (a) to 2 (f) in respect of experience of similar class of works completed, bidding capacity and financial turn over etc. will first be scrutinized and the bidder's eligibility for the work be determined.
 - b. Even though any bidder may satisfy the above requirements, he would be liable to disqualification if he has:
 - i. Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document,
 - ii. Record of poor performance such as abandoning work, not properly completing the contract, or financial failures / weaknesses etc.
17. The employer reserves the right, without being liable for any damages or obligation to inform the bidder, to:
 - a. Amend the scope and value of contract to the bidder.
 - b. Reject any or all the applications without assigning any reason.

Any effort on the part of the bidder or his agent to exercise influence or to pressurize the employer would result in rejection of his bid. Canvassing of any kind is prohibited.
18. List of Documents to be scanned and uploaded within the period of bid submission:
 - a. Online Deposit Receipt for EMD and tender fee.
 - b. Registration certificate of appropriate class.
 - c. Certificates of Work Experience (For completed works completion certificate issued by competent authority).
 - d. Certificate of Financial Turn over: At the time of submission of bid contractor may upload Affidavit/Certificate from CA mentioning Financial Turnover of last 3 years or for the period as specified in the bid document and further details if required may be asked from the contractor after opening of technical bids.
 - e. Bank Solvency Certificate.
 - f. Affidavit as per provisions of clause 1.2.1 of CPWD-6.
 - g. Certificate of Registration for Goods & Services Tax, PAN.
 - h. Registration with EPFO, ESIC and BOCW Welfare Board including provident Fund Code No.
 - i. Following Forms:
 - i. **FORM A: FINANCIAL INFORMATION**
 - ii. **FORM B: FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED BANK**
 - iii. **FORM C: DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE LAST FIVE YEARS (Including current year ending last day of the month previous to the one in which tenders are invited).**
 - iv. **FORM D: PROJECTS UNDER EXECUTION OR AWARDED**
 - v. **FORM F: STRUCTURE & ORGANISATION**
 - vi. **FORM G: DETAILS OF TECHNICAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED FOR THE WORK**
 - vii. **FORM H: DETAILS OF CONSTRUCTION PLANT AND EQUIPMENT LIKELY TO BE USED IN CARRYING OUT THE WORK**

Note: Only the above-mentioned documents shall be part of technical bid. Any document mentioning the financial bid of the bidder for the cited work uploaded in technical bid shall be liable for rejection.

CPWD-6 - NOTICE INVITING TENDER

1		Percentage rate tenders are invited on behalf MD, MMRC from approved and eligible contractors having registration in appropriate class of CPWD, M.E.S., BSNL, Railway, MCGM, State P.W.D. and other Govt. Departments dealing with building works, for the work of <u>Civil Maintenance Contract for R & R Sites, MMRCL Transit Office and Civil & Electrical Work at MMRCL Hallmark Business Plaza 2nd & 8th Floor Offices and other allied works under Mumbai Metro Line III of MMRCL.</u> The enlistment of the contractors should be valid on the last date of submission of tenders. In case the last date of submission of tender is extended, the enlistment of contractor should be valid on the original date of submission of tenders.
1.1		The work is estimated to cost ₹ 1,99,60,233/- including all taxes & GST. Bidder shall quote at par or single percentage above/below schedule rates considering all taxes. This estimate, however, is given merely as a rough guide.
1.2		Intending tenderer is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below: -
1.2.1		Three similar works each costing not less than ₹ 79,84,093/- Or two similar works each costing not less than ₹ 99,80,117/- Or one similar work costing not less than ₹ 1,59,68,186/- In last 5 years ending last day of the month previous to the one in which the tenders are invited.
		To become eligible, the tenderer shall have to furnish an affidavit as under: - I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for tendering in MMRCL in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee. (Scanned copy to be uploaded at the time of submission of bid).
2		Agreement shall be drawn with the successful tenderer on prescribed Form No. CPWD 7 which is available as a Govt. of India Publication. Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3		The time allowed for carrying out the work will be 24 Months (Including Monsoon) from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
4		i. The site for work is available.
5		The tender document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen on website https://mmrcl.ewizard.in or www.mmrcl.com free of cost. However, a non-

		refundable tender fee of ₹5,900/- (₹5,000/- Fee plus ₹900/- (GST @ 18%)) shall be payable.
6		After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
7		While submitting the revised bid, contractor can revise the percentage any number of times (he need not reenter rate of all the items) but before last time and date of submission of bid as notified.
8		<p>Earnest Money deposit for this work will be ₹ 1,99,602/-</p> <p>Earnest Money shall be paid online on the e-tender portal and the receipt generated through payment gateway shall be scanned and uploaded to the e-tendering website within the period of tender submission.</p> <p>Copy of Enlistment Order and certificate of work experience and other documents as specified in the tender document shall be scanned and uploaded to the e-Tendering website within the period of bid submission.</p> <p>Online bid documents submitted by intending bidders shall be opened only of those bidders, whose EMD receipt is found in order.</p> <p>The earnest money deposit of unsuccessful bidders will be refunded through RTGS, NEFT mode only after finalization of the tender for which the above refund details are required. Bidders should also upload scanned copy of cancelled cheque along with refund letter for refund of their EMD payment. In case of successful bidder, amount of the earnest money deposit may be transferred towards part of the security deposit to be paid after the award of the work, if he intends to do so in writing.</p> <p>Bidders failing to complete the payment of EMD using the above-mentioned process of RTGS/NEFT after downloading the system generated challans will not be able to submit their bids.</p> <p>The technical bid, if possible, shall be opened at <u>04:00 PM on 08/02/2023.</u></p>
9		<p>The bid submitted shall become invalid if:</p> <p>(i) The bidder is found ineligible.</p> <p>(ii) The bidder does not upload all the documents (including GST registration) as stipulated in the bid document including the copy of receipt for deposition of original EMD.</p> <p>(iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of tender opening authority.</p> <p>(iv) If a tenderer does not quote at par or single percentage above/below on total amount of the tender, the tender shall be treated as invalid.</p> <p>(v) If the tenderer uploads any document related to financial bid in technical bid.</p>
10		The contractor whose bid is accepted will be required to furnish performance guarantee within the period specified in Schedule F. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The Earnest Money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. The Contractor whose bid is accepted will also be required to furnish either copy of applicable licenses / registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW

		Board including provident Fund Code No. if applicable and also ensure the compliance of aforesaid provisions by the sub-contractors, if any engaged by the contractor for the said work and Programme Chart (Time and Progress) within the period specified in Schedule F.
11		<p>Description of Work:</p> <p>The work aims to keep, restore or improve every facility i.e. every part of a structure or building, its services to a currently acceptable standard and to sustain the utility and value of the facility by maintaining it to desired standard.</p> <p>The objective of work is: -</p> <p>(i) To preserve building and services, in good operating and habitable condition.</p> <p>(ii) To ensure safety of the occupants or the public at large.</p> <p>(iii) Where so required to carry out works for its maintenance as per the specifications and standards.</p> <p>The work also aims at effective and economic means of keeping the building and services fully utilizable.</p> <p>Intending Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.</p>
12		ED (PLANNING) on behalf MD, MMRC does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
13		Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
14		The ED (PLANNING) on behalf of MD, MMRC reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
15		The contractor shall not be permitted to tender for works in the MMRCL responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by

		him and who are near relatives to any gazette officer in the MMRCL or in the Ministry of Housing and Urban Affairs. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
16		No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
17		The bid for the works shall remain open for acceptance for a period of Ninety (90) days from the date of opening of bids. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.
18		This notice inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of: - a) The Notice Inviting Tender, Letter of Acceptance, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as uploaded at the time of invitation of tender and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto. b) Standard C.P.W.D. Form 7
19		In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid, then the bid submitted shall become invalid and the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.
20		Micro and Small Enterprises (MSEs) firms are exempted from submission of Bid Security. Further in lieu of Bid Security, MMRCL may ask bidders to sign "Bid Security Declaration" accepting that if they withdraw or modify their bids during bid period of validity etc., they will be suspended for the time period of two year.

MUMBAI METRO RAIL CORPORATION LIMITED
(A JV-SPV of GoI & GoM)

Percentage Rate Tender & Contract Agreement for Works

Tender for the work of **Civil Maintenance Contract for R & R Sites, MMRCL Transit Office and Civil & Electrical Work at MMRCL Hallmark Business Plaza 2nd & 8th Floor Offices and other allied works under Mumbai Metro Line III of MMRCL** (To be uploaded by **03:00 PM** on **18/01/2023** at www.tenderwizard.com/MMRC)

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F Specifications

applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified in this bid document within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the General Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for Ninety (90) days from the date of opening of technical bid and not to make any modification in its terms and conditions.

Receipt of Earnest Money for a sum of ₹ 1,99,602/- is uploaded on tender wizard.

If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the MD, MMRC or the successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/ We agree that MD, MMRC or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those more than that limit at the rates to be determined in accordance with the provision contained in Clause 12 of the tender form.

Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in MMRCL in future forever.

Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived therefrom to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated

Signature of Contractor

Witness

Postal Address

Address:

Occupation:

ACCEPTANCE

The above tender is accepted by me for and on behalf of the MD, MMRC for a sum of _____ (In Words))

The letters & Documents referred to below shall form part of this contract agreement: -

- (a) Detailed Tender Document
- (b) Corrigenda, if any
- (c) Letter of Acceptance
- (d) Work Order

For & on behalf of the MD, MMRC.

Signatures.....

Designation.....

Dated:

INTEGRITY PACT

To,

.....,

.....,

.....

Sub: NIT No. for the work

Dear Sir,

It is here by declared that MMRCL is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the MMRCL.

Yours faithfully

ED (PLANNING)

INTEGRITY PACT

To,
ED (PLANNING),
.....,
.....

Sub: Submission of Tender for the work of

Dear Sir,

I/We acknowledge that MMRCL is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that **THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE** of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by MMRCL. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, MMRCL shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/ bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of MMRCL.

INTEGRITY AGREEMENT

This Integrity Agreement is made at on this day of 20.....

BETWEEN

MD, MMRC represented through ED (PLANNING)
MMRCL, (Hereinafter referred as the 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

(Name and Address of the Individual/firm/Company)
through _____ (Details of duly authorized signatory) _____ (Hereinafter referred to as the "Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No. MMRC/Planning/NIT/Maintenance/23/02) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for Civil Maintenance Contract for R & R Sites, MMRCL Transit Office and Civil & Electrical Work at MMRCL Hallmark Business Plaza 2nd & 8th Floor Offices and other allied works under Mumbai Metro Line III of MMRCL hereinafter referred to as the "Contract".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relationship with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Principal/Owner

- (1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a. No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the 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/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will 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 relation to the Tender process or the Contract execution.
 - c. The Principal/Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

- (2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

- (1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- (2) The Bidder(s)/Contractor(s) commits 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/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b. The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into 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 cartelize 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 the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner 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 names and addresses of agents/representatives in India, if any. Similarly, Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participates in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
 - e. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose 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.
- (3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

- (4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- (5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- (1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes.
The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- (2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- (3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- (1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises 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 or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.

- (3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: 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. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors.
- (2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- (3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/ Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor / Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

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

Article 7- Other Provisions

- (1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division of the Principal/Owner, who has floated the Tender.
- (2) Changes and supplements need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- (4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (5) It is agreed term and condition that any dispute or difference arising between the parties about the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....
(For and on behalf of Principal/Owner)

.....
(For and on behalf of Bidder/Contractor)

WITNESSES:

1.
(Signature, name and address)

2.
(Signature, name and address)

Place:

Dated:

PROFORMA OF SCHEDULES

SCHEDULE 'A'

Schedule of quantities – Civil Works (Part-1) (See Pg. No. 121-146)

Schedule of quantities – Electrical Works (Part-2) (See Pg. No. 147-157)

SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

S. No.	Description of Item	Quantity	Rate	Place of issue
1	2	3	4	5
-----NIL-----				

SCHEDULE 'C'

Tools and plants to be hired to the contractor

S. No.	Description	Hire Charges per day	Place of issue
1	2	3	4
-----NIL-----			

SCHEDULE 'D'

-----NIL-----

SCHEDULE 'E'

Reference to General Conditions of contract: GCC 2020, CPWD form-7 as modified and corrected upto 31.03.2022

Name of work: Civil Maintenance Contract for R & R Sites, MMRCL Transit Office and Civil & Electrical Work at MMRCL Hallmark Business Plaza 2nd & 8th Floor Offices and other allied works under Mumbai Metro Line III of MMRCL.

Estimated cost of work : **₹ 1,99,60,233/-**

- (i) Earnest money : ₹ 1,99,602/- (to be returned after receiving performance guarantee)
- (ii) Performance Guarantee : 3% of tendered value
- (iii) Security Deposit : 2.5% of tendered value

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS: Officer inviting tender: ED (PLANNING)

Definitions (Conditions of Contract):

2(5)	Engineer-in-Charge	<u>DGM (Civil)</u>
2(8)	Accepting Authority	<u>ED (PLANNING)</u>
2(10)	Percentage on cost of materials and labour to cover all overheads and profits.	<u>15%</u>
2(11)	Standard Schedule of Rates	CPWD 2021, MCGM 2018, CSR SPWD 2021-22
2(12)	Department	Planning Department, MMRCL
9(2)	Standard CPWD contract Form GCC 2020, CPWD Form 7 as modified & corrected upto	31 March 2022

Clause 1

- (i) Time allowed for submission of Performance Guarantee, Programme Chart (Time and Progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance 15 days
- (ii) Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (I) above 15 days

Clause 2

Authority for fixing compensation under clause 2 ED (PLANNING)

Clause 2A

Whether Clause 2A shall be applicable No

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start: 7 days
Time allowed for execution of work 12 Months

Authority to decide:

- (i) Extension of time ED (PLANNING)
- (ii) Shifting of date of start in case of delay in handing over of site ED (PLANNING)

Schedule of Handing over of site:

Part	Portion of site	Description	Time Period for handing over reckoned from date of issue of letter of intent.
Part A	Portion without any hindrance	Nil	There is no hindrance.
Part B	Portions with encumbrances	Nil	There are no encumbrances.
Part C	Portions dependent on work of other agencies	Nil	Nil

Clause 5.2

Nature of Hindrance Register: Physical

Clause 6A

Clause applicable –

- i. For this work Clause 6A (Computerized Measurement Book) is applicable. Clause 6 is not applicable to this work.

Clause 7

Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment

Not Applicable

CLAUSE 7A

Whether Clause 7A shall be applicable

Yes

Clause 10A

Not Applicable

List of minimum testing equipment to be provided by the contractor at site lab.

- | | | |
|-----------------------------------|-----------------------|---------------------------------|
| 1. Weigh Balance (10 kg and 2 kg) | 2. Sieve Set (2 Nos.) | 3. Measuring Tapes (5m and 30m) |
| 4. Measuring Flask | 5. Screw Gauge | 6. Vernier Calipers |

Clause 10B(ii) & (iii)

Whether Clause 10 B (ii) shall be applicable

No

Whether Clause 10 B (iii) shall be applicable

No

Clause 10C

Component of labour expressed as percent of value of work

N. A.

Clause 10CA

N.A.

S. No.	Materials Covered under this clause:	Nearest Materials (other than cement*, reinforcement bars, the structural steel and POL) for which All India Wholesale Price Index to be followed:	Base Price and its corresponding period of all the Materials covered under clause 10 CA*
1			
2			
3			

* Includes Cement component used in RMC brought at site from outside approved RMC plants, if any.

** Base price and its corresponding period of all the materials covered under clause 10 CA is to be mentioned at the time of approval of NIT. In case of recall of tenders, the base price may be modified by adopting latest base price and its corresponding period.

ABOVE CLAUSE IS NOT APPLICABLE TO THIS TENDER

Clause 10CC

Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column

NOT APPLICABLE

Schedule of component of other Materials, Labour etc. for price escalation.

Component of civil (except materials covered under clause 10CA) /Electrical construction

value of work. - X_m _____ %

Component of Labour -

expressed as percent of total value of work. Y _____ %

Note: X_m % Should be equal to (100) - (materials covered under clause 10CA i.e. Cement, Steel, POL and other material specified in clause 10CA + Component of Labour)

ABOVE CLAUSE IS NOT APPLICABLE TO THIS TENDER

Clause 11

Specifications to be followed for execution of work

For Civil items of work : CPWD 2021 (Hereinafter called CPWD specifications also) along with additional specification mentioned elsewhere in the tender
MCGM SOR 2018 (Hereinafter called MCGM specifications also) along with additional specification mentioned elsewhere in the tender

For Electrical items of work : CSR SPWD FY 2021 – 22 (Hereinafter called CSR specifications also) along with additional specification mentioned elsewhere in the tender.

Clause 16

Competent Authority for
deciding reduced rates

ED (PLANNING)

Clause 17

Defect Liability Period : 12 months (including monsoon)

Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site: -

Vacuum Blower	Putty Knife	Tile Cutter	Measuring Box	Polishers
Digging bar	Ladder	Flat Pry Bar	Block Plane / Jack Plane	Hand Saw
Circular Saw	Cordless Drill	Torpedo Level	Line Level	Framing Hammer
Framing Square	Crow Bar	Chisel	Wooden Float/wooden rendering float	Bump Cutter/Screed
Safety Glass	Gloves	Sand screening machine	Rubber Boots	Wheel Barrow
Plumb Bob	Masonry trowel	Head Pan	Hoe	Measurement Tape

Clause 36 (i)**Requirement of Technical Representative(s) and recovery Rate**

S. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical /Technical representative)	Minimum Experience (In Years)	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i)	
						Fig.	Words
1	(i)Graduate / Diploma Engineer	Civil	Supervisor	5	1	₹ 15000 pm (each)	Rupees Fifteen Thousand Only
2	(ii)I.T.I	Electrical	Electrician	5	1		

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

Diploma holder with minimum 10-year relevant experience with a reputed construction company can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

Clause 42**NOT APPLICABLE**

- (i)
 - a. Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates _____ printed by C.P.W.D.
- (ii) Variations permissible on theoretical quantities:
 - a. Cement

For works with estimated cost put to tender not more than Rs. 5 lakhs.	NA
For works with estimated cost put to tender more than Rs.5 lakh.	NA
 - b. Bitumen All Works NA
 - c. Steel Reinforcement and structural steel sections for each diameter, section and category NA
 - d. All other materials. NA

General Rules & Directions

Name of Work		Civil Maintenance Contract for R & R Sites, MMRCL Transit Office and Civil & Electrical Work at MMRCL Hallmark Business Plaza 2nd & 8th Floor Offices and other allied works under Mumbai Metro Line III of MMRCL.
	1	The tenderer is advised to read and examine the tender documents for the work and the set of drawings available with Engineer-in-charge. He should inspect and examine the site and its surroundings by himself before submitting his tender.
	2	Separate schedule of quantity is included in this tender for civil and electrical items of work.
	3	Time allowed for the execution of work is 24 months (including monsoon).
	4	The contractor(s) shall submit a detailed program of execution in accordance with the master programme/milestone within ten days from the date of issue of award letter.
	5	Quality of the project is of utmost importance. This shall be adhered to in accordance with the provisions of CPWD/MCGM/CSR specifications and guidelines given in the relevant paras.
	6	The contractor (s) shall make his own arrangements for electricity and water required for the execution of work.
	7	Cement shall be arranged by the contractor himself.
	8	Steel Reinforcement shall be arranged by the contractor himself.
	9	Contractor has to use specialized agencies for specialized items of works such as water proofing, aluminum works, structural glazing, ACP, External Painting and other specialized items as mentioned in the tender documents.
	10	Contractor has to deploy required Plant and machinery on the project. Minimum number of plant and machinery to be deployed by him is indicated in Schedule F. In case the contractor fails to deploy the plant and machinery whenever required and as per the direction of the Engineer-in-charge, he (Engineer-in-charge) shall be at a liberty to get the same deployed at the risk and cost of the contractor.
	11	The contractor shall submit the running bills in the shape of the computerized MB in pages of A-4 size as per the standard format of department and shall act as per modified clause 6 A of General Conditions of Contract.
	12	Contractor has to provide reinforcement cover blocks made of approved proprietary pre- packed free flowing mortars (Conbextra as manufactured by M/s Fosroc Chemical India Ltd. or approved equivalent) of high early strength.
	13	The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time.
	14	In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power-of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1932.

	15	Receipts for payment made because work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give effectual receipts for the firm.
	16	<p>In case of Percentage Rate Tenders, contractor shall fill up the usual printed form, stating at what percentage at par or below/above (in figures) the total estimated cost given in Schedule of Quantities at Schedule-A (Part- 1&2), he will be willing to execute the work. The tender submitted shall be treated as invalid if: -</p> <ol style="list-style-type: none"> 1. The contractor does not quote percentage at par or above/below on the total amount of tender or any section/sub head of the tender. 2. The percentage at par or above/below is not quoted in figures on the total amount of tender. <p>Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected.</p>
	17	<p>In case the lowest tendered amount (estimated cost \pm amount worked on the basis of percentage at par or above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/ below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted at par or above/below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided based on revised offers.</p> <p>In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.</p> <p>If the revised tendered amount of two more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of DGM (Civil), Engineer-in-charge of major & minor component(s) & the lowest contractors those have quoted equal amount of their tenders.</p> <p>In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor.</p> <p>Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.</p>
	18	The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
	19	The tenderers shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender documents drawings or other records connected with the work given to them.

	20	Use of correcting fluid, anywhere in tender document is not permitted. Such tender is liable for rejection.
	21	In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures, so that there is no discrepancy.
	22	In Percentage Rate Tender, the tenderer shall quote percentage at par or below/above (in figures) at which he will be willing to execute the work.
	23	<ul style="list-style-type: none"> i. The Contractor whose tender is accepted, will be required to furnish performance guarantee within the period specified in Schedule F. ii. The contractor whose tender is accepted will also be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 2.5% of the tendered value of the work. The Security deposit will be collected by deductions from the running bills as well as final bill of the contractor at the rate mentioned above.
	24	On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated in writing to the Engineer-in-Charge.
	25	GST or any other tax applicable in respect of inputs procured by the contractor for this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same. However, component of GST at time of supply of services (as provided in CGST Act 2017) provided by the contract shall be varied if different from that applicable on the last date of receipt of tender including extension if any.
	26	The contractor shall give a list of both Gazetted and non-Gazetted MMRCL employees related to him.
	27	The tender for the work shall not be witnessed by a contractor or contractors who himself/ themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.
	28	The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the ED (PLANNING)/Assistant General Manager (Civil) may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising because any violation by him of the provisions of the said Act.

CONDITIONS OF CONTRACT

Definitions	1.	The Contract means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of the MD, MMRC and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in- Charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
	2.	<p>In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them: -</p> <ol style="list-style-type: none"> 1. The expression works or work shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional 2. The Site shall mean the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract. 3. The contractor shall mean the individual, firm or company whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company. 4. Joint Venture (JV)/Consortium are not allowed to bid for this tender. 5. The MD, MMRC means the Managing Director, Mumbai Metro Rail Corporation Limited and its successors. 6. The Engineer-in-charge means the Engineer Officer who shall supervise and be in charge of the work and who shall sign the contract on behalf of the MD, MMRC as mentioned in Schedule 'F' hereunder. 7. Government or Government of India shall mean the State Government or Central Government. 8. The term Director includes Managing Director, MMRCL. 9. Accepting Authority shall mean the authority mentioned in Schedule 'F'. 10. Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Government, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by Government of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to Government's faulty design of works.

		<p>11. Market Rate shall be the rate as decided by the Engineer-in-Charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover, all overheads and profits.</p> <p>Provided that no extra overheads and profits shall be payable on the part(s) of work assigned to other agency(s) by the contractor as per terms of contract.</p> <p>12. Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard Schedule of Rates of the government mentioned in Schedule 'F' hereunder, with the amendments thereto issued upto the date of receipt of the tender.</p> <p>13. Department means Planning Department of MMRCL which invites tenders on behalf of MD, MMRC as specified in schedule 'F'.</p> <p>14. Tendered value means the value of the entire work as stipulated in the letter of award.</p> <p>15. Date of commencement of work: The date of commencement of work shall be the date of start as specified in schedule 'F' or the first date of handing over of the site, whichever is later, in accordance with the phasing if any, as indicated in the tender document.</p> <p>16. GST shall mean Goods and Service Tax – Central, State and Inter State.</p> <p>17. MMRC or MMRCL shall mean Mumbai Metro Rail Corporation Limited, A 50:50 Joint Venture, Special Purpose Vehicle of Government of India and Government of Maharashtra.</p>
Scope and Performance	3	Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
	4	Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
	5	The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specifications, Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.
Works to be carried out	6	The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all Labour, materials, tools, plants, equipment and transport which may be required in preparation of and in the full and entire execution and completion of the works. The descriptions given in the Schedule of Quantities (Schedule- A, Part-1&2) shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labors necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.
Sufficiency of Tender	7	The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as

		otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
Discrepancies and Adjustment of Errors	8	The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.
	8.1	In the case of discrepancy between the schedule of Quantities, the Specifications and/ or the Drawings, the following order of preference shall be observed: - (i) Description of Schedule of Quantities. (ii) Specification and Special Condition, if any. (iii) Additional Specifications given by MMRC. (iv) Drawings. (v) CPWD Specification 2021 & MCGM Specification 2018 for Civil Works and CSR SPWD Specification 2021-22 for Electrical Works. (vi) Indian Standard Specifications of B.I.S.
	8.2	If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority about the intention of the document and his decision shall be final and binding on the contractor.
	8.3	Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.
Signing of Contract	9	The successful tenderer/Contractor on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of: - (i) the notice inviting tender, Letter of Acceptance, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto. (ii) Standard C.P.W.D. Form as mentioned in Schedule 'F' consisting of: a. Various standard clauses with corrections up to the date stipulated in Schedule 'F' along with annexures thereto. b. Safety Code provided in the tender. c. Model Rules for the protection of health, sanitary arrangements for workers employed by MMRCL or its contractors. d. CPWD Contractor's Labour Regulations provided in the tender. e. List of Acts and omissions for which fines can be imposed. (iii) No payment for the work done will be made unless contract agreement is signed by the contractor.

GENERAL CONDITIONS OF CONTRACT

<p>CLAUSE 1 Performance Guarantee</p>	<p>(I)</p>	<p>The contractor shall submit an irrevocable Performance Guarantee of 3% (Three percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge up to a maximum period as specified in schedule 'F' on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-Charge. This guarantee shall be in the form of Cash (in case guarantee amount is less than Rs. 10,000/-) or Term Deposit at Call receipt of any scheduled bank/Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank in favour of Mumbai Metro Rail Corporation Limited payable at Mumbai/Pay Order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Fixed Deposit Receipts or Bank Guarantee of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Government to make good the deficit.</p>
	<p>(ii)</p>	<p>The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets extended, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.</p>
	<p>(iii)</p>	<p>The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which the MD, MMRC is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:</p> <ul style="list-style-type: none"> (a) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee. (b) Failure by the contractor to pay MD, MMRC any amount due, either as agreed by the contractor or

		determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
	(iv)	In the event of the contract being determined or rescinded under provision of any of the Clause / Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the MD, MMRC.
	(v)	On substantial completion of any work which has been completed to such an extent that the intended purpose of the work is met and ready to use, then a provisional Completion certificate shall be recorded by the Engineer-in-Charge. The provisional certificate shall have appended with a list of outstanding balance item of work that need to be completed in accordance with the provisions of the contract. This provisional completion certificate shall be recorded by the concerned Engineer-in-Charge with the approval of Project Manager/ Chief Project Manager/ ED (PLANNING). 40% of performance guarantee shall be returned to the contractor, without any interest after recording the provisional completion certificate and balance 60% of performance guarantee shall be returned after finalization of outstanding balance item of work within 90 days from issuance of Final completion certificate.
CLAUSE 1A Recovery of Security Deposit		The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit Government at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 2.5% of the gross amount of each running and final bill till the sum deducted will amount to security deposit of 2.5% of the tendered value of the work. Such deductions will be made and held by Government by way of Security Deposit unless he/they has/have deposited the amount of Security at the rate mentioned above in cash or in the form of Government Securities or fixed deposit receipts. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government as part of the security deposit and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Government to make good the deficit. All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from any sums which may be due to or may become due to the contractor by Government on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in cash or fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks or

		<p>Government Securities (if deposited for more than 12 months) endorsed in favor of the Engineer-in-Charge, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof. The security deposit shall be collected from the running bills and the final bill of the contractor at the rates mentioned above.</p> <p>The security deposit as deducted above can be released against bank guarantee issued by a scheduled bank, on its accumulations to a minimum of Rs. 5 lac subjects to the condition that amount of such bank guarantee, except last one, shall not be less than Rs. 5 lac. Provided further that the validity of bank guarantee including the one given against the earnest money shall be in conformity with provisions contained in clause 17 which shall be extended from time to time depending upon extension of contract granted under provisions of clause 2 and clause 5.</p> <p>In case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.</p> <p>Note-1: Government papers tendered as security will be taken at 5% (five per cent) below its market price or at its face value, whichever is less. The market price of Government paper would be ascertained by the ED (PLANNING) at the time of collection of interest and the amount of interest to the extent of deficiency in value of the Government paper will be withheld if necessary.</p> <p>Note-2: Government Securities will include all forms of Securities mentioned in Rule No. 274 of the G.F. Rules except fidelity bond. This will be subject to the observance of the condition mentioned under the rule against each form of security.</p> <p>Note-3: Note 1 & 2 above shall be applicable for both clause 1 and 1A.</p> <p>The security deposit will be refunded to the contractor after expiring of 12 months from the completion of contract or receiving of final certificate whichever is later.</p> <p>In case of different defect liability periods have been specified for item of work, the security deposit will be released within 30 days on expiration of such defect liability periods</p>
<p>CLAUSE 2 Compensation for Delay</p>		<p>If the contractor fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the contract or justified extended date of completion as per clause 5 (excluding any extension under Clause 5.5) as well as any extension granted under clauses 12 and 15, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount calculated at the rates</p>

		<p>stipulated below as the authority specified in schedule 'F' may decide on the amount of tendered value of the work for every completed day/month (as determined) that the progress remains below that specified in Clause 5 or that the work remains incomplete.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Compensation for delay of work</p> <p>(i) With maximum rate 1% (one percent) of value of work delayed for each month of delay to be computed on per day basis due to stated delay on the part of Contractor.</p> </div> <p>Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Contract Value of work.</p> <p>In case no compensation has been decided by the authority in Schedule 'F' during the progress of work, this shall be no waiver of right to levy compensation by the said authority if the work remains incomplete on final justified extended date of completion. If the Engineer in Charge decides to give further extension of time allowing performance of work beyond the justified extended date, the contractor shall be liable to pay compensation for such extended period. If any variation in amount of contract takes place during such extended period beyond justified extended date and the contractor becomes entitled to additional time under clause 12, the net period for such variation shall be accounted for while deciding the period for levy of compensation. However, during such further extended period beyond the justified extended period, if any delay occurs by events under sub clause 5.2, the contractor shall be liable to pay compensation for such delay.</p> <p>In case, the contractor does not complete a particular item of work mentioned in schedule F, or in terms of Clause 5.4, the amount shown against that item of work shall be withheld, to be adjusted against the compensation levied as above. Withholding of this amount on failure to complete an item of work, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent item of work, the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent item of work, amount mentioned against each item of work missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.</p>
<p>CLAUSE 2A Incentive for early completion</p>		<p>DELETED FOR THIS TENDER</p>

CLAUSE 3
When Contract
can be Determined

Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- (i) If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or workman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- (ii) If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- (iii) If the contractor fails to complete the work or section of work with individual date of completion on or before the stipulated or justified extended date, on or before such date of completion; and the Engineer in Charge without any prejudice to any other right or remedy under any other provision in the contract has given further reasonable time in a notice given in writing in that behalf as either mutually agreed or in absence of such mutual agreement by his own assessment making such time essence of contract and in the opinion of Engineer-in-Charge the contractor will be unable to complete the same or does not complete the same within the period specified.
- (iv) If the contractor persistently neglects to carry out his obligations under the contract and/ or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
- (v) If the contractor shall offer or give or agree to give to any person in Government service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Government.

		<p>(vi) If the contractor shall enter into a contract with Government about which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer-in-Charge.</p> <p>(vii) If the contractor had secured the contract with Government as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement.</p> <p>(viii) If the contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.</p> <p>(ix) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order. If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.</p> <p>(x) If the contractor assigns (excluding part(s) of work assigned to other agency(s) by the contractor as per terms of contract), transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer -in-Charge.</p>
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		<p>When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the MD, MMRC shall have powers:</p> <p>(a) To determine the contract as aforesaid so far as performance of work by the Contractor is concerned (of which termination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, the Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government</p> <p>(b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work. In the event of above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.</p>
CLAUSE 3A		DELETED FOR THIS TENDER
<p>CLAUSE 4 Contractor liable to pay Compensation even if action not taken under Clause 3</p>		<p>In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause-3 thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the contractor) use as on hire (the amount of the hire money being</p>

		also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work/or any part thereof, paying or allowing for the same in account at the contract rates, or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.
CLAUSE 5 Time and Extension for Delay		The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the work shall commence from such time as mentioned in schedule 'F' or from the date of handing over of the site, notified by the Engineer-in-Charge, whichever is later. However, the handing over of site by the Engineer in Charge, in full or in part (if so provided in contract), shall be completed within two months from issue of acceptance letter. If the Contractor commits default in commencing the execution of the work as aforesaid, the performance guarantee shall be forfeited by the Engineer in Charge and shall be absolutely at the disposal of the Government without prejudice to any other right or remedy available in law.
	5.1	DELETED FOR THIS TENDER
	5.2	If the work(s) be delayed by: - <ul style="list-style-type: none"> a. force majeure, or b. abnormally bad weather, or c. serious loss or damage by fire, or d. civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or e. delay on the part of other contractors or tradesmen engaged by Engineer-in- Charge in executing work not forming part of the Contract, or f. non-availability of stores, which are the responsibility of Government to supply or

		<p>g. non-availability or break down of tools and Plant to be supplied or supplied by Government or</p> <p>h. any other cause like above which, in the reasoned opinion of the Engineer-in-Charge is beyond the Contractor's control.</p> <p>then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge for entry in the hindrance register (physical or web-based as prescribed in schedule F) but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.</p> <p>The contractor shall have no claim of damages for extension of time granted or rescheduling of milestone/s for events listed in sub clause 5.2.</p>
	5.3	<p>In case the work is hindered by any reasons, in the opinion of the contractor, by the Department or for someone for whose action the Department is responsible, the contractor may immediately give notice thereof in writing to the Engineer-in-Charge in the same manner as prescribed under sub-Clause 5.2 seeking extension of time or rescheduling of milestone/s. The authority as indicated in Schedule 'F' shall, if justified, give a fair and reasonable extension of time and reschedule the milestones for completion of work after due consideration of the same within 30 days of receipt of such request. In event of non-application by the contractor for extension of time E-in-C after affording opportunity to the contractor may give, supported with a programme, a fair and reasonable extension within a reasonable period of occurrence of the event. Such extension of time or rescheduling of milestone/s shall be without prejudice to any other right or remedy of the parties in contract or in law; provided further that for concurrent delays under this sub clause and sub clause 5.2 to the extent the delay is covered under sub clause 5.2 the contractor shall be entitled to only extension of time and no damages.</p>
	5.4	<p>Request for extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay. The Contractor shall indicate in such a request the period by which extension of time is desired.</p>
	5.4.1	<p>In any such case the authority as indicated in Schedule 'F' may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 30 days of the date of receipt of such request from the Contractor. In event of non-application by the contractor for</p>

		extension of time E-in-C after affording opportunity to the contractor, may give, supported and reasonable extension within a reasonable period of occurrence of the request.
	5.5	In case the work is delayed by any reasons, in the opinion of the Engineer-in-Charge, by the contractor for reasons beyond the events mentioned in clause 5.2 or clause 5.3 or clause 5.4 and beyond the justified extended date; without prejudice to right to take action under Clause 3, the Engineer-in-Charge may grant extension of time required for completion of work. The contractor shall be liable for levy of compensation for delay for such extension of time.
CLAUSE 6 Measurements of Work Done		<p>Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement, the value in accordance with the contract of work done.</p> <p>All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the contract.</p> <p>All measurements and levels shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer- in-Charge and the contractor or their representatives in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.</p> <p>If for any reason the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and the Department shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Contractor.</p> <p>The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.</p> <p>Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method</p>

		<p>of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available, then a mutually agreed method shall be followed.</p> <p>The contractor shall give, not less than seven days' notice to the Engineer-in-Charge or his authorized representative in charge of the work, before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing, the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.</p> <p>Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.</p> <p>It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates, nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.</p>
<p>CLAUSE 6A Computerized Measurement Book</p>		<p>Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract. All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the department so that a complete record is obtained of all the items of works performed under the contract.</p> <p>All such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Engineer-in-Charge or his authorized representative as</p>

		<p>per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Engineer-in-Charge, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer-in-Charge for the dated signatures by the Engineer-in-Charge and the contractor or their representatives in token of their acceptance. Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/test checked from the Engineer-in-Charge and/or his authorized representative. The contractor will, thereafter, incorporate such changes as may be done during these checks/test checks in his draft computerized measurements, and submit to the department a computerized measurement book, duly bound, and with its pages machine numbered. The Engineer-in-Charge and/or his authorized representative would thereafter check this MB and record the necessary certificates for their checks/test checks.</p> <p>The final, fair, computerized measurement book given by the contractor, duly bound, with its pages machine numbered, should be 100% correct, and no cutting or over-writing in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound, after getting the earlier MB cancelled by the department. Thereafter, the MB shall be taken in the Divisional Office records and allotted a number as per the Register of Computerized MBs. This should be done before the corresponding bill is submitted to the Division Office for payment. The contractor shall submit two spare copies of such computerized MB's for the purpose of reference and record by the various officers of the department. The contractor shall also submit to the department separately his computerized Abstract of Cost and the bill based on these measurements, duly bound, and its pages machine numbered along with two spare copies of the "bill. Thereafter, this bill will be processed by the Division Office and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.</p> <p>The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Engineer-in-Charge or his representative.</p> <p>Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of</p>
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		<p>items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.</p> <p>The contractor shall give not less than seven days' notice to the Engineer-in-Charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of checking and/or test checking the measurement of any work in order that the same may be checked and/or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of checking and/or test checking measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of checking and/or test checking measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.</p> <p>Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.</p> <p>It is also a term of this contract that checking and/or test checking the measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.</p>
<p>CLAUSE 7 Payment on Intermediate Certificate</p>		<p>No payment shall be made for work, estimated to cost Rs. One Lac or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs. One Lac, the interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the Department in triplicate on or before the date of every month fixed for the same by the Engineer-in-Charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/</p>

		<p>adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F', in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Engineer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the contractor to submit the bills, Engineer-in-Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Engineer-in-Charge certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. The amount admissible shall be paid within 30th working day after the day of presentation of the bill by the Contractor to the Engineer-in-Charge or his Asstt. Engineer together with the account of the material issued by the department, or dismantled materials, if any.</p> <p>All such interim payments shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.</p>
	Payments in composite Contracts	In case of composite contract measurements will be done by official of respective department of MMRC as authorized by Engineer-in-Charge. However, contractor will prepare a common bill for both components of works and submit to Engineer-in-Charge.
CLAUSE 7A		No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, GST Registration whatever applicable are submitted by the contractor to the Engineer-In-Charge.
CLAUSE 8 Completion Certificate and Completion Plans		Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge shall inspect the work and if there is no defect in the work, shall furnish the contractor with

		<p>a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution; thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus material and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.</p>
<p>CLAUSE 8A Contractor to Keep Site Clean</p>		<p>When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, color washing, painting etc., on walls, floor, windows, etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done: without waiting for the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days' notice in writing to the contractor.</p>
<p>CLAUSE 8B Completion Plans to be Submitted by the Contractor</p>		<p>The contractor shall submit completion plans for Internal and External Civil and Electrical within thirty days of the completion of the work, provided that the service plans having been issued for execution by the Engineer-in-Charge, unless the contractor, by any other provision in the contract, is required to prepare such plans.</p> <p>In case, the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum of 0.1% of tendered</p>

		value or limit prescribed in Schedule F whichever is more as may be fixed by the ED (PLANNING) concerned and in this respect the decision of the ED (PLANNING) shall be final and binding on the contractor.
CLAUSE 9 Payment of Final Bill		<p>The final bill shall be submitted by the contractor in the same manner as specified in interim bills within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period specified hereinunder, the period being reckoned from the date of receipt of the bill by the Engineer-in- Charge or his authorized Asstt. Engineer, complete with account of materials issued by the Department and dismantled materials.</p> <ul style="list-style-type: none"> (i) If the Tendered value of work is up to Rs. 45 lacs: 2 months (ii) If the Tendered value of work is more than Rs.45 lac and up to Rs. 2.5 Crore: 3 months (iii) If the Tendered value of work exceeds Rs. 2.5 Crore: 6 months
CLAUSE 9A Payment of Contractor's Bills to Banks		DELETED FOR THIS TENDER
CLAUSE 10 Materials supplied by Government		DELETED FOR THIS TENDER
CLAUSE 10 A Materials to be provided by the Contractor		<p>The contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by the Government.</p> <p>The contractor shall, at his own expense and without delay, supply to the Engineer-in- Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in- Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within thirty days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval, fresh samples complying with the specifications laid down in the</p>

		<p>contract. When materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.</p> <p>The Contractor shall at his risk and cost submit the samples of materials to be tested or analyzed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer-in-Charge. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.</p> <p>The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting, and preparing the required number of samples or such tests at such time and to such place or places as may be directed by the Engineer-in-Charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in-Charge or his authorized representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.</p> <p>The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.</p> <p>The contractor shall at his own expense, provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in schedule F.</p>
<p>CLAUSE 10B</p>	<p>Secured Advance on Non-perishable Materials</p>	<p>DELETED FOR THIS TENDER</p>

	Mobilization Advance	DELETED FOR THIS TENDER
	Plant Machinery & Shuttering Material Advance	DELETED FOR THIS TENDER.
	Interest & Recovery	DELETED FOR THIS TENDER
CLAUSE 10 C Payment on Account of Increase in Prices/Wages due to Statutory Order(s)		DELETED FOR THIS TENDER
CLAUSE 10 CA Payment due to variation in prices of materials after receipt of tender		DELETED FOR THIS TENDER
CLAUSE 10 CC Payment due to Increase/Decrease in Prices/Wages (excluding materials covered under clause 10 CA) after Receipt of Tender for Works		DELETED FOR THIS TENDER
CLAUSE 10 D Dismantled Material Govt. Property		The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as Government's property and such materials shall be disposed off to the best advantage of Government according to the instructions in writing issued by the Engineer-in-Charge.
CLAUSE 11 Work to be Executed in Accordance with Specifications, Drawings, Orders etc.		The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications of CPWD/MCGM/CSR specified in Schedule 'F' or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or

		<p>any other printed publication referred to elsewhere in the contract.</p> <p>The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.</p>
<p>CLAUSE 12 Deviations/ Variations Extent and Pricing</p>		<p>The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.</p> <p>The completion cost of any agreement for Maintenance works including works of upgradation, aesthetic, special repair, addition/ alteration shall not exceed 1.25 times of Tendered amount. Any further deviation beyond this limit upto 1.50 times of tendered amount shall be approved by the authority mentioned in schedule 'F' with recorded reason and in exceptional case MD, MMRCL shall have full power to approve the deviation beyond 1.50 times of tendered amount with recorded reason and take suitable corrective action.</p>
	12.1	<p>The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the contractor, as follows :</p> <p>(i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus.</p> <p>(ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.</p>

	12.2	<p>For Maintenance works including works of upgradation, aesthetic, special repair, addition/ alteration:</p> <p>In the case of Extra Item(s) being the schedule items (Schedule of Rates items of CPWD /MCGM /CSR SPWD), these shall be paid as per the plus/minus percentage above/ below quoted in the tender/contract amount.</p> <p>Payment of Extra items in case of non-schedule items shall be made as per the prevailing market rate.</p>
	12.3	DELETED FOR THIS TENDER
	12.4	DELETED FOR THIS TENDER
	12.5	<p>Any operation incidental to or necessarily has to be in contemplation of tenderer while filing. tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.</p>
<p>CLAUSE 13 Foreclosure of contract due to Abandonment or Reduction in Scope of Work</p>		<p>If at any time after acceptance of the tender or during the progress of work, the purpose or object for which the work is being done changes due to any supervening cause and as a result of which the work has to be abandoned or reduced in scope the Engineer-in-Charge shall give notice in writing to that effect to the contractor stating the decision as well as the cause for such decision and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.</p> <p>The contractor shall be paid at contract rates, full amount for works executed at site.</p> <p>In the event of action being taken under Clause 13 to reduce the scope of work, the contractor may furnish fresh Performance Guarantee on the same conditions, in the same manner and at the same rate for the balance tendered amount and initially valid up to the extended date of completion or stipulated date of completion if no extension has been granted plus 60 days beyond that. Wherever such a fresh Performance Guarantee is furnished by the contractor the Engineer-in-Charge may return the previous Performance Guarantee.</p>
<p>CLAUSE 14 Carrying out part work at risk & cost of contractor</p>		<p>If contractor:</p> <p>(i) At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice</p>

		<p>in writing of 7 days in this respect from the Engineer-in-Charge: or</p> <p>(ii) Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Engineer-in-Charge; or Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge.</p> <p>The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to Government, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to:</p> <p>(i) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or</p> <p>(ii) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.</p> <p>The Engineer-in-Charge shall determine the amount, if any, is recoverable from the contractor for completion of the part work/ part incomplete work of any item(s) taken out of his hands and execute at the risk and cost of the contractor, the liability of contractor on account of loss or damage suffered by Government because of action under this clause shall not exceed 10% of the tendered value of the work.</p> <p>In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor. The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the department are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.</p> <p>Any excess expenditure incurred or to be incurred by Government in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or</p>
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		<p>may be suffered by Government as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Government in law or per as agreement be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.</p> <p>If the contractor fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge shall have the right to sell any or all of the contractors' unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract.</p> <p>In the event of above course being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.</p>
<p>CLAUSE 15 Suspension of Work</p>		<p>(i) The contractor shall, on receipt of the order in writing of the Engineer-in-Charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:</p> <ol style="list-style-type: none"> a. on account of any default on the part of the contractor or; b. for proper execution of the works or part thereof for reasons other than the default of the contractor; or c. for safety of the works or part thereof. <p>The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in- Charge.</p> <p>(ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:</p> <ol style="list-style-type: none"> a. the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the

		<p>contract and of which the suspended work forms a part, and;</p> <p>b. If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the Engineer-in- Charge may consider reasonable in respect of salaries and/or wages paid by the contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within fifteen days of the expiry of the period of 30 days.</p> <p>(iii) If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason (a) in sub- para (i) above, the contractor may after receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer- in-Charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by Government or where it affects whole of the works, as an abandonment of the works by Government, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in-Charge. In the event of the contractor treating the suspension as an abandonment of the contract by Government, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer-in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the</p>
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		contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within 30 days of the expiry of the period of 3 months.
CLAUSE 15 A Compensation in case of Delay of Supply of Material by Govt.		DELETED FOR THIS TENDER
CLAUSE 16 Action in case Work not done as per Specifications		<p>All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-In-charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Quality Assurance Unit of the Department or any organization engaged by the Department for Quality Assurance and of the Chief Technical Examiner's Office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.</p> <p>If it shall appear to the Engineer-in-charge or his authorized subordinates in charge of the work or to the Engineer in charge of Quality Assurance or his subordinate officers or the officers of the organization engaged by the Department for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of</p>

		<p>the contract (for non-completion of the work in time) for this default.</p> <p>In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the authority specified in schedule 'F' may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.</p>
<p>CLAUSE 17 Contractor Liable for Damages, defects during defect liability period</p>		<p>The time allowed for defect liability period of the Works as specified in the Schedule 'F' shall be the essence of the contract. If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within twelve months after a certificate final or otherwise of its completion shall have been given by the Engineer- in-Charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of defect liability period of twelve months after the issue of the final completion certificate or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.</p>
<p>CLAUSE 18 Contractor to Supply Tools & Plants etc.</p>		<p>The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), machinery, tools & plants as specified in schedule F. In addition to this, appliances, implements, other plants, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or referred to in these conditions</p>

		<p>or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer-in-Charge at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof.</p>
<p>CLAUSE 18 A Recovery of Compensation paid to Workmen</p>		<p>In every case in which by virtue of the provisions sub-section (1) of Section 12, of the Workmen's Compensation Act, 1923, Government is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Government will recover from the contractor, the amount of the compensation so paid; and, without prejudice to the rights of the Government under sub-section (2) of Section 12, of the said Act, Government shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Government to the contractor whether under this contract or otherwise or from the performance guarantee. Government shall not be bound to contest any claim made against it under sub-section (1) of Section 12, of the said Act, except on the written request of the contractor and upon his giving to Government full security for all costs for which Government might become liable in consequence of contesting such claim.</p>
<p>CLAUSE 18 B Ensuring Payment and Amenities to Workers if Contractor fails</p>		<p>In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, Government is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the CPWD Contractor's Labour Regulations, or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by MMRCL Contractors, Government will recover from the contractor, the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the Government under sub-section(2) of Section 20, and sub-</p>

		<p>section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, Government shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Government to the contractor whether under this contract or otherwise or from the performance guarantee. Government shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the Government full security for all costs for which Government might become liable in contesting such claim.</p>
<p>CLAUSE 19 Labour Laws to be complied by the Contractor</p>		<p>The contractor shall obtain a valid license under the Contract Labour (R&A) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also comply with provisions of the Inter-State Migrant Workmen (regulation of Employment and Condition of Service) Act, 1979. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.</p> <p>The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.</p> <p>Any failure to fulfil these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.</p>
<p>CLAUSE 19 A</p>		<p>No labour below the age of fourteen years shall be employed on the work.</p>
<p>CLAUSE 19 B Payment of Wages</p>		<p>Payment of wages:</p> <ul style="list-style-type: none"> (i) The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as defined in the MMRCL Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable. (ii) The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him. (iii) In respect of all labour directly or indirectly employed in the works for performance of the

		<p>contractor's part of this contract, the contractor shall comply with or cause to be complied with CPWD contractor's Labour Regulations made by Government from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorisedly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.</p> <p>(iv) (a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.</p> <p>(b) Under the provision of Minimum Wages (Central) Rules, 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-Charge concerned.</p> <p>(v) The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made thereunder from time to time.</p> <p>(vi) The contractor shall indemnify and keep indemnified Government against payments to be</p>
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		<p>made under and for the observance of the laws aforesaid and the MMRCL Contractor's Labour Regulations without prejudice to his right to claim indemnity from his sub-contractors.</p> <p>(vii) The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.</p> <p>(viii) Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.</p> <p>(ix) The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.</p>
CLAUSE 19C		<p>In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs.200/- for each default and in addition, the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.</p>
CLAUSE 19 D		<p>The contractor shall submit by the 4th and 19th of every month, to the Engineer-in-Charge, a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively: -</p> <ol style="list-style-type: none"> 1. the number of labourers employed by him on the work, 2. their working yours, 3. the wages paid to them, 4. the accidents that occurred during the said fortnight showing the circumstances under which they happened, and the extent of damage and injury caused by them, and 5. the number of female workers who have been allowed maternity benefit according to Clause 19F and the amount paid to them. <p>Failing which the contractor shall be liable to pay to Government, a sum not exceeding Rs.200/- for each default or materially incorrect statement. The decision of the ED</p>

		(PLANNING) shall be final in deducting from any bill due to the contractor, the amount levied as fine and be binding on the contractor.
CLAUSE 19 E		In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with all the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by the MMRCL and its contractors.
CLAUSE 19 F		<p>Leave and pay during leave shall be regulated as follows:-</p> <ol style="list-style-type: none"> 1. Leave : <ol style="list-style-type: none"> a. in the case of delivery - maternity leave not exceeding 8 weeks, 4 weeks up to and including the day of delivery and 4 weeks following that day, b. in the case of miscarriage - upto 3 weeks from the date of miscarriage. 2. Pay : <ol style="list-style-type: none"> a. in the case of delivery - leave pay during maternity leave will be at the rate of the women's average daily earnings, calculated on total wages earned on the days when full time work was done during a period of three months immediately preceding the date on which she gives notice that she expects to be confined or at the rate of Rupee one only a day whichever is greater. b. In the case of miscarriage - leave pay at the rate of average daily earning calculated on the total wages earned on the days when full time work was done during a period of three months immediately preceding the date of such miscarriage. 3. Conditions for the grant of Maternity Leave: No maternity leave benefit shall be admissible to a woman unless she has been employed for a total period of not less than six months immediately preceding the date on which she proceeds on leave. 4. The contractor shall maintain a register of Maternity (Benefit) in the Prescribed Form as shown in appendix -I and II, and the same shall be kept at the place of work.
CLAUSE 19 G		In the event of the contractor(s) committing a default or breach of any of the provisions of the CPWD Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements for the workers as amended from time to time or furnishing any information or submitting or filing any statement under the provisions of the above Regulations and'

		<p>Rules which is materially incorrect, he/they shall, without prejudice to any other liability, pay to the Government a sum not exceeding Rs.200/- for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractor(s) defaulting continuously in this respect, the penalty may be enhanced to Rs.200/- per day for each day of default subject to a maximum of 5 per cent of the estimated cost of the work put to tender. The decision of the Engineer-in-Charge shall be final and binding on the parties.</p> <p>Should it appear to the Engineer-in-Charge that the contractor(s) is/are not properly observing and complying with the provisions of the CPWD Contractor's Labour Regulations and Model Rules and the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (R& A) Central Rules 1971, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as "the said Rules") the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and/observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities hereinbefore mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/their own expense and to approved standards all necessary huts and sanitary arrangements required for his/their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said huts and sanitary arrangements be remodeled and/or reconstructed according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the contractor(s).</p>
<p>CLAUSE 19 H</p>		<p>The contractor(s) shall at his/their own cost provide his/their labour with a sufficient number of huts (hereinafter referred to as the camp) of the following specifications on a suitable plot of land to be approved by the Engineer-in-Charge.</p>

	(i)	<p>(a) The minimum height of each hut at the eaves level shall be 2.10m (7 ft.) and the floor area to be provided will be at the rate of 2.7 sq.m. (30 sq.ft.) for each member of the worker's family staying with the labourer.</p> <p>(b) The contractor(s) shall in addition construct suitable cooking places having a minimum area of 1.80m x 1.50m (6'x5') adjacent to the hut for each family.</p> <p>(c) The contractor(s) shall also construct temporary latrines and urinals for the use of the labourers each on the scale of not less than four per each one hundred of the total strength, separate latrines and urinals being provided for women.</p> <p>(d) The contractor(s) shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitably screened.</p>
	(ii)	<p>(a) All the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local materials as may be approved by the Engineer-in-Charge. In case of sun-dried bricks, the walls should be plastered with mud gobi on both sides. The floor may be kutcha but plastered with mud gobi and shall be at least 15 cm (6") above the surrounding ground. The roofs shall be laid with thatch, or any other materials as may be approved by the Engineer-in-Charge and the contractor shall ensure that throughout the period of their occupation, the roofs remain water-tight.</p> <p>(b) The contractor(s) shall provide each hut with proper ventilation.</p> <p>(c) All doors, windows, and ventilators shall be provided with suitable leaves for security purposes.</p> <p>(d) There shall be kept an open space of at least 7.2m (8 yards) between the rows of huts which may be reduced to 6m (20 ft.) according to the availability of site with the approval of the Engineer-in-Charge. Back-to-back construction will be allowed.</p>
	(iii) Water Supply	<p>The contractor(s) shall provide adequate supply of water for the use of labourers. The provisions shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or river, tanks which may be of metal or masonry, shall be provided. The contractor(s) shall also at his/ their own cost make arrangements for laying pipelines for water supply to his/ their labour camp from the existing mains wherever available and shall pay all fees and charges therefore.</p>

	(iv)	The site selected for the camp shall be high ground, removed from jungle.
	(v) Disposal of Excreta	The contractor(s) shall make necessary arrangements for the disposal of excreta from the latrines by trenching or incineration which shall be according to the requirements laid down by the Local Health Authorities. If trenching or incineration is not allowed, the contractor(s) shall make arrangements for the removal of the excreta through the Municipal Committee/authority and inform it about the number of labourers employed so that arrangements may be made by such Committee/authority for the removal of the excreta. All charges on this account shall be borne by the contractor and paid direct by him to the Municipality/authority. The contractor shall provide one sweeper for every eight seats in case of dry system.
	(vi) Drainage	The contractor(s) shall provide efficient arrangements for draining away sullage water so as to keep the camp neat and tidy.
	(vii)	The contractor(s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.
	(viii) Sanitation	The contractor(s) shall make arrangements for conservancy and sanitation in the labour camps according to the rules of the Local Public Health and Medical Authorities.
CLAUSE 19 I		The Engineer-in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors' employ upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements. In respect of maintenance/repair or renovation works etc. where the labour has an easy access to the individual houses, the contractor shall issue identity cards to the labourers, whether temporary or permanent and he shall be responsible for any untoward action on the part of such labour. DE/JE will display a list of contractors working in the colony/Blocks on the notice board in the colony and also at the service centre, to apprise the residents about the same.
CLAUSE 19J		It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody unauthorizedly during construction and is handed over to the Engineer-in-Charge with vacant possession of complete building. If such building though completed is occupied illegally, then the Engineer-in-Charge shall have the option to refuse to accept the said building/buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay, a levy upto 5% of tendered value of work may be imposed by the ED (PLANNING) whose

		<p>decision shall be final both with regard to the justification and quantum and be binding on the contractor.</p> <p>However, the ED (PLANNING), through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.</p>
CLAUSE 19 K Employment of skilled/semi-skilled workers		DELETED FOR THIS TENDER
CLAUSE 19L Contribution of EPF and ESI		DELETED FOR THIS TENDER
CLAUSE 20 Minimum Wages Act to be Complied with		The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought into force from time to time.
CLAUSE 21 Work not to be sublet. Action in case of insolvency		<p>The contract shall not be assigned or sublet without the written approval of the Engineer-in - Charge. And if the contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employ of Government in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-</p> <p>in-Charge on behalf of the MD, MMRC shall have power to adopt the course specified in Clause 3 hereof in the interest of Government and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.</p>
CLAUSE 22		All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.
CLAUSE 23 Changes in firm's Constitution to be intimated		Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in- Charge shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous

		approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.
CLAUSE 24		All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.
CLAUSE 25 Settlement of Disputes & Arbitration		In case, any dispute out of or in connection with this contract, including any question regarding its existence validity or termination, shall be referred to and finally resolved by arbitration in accordance with the arbitration rules of the Arbitration & Conciliation Act, 1996 including its amendments thereof. The sole arbitrator shall be appointed by mutual consent of both the parties within 30 days from the date of first written intimation of the intend to resolve the dispute by arbitration. If the parties fail to appoint the sole arbitrator by mutual consent, as above, the same shall be appointed as per the provision of the Arbitration & Conciliation Act, 1996, including its amendments thereof. The seat of arbitration shall be Mumbai and the language of the arbitration shall be English. The decision of arbitrator shall be final and binding upon the parties. Both the parties shall bear the cost of the arbitration in equal proportion unless otherwise decided by the sole arbitrator. The parties agree that the existence & content of the arbitration and terms of the order or award made in the arbitration shall, except as may be required by law, be kept confidential.
CLAUSE 26 Contractor to indemnify Govt. against Patent Rights		The contractor shall fully indemnify and keep indemnified the MD, MMRC against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against Government in respect of any such matters as aforesaid, the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify the MD, MMRC if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.
CLAUSE 27 Lumpsum Provisions in Tender		When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this

		contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-Charge payable of measurement, the Engineer-in-Charge may at his discretion pay the lump-sum amount entered in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of the clause.
CLAUSE 28 Action where no Specifications are specified		In the case of any class of work for which there is no such specifications as referred to in Clause 11, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers' specifications, if not available then as per District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.
CLAUSE 29 Withholding and lien in respect of sum due from contractor	(i)	Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge or the Government shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer-in-Charge or the Government shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the Government shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in-Charge of the Government or any contracting person through the Engineer-in-Charge pending finalization of adjudication of any such claim. It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or Government will be kept withheld or retained as such by the Engineer-in-Charge or Government till the claim arising out of or under the contract is determined by the arbitrator(if the contract is governed by the arbitration clause) by the competent court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified

		<p>as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge or the Government shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.</p>
	(ii)	<p>Government shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for Government to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Government to the contractor, without any interest thereon whatsoever.</p> <p>Provided that the Government shall not be entitled to recover any sum overpaid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the ED (PLANNING) or Assistant General Manager (Civil) on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the ED (PLANNING) or the Assistant General Manager (Civil).</p>
<p>CLAUSE 29A Lien in respect of claims in other Contracts</p>		<p>Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the Government or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or Government or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge or the Government or with such other person or persons.</p> <p>It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the Government will be kept withheld or retained as such by the Engineer-in-Charge or the Government or till his claim arising out of the same contract or any other contract</p>

		is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.
CLAUSE 30 Employment of coal mining or controlled area labour not permissible		DELETED FOR THIS TENDER
CLAUSE 31 Unfiltered water supply		The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions. (i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-Charge. (ii) The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are in the opinion of the Engineer-in-Charge, unsatisfactory.
CLAUSE 31 A Departmental water supply, if available		Water if available may be supplied to the contractor by the department subject to the following conditions:- (i) The water charges @ 1 % shall be recovered on gross amount of the work done. (ii) The contractor(s) shall make his/their own arrangement of water connection and laying of pipelines from existing main of source of supply. (iii) The Department do not guarantee to maintain uninterrupted supply of water and it will be incumbent on the contractor(s) to make alternative arrangements for water at his/ their own cost in the event of any temporary break down in the Government water main so that the progress of his/their work is not held up for want of water. No claim of damage or refund of water charges will be entertained on account of such break down.
CLAUSE 32 Alternate water arrangements	(i)	Where there is no piped water supply arrangement and the water is taken by the contractor from the wells or hand pump constructed by the Government, no charge shall be recovered from the contractor on that account. The contractor shall, however, draw water at such hours of the day that it does not interfere with the normal use for which the hand pumps and wells are intended. He will also be responsible for all damage and abnormal repairs arising out of his use, the cost of which

		shall be recoverable from him. The Engineer-in-Charge shall be the final authority to determine the cost recoverable from the contractor on this account and his decision shall be binding on the contractor.
	(ii)	The contractor shall be allowed to construct temporary wells in Government land for taking water for construction purposes only after he has got permission of the Engineer-in-Charge in writing. No charges shall be recovered from the contractor on this account, but the contractor shall be required to provide necessary safety arrangements to avoid any accidents or damage to adjacent buildings, roads and service lines. He shall be responsible for any accidents or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.
CLAUSE 33 Return of Surplus materials		Notwithstanding anything contained to the contrary in this contract, where any materials for the execution of the contract are procured with the assistance of Government either by issue from Government stocks or purchase made under orders or permits or licenses issued by Government, the contractor shall hold the said materials economically and solely for the purpose of the contract and not dispose of them without the written permission of the Government and return, if required by the Engineer-in-Charge, all surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on being paid or credited such price as the Engineer-in-Charge shall determine having due regard to the condition of the materials. The price allowed to the contractor however shall not exceed the amount charged to him excluding the element of storage charges. The decision of the Engineer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to throwing himself open to action for contravention of the terms of the license or permit and/or for criminal breach of trust, be liable to Government for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.
CLAUSE 34 Plant & Machinery		The contractor shall arrange at his own expense all tools, plant, machinery and equipment (hereinafter referred to as T&P) required for execution of the work.
CLAUSE 35 Condition relating to use of asphaltic materials	(i)	The contractor undertakes to make arrangement for the supervision of the work by the firm supplying the tar or bitumen used.
	(ii)	The contractor shall collect the total quantity of tar or bitumen required for the work as per standard formula, before the process of painting is started and shall hypothecate it to the Engineer-in-

		Charge. If any bitumen or tar remains unused on completion of the work on account of lesser use of materials in actual execution for reasons other than authorized changes of specifications and abandonment of portion of work, a corresponding deduction equivalent to the cost of unused materials as determined by the Engineer-in-Charge shall be made and the material return to the contractors. Although the materials are hypothecated to Government, the contractor undertakes the responsibility for their proper watch, safe custody and protection against all risks. The materials shall not be removed from site of work without the consent of the Engineer-in- Charge in writing.
	(iii)	The contractor shall be responsible for rectifying defects noticed within a year from the date of completion of the work and the portion of the security deposit relating to asphaltic work shall be refunded after the expiry of this period.
CLAUSE 36 Employment of Technical Staff & Employees		Contractors Superintendence, Supervision, Technical Staff & Employees
	(i)	<p>The contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for proper fulfilling of the obligations under the contract. The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge, the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work. Minimum requirement of such technical representative(s) and their qualifications and experience shall not be lower than specified in Schedule 'F'. The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative(s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative(s) according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative and other technical representative(s) shall be appointed by the contractor soon after receipt of the approval from Engineer-in-charge and shall be available at site before start of work.</p> <p>All the provisions applicable to the principal technical representative under the Clause will also be applicable to other technical representative(s) The principal technical</p>

		<p>representative and other technical representative(s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself/themselves, as required, to the Engineer-in-Charge and/or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative(s) shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and other technical representative(s) shall be actually available at site fully during all stages of execution of work, during recording/checking/test checking of measurements of works and whenever so required by the Engineer-in-Charge and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative(s) in the site order book and shall affix his/their signature in token of noting down the instructions and in token of acceptance of measurements/ checked measurements/ test checked measurements. The representative(s) shall not look after any other work. Substitutes, duly approved by Engineer-in-Charge of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative(s) by more than two days.</p> <p>If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the contractor as specified in Schedule 'F' and the decision of the Engineer-In-Charge as recorded in the site order book and measurement recorded checked/test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint suitable technical Principal technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is/are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form-16 or CPF deduction issued to the Engineers employed by him) along with every on-account bill final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.</p>
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	(ii)	<p>The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.</p> <p>The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.</p> <p>The Engineer-in-Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer- in-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.</p>
CLAUSE 37 Levy/Taxes payable by Contractor		<p>(i) GST, Building and Other Construction Workers Welfare Cess or any other tax, levy or cess in respect of input for or output by this contract shall be payable by the contractor and government shall not entertain any claim whatsoever in this respect as provided under clause 38.</p> <p>(ii) The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.</p> <p>If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Government of India and does not any time become payable by the contractor to the State Government, Local authorities in respect of any material used by the contractor in the works, then in such a case, it shall be lawful to the Government of India and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the contractor.</p> <p>(iii) TDS, tax deduction at source towards Income Tax/GST/Building Cess etc. as per regulations in force will be deducted from contractor's bill by MMRCL.</p>
CLAUSE 38 Conditions for reimbursement of levy/taxes if levied after receipt of tenders		<p>(i) All tendered rates shall be inclusive of any tax, levy or cess applicable on the last stipulated date of receipt of tender including extension if any. No adjustment i.e. increase or decrease shall be made for any variation in the rate of GST, Building and Other Construction Workers Welfare Cess or any tax, levy or cess applicable on inputs.</p> <p>However, effect of variation in rates of GST or Building and Other Construction Workers Welfare Cess or imposition or repeal of any other tax, levy</p>

		<p>or cess applicable on output of the works contract shall be adjusted on either side, increase or decrease.</p> <p>Provided further that for Building and Other Construction Workers Welfare Cess or any tax (other than GST), levy or cess varied or imposed after the last date of receipt of tender including extension if any, any increase shall be reimbursed to the contractor only if the contractor necessarily and properly pays such increased amount of taxes/levies/cess.</p> <p>Provided further that such increase including GST shall not be made in the extended period of contract for which the contractor alone is responsible for delay as determined by authority for extension of time under Clause 5 in Schedule f.</p> <p>(ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Government and/or the Engineer-in-Charge and shall also furnish such other information/document as the Engineer-in-Charge may require from time to time.</p> <p>(iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or cess, give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto.</p>
CLAUSE 39 Termination of Contract on death of contractor		Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the ED (PLANNING) on behalf of the MD, MMRC shall have the option of terminating the contract without compensation to the contractor.
CLAUSE 40 If relative working in MMRC then the contractor not allowed to tender		The contractor shall not be permitted to tender for works in the MMRC responsible for award and execution of contracts in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of the ED (PLANNING) and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted Officer in the MMRC or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department. If however the contractor is registered in any other department, he shall be

		<p>debarred from tendering in MMRC for any breach of this condition.</p> <p>NOTE: By the term “near relatives” is meant wife, husband, parents and grandparents, children and grandchildren, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.</p>
<p>CLAUSE 41 No Gazetted Engineer to work as Contractor within one year of retirement</p>		<p>No engineer of Gazetted rank or other Gazetted officer employed in engineering or administrative duties in an engineering department of the Government of India shall work as a contractor or employee of a contractor for a period of one year after his retirement from government service without the previous permission of Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of Government of India as aforesaid, before submission of the tender or engagement in the contractor’s service, as the case may be.</p>
<p>CLAUSE 42 Return of material & recovery for excess material issued.</p>		<p>DELETED FOR THIS TENDER</p>
<p>CLAUSE 43 Compensation during warlike situations</p>		<p>The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in addition to compensation upto the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the ED (PLANNING) upto Rs.5,000/- and by the MD concerned for a higher amount. The contractor shall be paid for the damages/destruction suffered and for restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the</p>

		<p>Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.</p> <p>Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the A.R.P. Officers or the Engineer-in-Charge (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work.</p> <p>In the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the ED (PLANNING)</p>
CLAUSE 44 Apprentices Act provisions to be complied with		<p>The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the ED (PLANNING) may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.</p>
CLAUSE 45 Release of Security deposit		<p>Release of Security Deposit of the work shall be refunded on successful completion of defect liability period of 12 months.</p>
CLAUSE 46 Stamp Duty		<p>Stamp Duty liable on registration of contract agreement will be borne by the contractor.</p>

SAFETY CODE

1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and handhold shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to $1\frac{1}{4}$ horizontal and 1 vertical.)
2. Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3ft.) 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 opening 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 building or structure.
3. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm. (3ft.)
5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11½”) for ladder upto and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least $\frac{1}{4}$ ” for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.
6.
 - a. Excavation and Trenching - All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3ft.) above the surface of the ground. The side of the trenches which are 1.5 m. (5ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m. (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.

- b. Safety Measures for digging bore holes:-
 - i. If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse.
 - ii. During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer in-charge of the work;
 - iii. Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50m around the point of drilling to avoid entry of people;
 - iv. After drilling the borewell, a cement platform (0.50m x 0.50m x 1.20m) 0.60m above ground level and 0.60m below ground level should be constructed around the well casing;
 - v. After the completion of the borewell, the contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;
 - vi. After the borewell is drilled the entire site should be brought to the ground level.
7. Demolition - Before any demolition work is commenced and also during the progress of the work,
- a. All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - b. No electric cable or apparatus which is liable to be a source of danger, or a cable or apparatus used by the operator shall remain electrically charged.
 - c. All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned:- The following safety equipment shall invariably be provided.
- a. Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - b. Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
 - c. Those engaged in welding works shall be provided with welder's protective eye shields
 - d. Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - e. When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measure are adhered to :-
 - i. Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.

- ii. At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.
- iii. Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
- iv. Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.
- v. Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
- vi. The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- vii. No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- viii. The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- ix. Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
- x. Gas masks with Oxygen Cylinder should be kept at site for use in emergency.
- xi. Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapor proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
- xii. The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.
- xiii. The workers shall be provided with Gumboots or non-sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
- xiv. Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- xv. If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
- xvi. The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.

- f. The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken:-
 - i. No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
 - ii. Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
 - iii. Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
9. An additional clause (viii)(i) of Safety Code (iv) the Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use :
 - a. White lead, sulphate of lead or product containing these pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.
 - b. Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
 - c. Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
 - d. Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
 - e. Overall, shall be worn by working painters during the whole of working period.
 - f. Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
 - g. Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man appointed by competent authority of MMRCL.
 - h. MMRCL may require, when necessary medical examination of workers.
 - i. Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
10. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
11. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions :-
 - a. (i) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.
(ii) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
 - b. Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.

- c. In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - d. In case of departmental machines, the safe working load shall be notified by the Electrical Engineer- in-Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.
12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
13. All scaffolds, ladders 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 at or near places of work.
14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
15. 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 Labour Officer or Engineer-in-Charge of the department or their representatives.
16. Notwithstanding the above clauses from (1) to (15), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

Model Rules for the Protection of Health and Sanitary Arrangements for Workers Employed by MMRCL or its Contractors

1. APPLICATION

These rules shall apply to all buildings and construction works in charge of MMRCL in which twenty or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the contract work is in progress.

2. DEFINITION

Workplace means a place where twenty or more workers are ordinarily employed in connection with construction work on any day during the period during which the contract work is in progress.

3. FIRST-AID FACILITIES

- a. At every work place, there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- b. The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment:-
 - i. For workplaces in which the number of contract labour employed does not exceed 50 - Each first-aid box shall contain the following equipment:
 1. 6 small, sterilized dressings.
 2. 3 medium size sterilized dressings.
 3. 3 large size sterilized dressings.
 4. 3 large, sterilized burn dressings.
 5. 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
 6. 1 (30 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 7. 1 snakebite lancet.
 8. 1 (30 gms.) bottle of potassium permanganate crystals.
 9. 1 pair scissors.
 10. 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
 11. 1 bottle containing 100 tablets (each of 5 gms.) of aspirin.
 12. Ointment for burns.
 13. A bottle of suitable surgical antiseptic solution
 - ii. For workplaces in which the number of contract labour exceed 50. Each first-aid box shall contain the following equipment:
 1. 12 small, sterilized dressings.
 2. 6 medium size sterilized dressings.
 3. 6 large size sterilized dressings.
 4. 6 large size sterilized burn dressings.
 5. 6 (15 gms.) packets sterilized cotton wool.
 6. 1 (60 ml.) bottle containing a two per cent alcoholic solution iodine.

7. 1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 8. 1 roll of adhesive plaster.
 9. 1 snake bite lancet.
 10. 1 (30 gms.) bottle of potassium permanganate crystals.
 11. 1 pair scissors.
 12. 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institutes /Government of India.
 13. A bottle containing 100 tablets (each of 5 gms.) of aspirin.
 14. Ointment for burns.
 15. A bottle of suitable surgical antiseptic solution.
- iii. Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
 - iv. Nothing except the prescribed contents shall be kept in the First-aid box.
 - v. The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the workplace.
 - vi. A person in charge of the First-aid box shall be a person trained in First-aid treatment in the workplaces where the number of contract labour employed is 150 or more.
 - vii. In workplaces where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
 - viii. Where workplaces are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

4. DRINKING WATER

- a. In every workplace, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.
- b. Where drinking water is obtained from an Intermittent public water supply, each workplace shall be provided with storage where such drinking water shall be stored.
- c. Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be properly closed in and be provided with a trap door which shall be dust and waterproof.
- d. A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5. WASHING FACILITIES

- a. In every workplace adequate and suitable facilities for washing shall be provided and maintained for the use of contract labour employed therein.
- b. Separate and adequate cleaning facilities shall be provided for the use of male and female workers.
- c. Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

6. LATRINES AND URINALS

- a. Latrines shall be provided in every workplace on the following scale namely: -
 - i. Where female are employed, there shall be at least one latrine for every 25 females.
 - ii. Where males are employed, there shall be at least one latrine for every 25 males.

Provided that, where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females as the case may be upto the first 100, and one for every 50 thereafter.

- b. Every latrine shall be under cover and so partitioned off as to secure privacy and shall have a proper door and fastenings.
- c. Construction of latrines: The inside walls shall be constructed of masonry or some suitable heat-resisting nonabsorbent materials and shall be cement washed inside and outside at least once a year, Latrines shall not be of a standard lower than borehole system.
- d. (a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women Only" as the case may be.
(a) The notice shall also bear the figure of a man or of a woman, as the case may be.
- e. There shall be at least one urinal for male workers upto 50 and one for female workers upto fifty employed at a time, provided that where the number of male or female workmen, as the case may be exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females upto the first 500 and one for every 100 or part thereafter.
- f. (a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
(b) Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- g. Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- h. Disposal of excreta :- Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn to manure).
- i. The contractor shall at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority for execution of such on his behalf.

7. PROVISION OF SHELTER DURING REST

At every place there shall be provided, free of cost, four suitable sheds, two for meals and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 meters (10 ft.) from the floor level to the lowest part of the roof. These shall be kept clean, and the space provided shall be on the basis of 0.6 sq.m. (6 sft) per head. Provided that the Engineer-in-Charge may permit subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

8. CRECHES

- a. At every workplace, at which 20 or more women worker are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One room shall be used as a playroom for the children and the other as their bedroom. The rooms shall be constructed with specifications as per clause 19H (ii) a, b & c.
- b. The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.
- c. The contractor shall supply adequate number of toys and games in the playroom and sufficient number of cots and beddings in the bed room.
- d. The contractor shall provide one ayaa to look after the children in the creche when the number of women workers does not exceed 50 and two when the number of women workers exceed 50.
- e. The use of the rooms earmarked as creches shall be restricted to children, their attendants and mothers of the children.

9. CANTEENS

- a. In every work place where the work regarding the employment of contract labour is likely to continue for six months and where in contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such contract labour.
- b. The canteen shall be maintained by the contractor in an efficient manner.
- c. The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.
- d. The canteen shall be sufficiently lighted at all times when any person has access to it.
- e. The floor shall be made of smooth and impervious materials and inside walls shall be lime-washed or colour washed at least once in each year. Provided that the inside walls of the kitchen shall be lime-washed every four months.
- f. The premises of the canteen shall be maintained in a clean and sanitary condition.
- g. Wastewater shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.
- h. Suitable arrangements shall be made for the collection and disposal of garbage.
- i. The dining hall shall accommodate at a time 30 per cent of the contract labour working at a time.
- j. The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs shall not be less than one square meter (10 sft) per diner to be accommodated as prescribed in sub-Rule 9.
- k. (a) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number.
(b) Washing places for women shall be separate and screened to secure privacy.
- l. Sufficient tables stools, chair or benches shall be available for the number of diners to be accommodated as prescribed in sub-Rule 9.
- m.
 - i.
 1. There shall be provided and maintained sufficient utensils crockery, furniture and any other equipment necessary for the efficient running of the canteen.

2. The furniture utensils and other equipment shall be maintained in a clean and hygienic condition.
 - ii.
 1. Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.
 2. A service counter, if provided, shall have top of smooth and impervious material.
 3. Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment.
 - n. The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.
 - o. The charges for food stuffs, beverages and any other items served in the canteen shall be based on 'No profit, No loss' and shall be conspicuously displayed in the canteen.
 - p. In arriving at the price of foodstuffs, and other article served in the canteen, the following items shall not be taken into consideration as expenditure namely:-
 - i. The rent of land and building.
 - ii. The depreciation and maintenance charges for the building and equipments provided for the canteen.
 - iii. The cost of purchase, repairs and replacement of equipments including furniture, crockery, cutlery and utensils.
 - iv. The water charges and other charges incurred for lighting and ventilation.
 - v. The interest and amounts spent on the provision and maintenance of equipments provided for the canteen.
 - q. The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.

10. ANTI-MALARIAL PRECAUTIONS

The contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer-in-Charge including the filling up of any borrow pits which may have been dug by him.

11. The above rules shall be incorporated in the contracts and in notices inviting tenders and shall form an integral part of the contracts.

12. AMENDMENTS

Government may, from time to time, add to or amend these rules and issue directions - it may consider necessary for the purpose of removing any difficulty which may arise in the administration thereof.

CPWD Contractor's Labour Regulations

1. SHORT TITLE

These regulations may be called the CPWD Contractors Labour Regulations.

2. DEFINITIONS

- a. Workman means any person employed by MMRCL or its contractor directly or indirectly through a subcontractor with or without the knowledge of the MMRCL to do any skilled, semiskilled or unskilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment are expressed or implied but does not include any person :-
- i. Who is employed mainly in a managerial or administrative capacity : or
 - ii. Who, being employed in a supervisory capacity draws wages exceeding five hundred rupees per mensem or exercises either by the nature of the duties attached to the office or by reason of powers vested in him, functions mainly of managerial nature: or
 - iii. Who is an out worker, that is to say, person to whom any article or materials are given out by or on behalf of the principal employers to be made up cleaned, washed, altered, ornamental finished, repaired adopted or otherwise processed for sale for the purpose of the trade or business of the principal employers and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal employer.

No person below the age of 14 years shall be employed to act as a workman.

- b. Fair Wages means wages whether for time or piece work fixed and notified under the provisions of the Minimum Wages Act from time to time.
- c. Contractors shall include every person who undertakes to produce a given result other than a mere supply of goods or articles of manufacture through contract labour or who supplies contract labour for any work and includes a subcontractor.
- d. Wages shall have the same meaning as defined in the Payment of Wages Act.

3.

- a. Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
- b. When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be paid overtime for the extra hours put in by him at double the ordinary rate of wages.
- c.
- i. Every worker shall be given a weekly holiday normally on a Sunday, in accordance with the provisions of the Minimum Wages (Central) Rules 1960 as amended from time to time irrespective of whether such worker is governed by the Minimum Wages Act or not.
 - ii. Where the minimum wages prescribed by the Government under the Minimum Wages Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next

preceding day, provided he has worked under the same contractor for a continuous period of not less than 6 days.

- iii. Where a contractor is permitted by the Engineer-in-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substituted holiday to him for the whole day on one of the five days immediately before or after the normal weekly holiday and pay wages to such worker for the work performed on the normal weekly holiday at overtime rate.

4. DISPLAY OF NOTICE REGARDING WAGES ETC.

The contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clear and legible condition in conspicuous places on the work, notices in English and in the local Indian languages spoken by the majority of the workers giving the minimum rates of wages fixed under Minimum Wages Act, the actual wages being paid, the hours of work for which such wage are earned, wages periods, dates of payments of wages and other relevant information as per Appendix 'III'.

5. PAYMENT OF WAGES

- a. The contractor shall fix wage periods in respect of which wages shall be payable.
- b. No wage period shall exceed one month.
- c. The wages of every person employed as contract labour in an establishment or by a contractor where less than one thousand such persons are employed shall be paid before the expiry of seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.
- d. Where the employment of any worker is terminated by or on behalf of the contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- e. All payment of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.
- f. Wages due to every worker shall be paid to him direct by contractor through Bank or ECS or online transfer to his bank account.
- g. All wages shall be paid through Bank or ECS or online transfer.
- h. Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956.
- i. A notice showing the wages period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the contractor to the Engineer-in-Charge under acknowledgment.
- j. It shall be the duty of the contractor to ensure the disbursement of wages through bank account of labour.
- k. The contractor shall obtain from the Junior Engineer or any other authorized representative of the Engineer-in-Charge as the case may be, a certificate under his signature at the end of the entries in the "Register of Wages" or the "Wage-cum-Muster Roll" as the case may be in the following form:-

“Certified that the amount shown in column Nohas been paid to the workman concerned through bank account of labour on at“

6. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES

- a. The wages of a worker shall be paid to him without any deduction of any kind except the following:-
 - i. Fines
 - ii. Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
 - iii. Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money or any other deduction which he is required to account, where such damage or loss is directly attributable to his neglect or default.
 - iv. Deduction for recovery of advances or for adjustment of overpayment of wages, advances granted shall be entered in a register.
 - v. Any other deduction which the Central Government may from time to time allow.
- b. No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved of by the Chief Labour Commissioner.
Note :- An approved list of Acts and Omissions for which fines can be imposed is enclosed at Appendix-X
- c. No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- d. The total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the total wages, payable to him in respect of that wage period.
- e. No fine imposed on any worker shall be recovered from him by instalment, or after the expiry of sixty days from the date on which it was imposed.
- f. Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

7. LABOUR RECORDS

- a. The contractor shall maintain a Register of persons employed on work on contract in Form XIII of the CL (R&A) Central Rules 1971 (Appendix
- b. IV)
- c. The contractor shall maintain a Muster Roll register in respect of all workmen employed by him on the work under Contract in Form XVI of the CL (R&A) Rules 1971 (Appendix V).
- d. The contractor shall maintain a Wage Register in respect of all workmen employed by him on the work under contract in Form XVII of the CL (R&A) Rules 1971 (Appendix VI).
- e. The contractor shall maintain a register of accidents in such form as may be convenient at the workplace but the same shall include the following particulars:
 - i. Full particulars of the labourers who met with accident.

- ii. Rate of Wages.
 - iii. Sex
 - iv. Age
 - v. Nature of accident and cause of accident.
 - vi. Time and date of accident.
 - vii. Date and time when admitted in Hospital,
 - viii. Date of discharge from the Hospital.
 - ix. Period of treatment and result of treatment.
 - x. Percentage of loss of earning capacity and disability as assessed by Medical Officer.
 - xi. Claim required to be paid under Workmen's Compensation Act.
 - xii. Date of payment of compensation.
 - xiii. Amount paid with details of the person to whom the same was paid.
 - xiv. Authority by whom the compensation was assessed.
 - xv. Remarks
- f. The contractor shall maintain a Register of Fines in the Form XII of the CL (R&A) Rules 1971 (Appendix-XI). The contractor shall display in a good condition and in a conspicuous place of work the approved list of acts and omissions for which fines can be imposed (Appendix-X)
 - g. The contractor shall maintain a Register of deductions for damage or loss in Form XX of the CL (R&A) Rules 1971 (Appendix-XII)
 - h. The contractor shall maintain a Register of Advances in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIII)
 - i. The contractor shall maintain a Register of Overtime in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIV)

8. ATTENDANCE CARD-CUM-WAGE SLIP

- a. The contractor shall issue an Attendance card-cum-wage slip to each workman employed by him in the specimen form at (Appendix-VII)
- b. The card shall be valid for each wage period.
- c. The contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.
- d. The card shall remain in possession of the worker during the wage period under reference.
- e. The contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- f. The contractor shall obtain the signature or thumb impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

9. EMPLOYMENT CARD

The contractor shall issue an Employment Card in Form XIV of the CL (R&A) Central Rules 1971 to each worker within three days of the employment of the worker (Appendix-VIII).

10. SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the contractor shall issue to the workman whose services have been terminated, a Service certificate in Form XV of the CL (R&A) Central Rules 1971 (Appendix-IX)

11. PRESERVATION OF LABOUR RECORDS

All records required to be maintained under Regulations Nos. 6 & 7 shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available

for inspection by the Engineer-in-Charge or Labour Officer or any other officers authorized by the Ministry of Urban Development in this behalf.

12. POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

The Labour Officer or any person authorized by Central Government on their behalf shall have power to make enquires with a view to ascertaining and enforcing due and proper observance of Fair Wage Clauses and the Provisions of these Regulations. He shall investigate into any complaint regarding the default made by the contractor or subcontractor in regard to such provision.

13. REPORT OF LABOUR OFFICER

The Labour Officer or other persons authorized as aforesaid shall submit a report of result of his investigation or enquiry to the Assistant General Manager (Civil) concerned indicating the extent, if any, to which the default has been committed with a note that necessary deductions from the contractor's bill be made and the wages and other dues be paid to the labourers concerned. In case an appeal is made by the contractor under Clause 13 of these regulations, actual payment to labourers will be made by the Assistant General Manager (Civil) after the ED (PLANNING) has given his decision on such appeal.

- a. The Assistant General Manager (Civil) shall arrange payments to the labour concerned within 45 days from the receipt of the report form the Labour Officer or the ED (PLANNING) as the case may be.

14. APPEAL AGAINST THE DECISION OF LABOUR OFFICER

Any person aggrieved by the decision and recommendations of the Labour Officer or other person so authorized may appeal against such decision to the ED (PLANNING) concerned within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Assistant General Manager (Civil) concerned but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.

15. PROHIBITION REGARDING REPRESENTATION THROUGH LAWYER

- a. A workman shall be entitled to be represented in any investigation or enquiry under these regulations by: -
 - i. An officer of a registered trade union of which he is a member.
 - ii. An officer of a federation of trade unions to which the trade union referred to in clause (a) is affiliated.
 - iii. Where the employer is not a member of any registered trade union, by an officer of a registered trade union, connected with the industry in which the worker is employed or by any other workman employed in the industry in which the worker is employed.
- b. An employer shall be entitled to be represented in any investigation or enquiry under these regulations by :-
 - i. An officer of an association of employers of which he is a member.
 - ii. An officer of a federation of associations of employers to which association referred to in clause (a) is affiliated.
 - iii. Where the employers is not a member of any association of employers, by an officer of association of employer connected with the industry in which the employer is engaged or by any other employer, engaged in the industry in which the employer is engaged.

- c. No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

16. INSPECTION OF BOOKS AND SLIPS

The contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour Officer or any other person, authorized by the Central Government on his behalf.

17. SUBMISSIONS OF RETURNS

The contractor shall submit periodical returns as may be specified from time to time.

18. AMENDMENTS

The Central Government may from time to time add to or amend the regulations and on any question as to the application/Interpretation or effect of those regulations the decision of the ED (PLANNING) concerned shall be final.

PART B

MATERIAL AND QUALITY ASSURANCE

1. The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted. He shall have to submit quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists to enforce quality control.
2. The contractor shall get the source of all other materials, not specified elsewhere in the document, approved from the Engineer-in-Charge. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be done by the contractor at his own cost. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in- Charge along with samples and once approved, he shall stick to it.
3. The contractor shall submit shop drawings of staging and shuttering arrangement, aluminum work, and other works as desired by Engineer In Charge for his approval before execution. The contractor shall also submit bar bending schedule for approval of Engineer –in – charge before execution.
4. Test Laboratories:
 - A. Laboratory at site:

The contractor shall establish a testing lab at site and provide testing equipment and materials for the field tests mentioned in the list of mandatory tests given in CPWD specifications 2021, MCGM specifications 2018 & CSR specifications 2021-22. Nothing extra shall be payable to him on this account. The representatives of the department shall be at liberty to inspect the testing facilities at site and conduct testing at random in consultation with Engineer in charge. The contractor shall provide all necessary facilities for the purpose. The laboratory shall be equipped, inter alia, with the following equipment:

 - a. Balances:
 - i. 7 kg to 10 kg capacity, semi-self-indicating type – Accuracy 10 gm.
 - ii. 500 gm capacity, semi-self-indicating type Accuracy 1 gm.
 - iii. Pan Balance- 5 kg Capacity- Accuracy 10 gm.
 - b. Ovens- Electrically operated, thermostatically controlled upto 1100C- Sensitivity 10C.
 - c. Sieves: as per IS: 460
 - i. IS Sieves – 450 mm internal dia of sizes 100 mm, 80 mm, 63 mm, 50 mm, 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3 mm, 4.75 mm, complete with lid and pan.
 - ii. IS Sieves – 200 mm internal dia (brass frame) consisting of 2.36 mm, 1.18 mm, 500 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns with lid and pan.
 - d. Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly.
 - e. Equipment for slump test- slump cone, steel plate, taping rod, steel scale, scoop.
 - f. Equipment for concrete testing
 - i. Concrete cube moulds 15x15x15cm. 18Nos.
 - ii. Pruning Rods 2Kg weight length 40cm and ramming face 25mm 1No.
 - iii. Extra Bottom plates for 15cm cube mould 6Nos.

- | | |
|---|-------|
| iv. Standard Vibration table for cubes | 1No |
| v. Dial gauges 25 mm travel- 0.01 mm/division Least count | 1 No. |
| vi. Compression testing machine of 100 tonne capacity | 1 No. |

Not less than 90% tests for material be performed at site lab with above stated equipment's, however at least 10% testing of materials shall be got done from external laboratories. However, for the tests to be carried out by the external laboratories, the contractor shall supply free of charge all the materials required for testing, including transportation. If the tests which were to be conducted in the site laboratory are conducted in other laboratories for any the reasons the cost of such tests shall be borne by the contractor.

B. Other Laboratories :

B1 The contractor shall arrange carrying out all tests required under the agreement through the laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including charges for testing for all materials except cement for which separate condition is provided in tender document.

C. Sampling of Materials :

C1 Sample of building materials fittings and other articles required for execution of work shall be got approved from the Engineer-in-Charge. Articles manufactured by companies of repute and approved by the Engineer-in-Charge shall only be used. Articles bearing BIS certification mark shall be used in case the above are not available, the quality of samples brought by the contractor shall be judged by standards laid down in the relevant BIS specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work.

C2 The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-Charge.

C3 BIS marked materials except otherwise specified shall be subjected to quality test at the discretion of the Engineer-in-Charge besides testing of other materials as per the specifications described for the item/materials. Wherever BIS marked materials are brought to the site of work, the contractor shall if required, by the Engineer-in-Charge furnish manufacturers test certificate to establish that the material produced by the contractor for incorporation in the work satisfies the provisions of BIS codes relevant to the material and/or the work done.

C4 The contractor shall procure all the materials in advance so that there is sufficient time to testing and approving of the materials and clearance of the same before use in work.

C5 All materials brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.

C6 The contractor shall be fully responsible for the safe custody of the materials issued to him even if the materials are in double lock and key system.

C7 The Stone aggregate/stone, sand shall be brought from any quarries subjected to the said materials confirm CPWD/MCGM/CSR specifications.

5. The day-to-day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard proforma by the Jr. Engineer-in-Charge of work and which shall be duly signed by the contractor or his authorized representative.
6. The contractor shall render all help and assistance in documenting the total sequence of this project by way of photography, slides, audio-video recording etc. Nothing extra shall be payable to the contractor on this account and shall be submitted along with running account bills.
7. The contractor shall be fully responsible for the safe custody of materials brought by him issued to him even though the materials are under double lock key system.
8. Separate cement registers showing the receipt of the OPC and PPC shall be maintained at site. The contractor shall construct separate godowns for storage of OPC & PPC at site and nothing extra on this account shall be payable.
9. In case there is any discrepancy in frequency of testing as given in the list of mandatory tests and that in the individual sub-head of work as per CPWD specification 2021, MCGM specification 2018 & CSR specification 2021-22 the higher of the two frequencies of testing shall be adopted.
10. Maintenance of Cement Register:
 - a. All the register of tests to be carried out at construction site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in- Charge in the same manner as being issued to CPWD field staff.
 - b. The test registers to be maintained by the contractor are :
 - i. Materials at site account register.
 - ii. Cement register.
 - iii. Master test registers.
 - iv. Cube test register.
 - v. Paint register.
 - vi. Inspection register.
 - vii. Drawing register.
 - c. All the entries in the register will be made by the designated engineering staff of the contractor and same should be regularly reviewed by concerned engineers of MMRCL.
 - d. Contractor shall be responsible for safe custody of all the test registers.
 - e. Submission of copy of all test registers, material at site register along with each alternate running account bill and final bill shall be mandatory.

Additional Conditions for Cement

1. The contractor shall procure Portland Pozzolana Cement conforming to IS: 1489 (Part-I) or Ordinary Portland Cement conforming to IS 8112 (2013) as required in the work, from reputed manufacturers of cement, such as A.C.C., Ultratech, Vikram, Shri cement, Ambuja, Jaypee Cement, Century Cement, J.K. Cement, Birla Cement or from any other reputed cement Manufacturer having a production capacity not less than one million tonnes per annum as approved by ADG for the sub region. The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves right to accept or reject name(s) of cement manufacturer(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturers, given by the tenderer, fully or partially. Supply of cement shall be made in 50 kg. bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of the relevant BIS codes. In case the test results indicate that the cement arranged by the contractor does not confirm to the relevant BIS code the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-Charge to do so.
2. The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer-in-Charge. The cement godown of the capacity to store a minimum of 1000 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made.
3. Double lock provision shall be made to the door of the cement godown. The keys of one lock shall remain with the Engineer-in-charge or his authorized representative and the key to the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge at any time.
4. The cement shall be got tested by the Engineer-in-Charge and shall be used on the work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to test laboratories. The cost of tests shall be borne by the contractor/department in the manner indicated below :
 - a. By the contractor, if the results show that the cement does not conform to relevant CPWD specifications /MCGM Specifications /CSR Specifications / BIS code or specification mentioned elsewhere in the documents.
 - b. By the department, if the results show that the cement conforms to relevant CPWD specifications /MCGM Specifications / CSR Specifications / BIS code or specification mentioned elsewhere in the documents.
5. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein. In case the cement consumption is less than theoretical consumption including permissible variation, recovery at the rate show prescribed shall be made. In case of excess consumption, no adjustment needs to make.
6. The cement brought to site and the cement remaining unused after completion of the work shall not be removed from site without the written permission of the Engineer-in-Charge.
7. The damaged cement shall be removed from the site immediately by the contractor on receipt of a notice in writing from the Engineer-in-Charge. If he does not do show within three days of receipt of such notice, the Engineer-in-Charge shall get it removed at the cost of the contractor.

Additional Condition for Steel Reinforcement

1. The contractor shall procure TMT bars of Fe 500 D grade from primary steel producers such as SAIL, Tata Steel Ltd, RINL, Jindal Steel & Power Ltd and JSW Steel Ltd or any other producer as approved by MMRC who are using iron ore as the basic raw material/input and having crude steel capacity of 2.0 million tons per annum and above.
 - a. TMT bars shall meet the provisions of IS 1786: 2008 pertaining to Fe 500 D grade of steel.
2. The contractor shall have to obtain vouchers and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.
3. Samples shall also be taken and got tested by the Engineer-in-charge as per the provisions in this regard in the relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined under para 1.1 and 1.2 above, the same shall stand rejected and it shall be removed from the site of work by the contractor at his cost within a week time of written orders from the Engineer-in-charge to do so.
4. The steel reinforcement shall be brought to the site in bulk supply of 50 tons or more or as directed by the Engineer-in-charge.
5. The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent distortion & corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
6. For checking nominal mass, tensile strength, bend test, re-bend test etc. specimens of sufficient length shall be cut from each size of the bar at random at frequency not less than that specified below:

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

7. The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor.
8. The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by the conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations recovery at the rate so prescribed shall be made. In case of excess consumption, no adjustment needs to be made.
9. The steel brought to the site and the steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge
10. Steel bars brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
11. In case the contractor brings surplus quantity of steel the same after completion of the work will be removed from the site by the contractor at his own cost after approval of the Engineer-in-Charge.
12. Reinforcement including authorized spacer bars and lap pages shall be measured in length of different diameters, as actually (not more than as specified in the drawing) used in the work, nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured.
13. The standard sectional weights referred Indian Standard Codes will be considered for conversion of length of various sizes of MS bars, Tor steel bars and TMT bars into standard weight.
14. Records of actual sectional weight shall also be kept dia-wise & lot-wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer-in-Charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will

constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as derived actual weight.

15. If the derived weight as in para 14 above is lesser than the standard weight as in para 13 above, the derived actual weight shall be taken for payment. If the derived actual weight is found more than the standard weight than the standard weight as worked out in para 13 above shall be taken for payment. In such case nothing extra shall be paid for the difference between the derived actual weight and the standard weight.
16. Mixing of different type of steel/different grades of steel shall not be allowed in the same structural members as main reinforcement to satisfy clause 26.1 of IS:456.
17. Tolerances on Nominal Mass (individual sample) shall be as under:-

S. No.	Nominal size mm	Tolerances on the Nominal Mass, percentage
1	Upto and including 10	-8%
2	Over 10 upto & including 16	-6%
3	Over 16	-4%

General Terms & Condition

1. The order of preference in case of any discrepancy as indicated in condition No. 8.1 under “Conditions of Contract” give in standard CPWD contract form may be read as the following:
 - a. Nomenclature of items as per schedule of quantities.
 - b. Particular specification and special condition, if any.
 - c. CPWD specifications 2021.
 - d. MCGM specifications 2018.
 - e. CSR Specifications 2021 – 22.
 - f. Architectural Drawings
 - g. Indian standard specifications of B.I.S.
 - h. Sound Engineering Practice

A reference made to any Indian Standard specification in these documents, shall imply to the latest version of that standard. Including such revision/amendments as issued by the bureau of Indian standard upto last date of receipt of tenders. The contractor shall keep at his own cost all such publications of relevant Indian standard applicable to the work at site.

2. Except for the items, for which particular specifications are given or where it is specifically mentioned otherwise in the description of items in the schedule of quantities the work shall generally be carried out in accordance with the “CPWD specifications 2021, MCGM specifications 2018 & CSR specifications 2021-22 (with upto date corrections slips). (Hereinafter to be referred to as CPWD/MCGM/CSR specifications) and instructions of Engineer-in-Charge. Wherever CPWD specifications, MCGM specifications & CSR Specifications are silent the latest IS codes/specification shall be followed.
3. Unless otherwise provided in the Schedule of Quantities/Specifications, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the work and nothing extra shall be payable to him on account of the same. Extra payment for centering/shuttering, if required to be done for heights greater than 3.5 m shall however be admissible at the rates arrived at in accordance with clause 12 of the agreement, if not already specified.
4. The proposed building is a prestigious project and quality of work is paramount importance. Contractor shall have to engage well experienced skilled labour and deploy modern T&P and other equipment to execute the work. Many items like stone masonry & stone cladding works, stone flooring, structural glazing, PVDF coating aluminium composite panel and other specialized flooring work, Woodwork will specially require engagement of skilled workers having experience particularly in execution of such items.
5.
 - a) The contractor (s) shall inspect the site of work before tendering and acquaint himself with the site conditions and no claim on this account shall be entertained by the department.
 - b) The contractor (s) shall get himself acquainted with nature and extent of the work and satisfy himself about the availability of materials from kiln or approved quarries for collection and conveyance of materials required for construction.
6. The contractor (s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy himself about complete characteristics of soil and other parameters of site. However, no claim on the alleged inadequacy or incorrectness of the soil data shall be entertained.

7. The tenderer shall see the approaches to the site. In case any approach from main road is required by the contractor, the same shall be made good, improved and maintained by the contractor at his own cost. No payment shall be made on this account.
8. The contractor (s) shall give to the Municipality, Police and other authorities all necessary notices etc. that may be required by law and obtain all requisite Licenses for temporary obstructions, enclosures etc. and pay all fee, taxes and charges which may be leviable on account of these operations in executing the contract. He shall make good any damage to the adjoining property whether public or private and shall supply and maintain light and other illumination on for cautioning the public at night.
9. The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night speed limit boards red flags, red lights and providing barriers. He shall be responsible for all dangers and incidents caused to existing / new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work.
10. Contractor shall provide permanent benchmarks and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings
11. The contractor shall make his own arrangement for obtaining electric connection(s) if required and make necessary payments directly to the department concerned.
12. Other agencies doing works related with this project may also simultaneously execute their works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc. for laying/burying in the work, pipes cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for the other agencies. Nothing extra over the Agreement rates shall be paid for doing these.
13. Some restrictions may be imposed by the security staff etc. on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on account of the same.
14. The contractor shall fully comply with all legal orders and directions of the Public or local authorities or municipality and adhere by their rules and regulations and pay all fees and charges for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
15. The building work shall be carried out in the manner complying in all respects with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-charge and nothing extra shall be paid on this account.
16. The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted by making his own arrangements for water supply, electricity etc. and nothing extra whatsoever shall be payable for the same.
17. If as per local Municipal regulations, huts for labour are not to be erected at the site of work, the contractor shall be required to provide such accommodation at a place as is acceptable to the local body and nothing extra shall be paid on this account.
18. It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
19. The structural and architectural drawings shall at all times be properly co-related before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and Architectural drawings relating to the relevant item, the former shall prevail unless otherwise given in writing by the Engineer-in-charge.

20. The contractor shall maintain in perfect condition, all portions executed till completion of the entire work allotted to him. Where however phased delivery of work is contemplated these provisions shall apply separately to each phase.
21. The entire royalty at the prevalent rates shall have to be paid by the contractor on all the boulders, metals, shingle sand etc. collected by him for execution of the work, directly to the Revenue authority or authorized agents of the State Government concerned or the Central Government, as the case may be.
22. PROGRAMME CHART
 - a. The contractor shall prepare an integrated programme chart for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfillment of the programme within the stipulated period or earlier as indicated in the milestones under clause 5 of the contract and submit the same for approval to the Engineer-in-Charge within ten days of the award of the contract.
 - b. The program charts should include the following:-
 - i. Descriptive note explaining sequence of various activities.
 - ii. Network (PERT/CPM/BAR CHART)
 - iii. Programme for procurement of materials by the contractor
 - iv. Programme of procurement of machinery/equipment's having adequate capacity commensurate with the quantum of work to be done within the stipulated period by the contractor.
23. If it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved programme referred above the contractor shall produce a revised programme showing the modifications to the approved programme to ensure completion of the work within the stipulated time for completion.
24. The submission for approval by the Engineer-in-Charge of such programme or the furnishing of such particulars shall not relieve the contractor of any of his duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in- Charge to take action against the contractor as per terms and conditions of the agreement.
25. If the work is carried out in more than one shift or during night, no claim on this account shall be entertained.
26. Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.
27. The contractor shall be responsible for the watch and ward/guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
28. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by department.
29. Any cement slurry added over base surface for continuation of concreting for better bond is deemed to have been built in the items and nothing extra shall be payable for extra cement considered in consumption on this account.

30. The contractor shall take instructions from the Engineer-in-charge for stacking of materials. No excavated earth or building materials etc. shall be stacked/collected in areas where other buildings, roads, services, compound walls etc. are to be constructed.
31. Any trenching and digging for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machinery's and materials have been arranged and closing of the trench(s) thereafter shall be ensured within the least possible time.
- a. The contractor shall submit for the approval of Engineer-in-Charge names of specialized agencies of repute along with their technical capacity proposed to be engaged by him, who must have executed satisfactorily works of value as specified in mandatory conditions.
 - b. The works shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time by the Engineer-in-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work and satisfy himself that the information available thereof is complete and unambiguous. The discrepancy, if any shall be brought to the notice of the Engineer-in-Charge before execution of the work. The contractor alone shall be responsible for any loss or damage executing by the commencement of work on the basis of any erroneous and or incomplete information.
 - c. The contractor shall take all precautions to avoid accidents by, exhibiting caution boards day and night, speed limit boards, red flags, red light and providing necessary barriers and other measures required from time to time. The contractor shall be responsible for all damages and accidents due to negligence on his part.
 - d. Other agencies will also simultaneously execute and install the works of electrification, air conditioning, lifts, firefighting etc. for this work and the contractor shall provide necessary facilities for the same. The contractor shall leave such recesses, holes openings etc. as may be required for the electric, air-conditioning and other related works (for which inserts, sleeves, brackets, conduits base pinion, clamps etc. shall be supplied free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at time of casting of concrete, stonework & brick work, if required and nothing extra shall be payable on this account.
 - e. The contractor shall conduct work so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
 - f. All Architectural drawings given in the tender other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fixings involved unless and otherwise specifically mentioned. However, the work shall be executed in accordance with the drawings duly approved by the Engineer-in-Charge.
32. Samples of all materials and fittings to be used in the work in respect of brand manufacturer and quality shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work. Articles bearing BIS certifications mark shall only be used unless no manufacturer has got BIS mark for the particular material. Any material/fitting whose sample has not been approved in advance and

any other unapproved material brought by the contractor shall be immediately removed as soon as directed

Unless otherwise specified in the schedule of quantities the rates for all items shall be considered as inclusive of pumping/baling out water, if necessary, for which no extra payment shall be made. Those conditions shall be considered to include water from any source such as inflow of flood, surface and sub-soil water etc. and shall apply to the execution in any season.

33. On completion of work, the contractor shall submit at his own cost four prints of “as built” drawings to the Engineer-in-Charge within 30 days of completion of work. These drawings shall have the following information:
 - a. Route of all piping and their diameters including soil waste pipes & vertical stacks.
 - b. Ground and invert levels of all drainage pipes together with locations of all manholes and connections upto outfall.
 - c. Route of all water supply lines with diameters, location of control valves, access panels etc.
34. No extra payment will be made for operation/activity mentioned at Sl. No. 1 to 33 above unless specifically mentioned otherwise.
35. Condition regarding secured advance: -

Secured advance shall be admissible only on those bonafide materials which are likely to be used in the work in a period not exceeding six months from the date of secured advance payment. If agency fails to use the material (in respect of which secured advance have been paid) in the work in this specified period of six month, the said component of secured advance shall be recovered from next running account bill paid to the agency. Secured advance on the same material shall not be paid again.

CONSTRUCTION SPECIFICATON & OTHER CONDITION OF WORK

A. SCOPE OF WORK

Contractor's scope of works will be as follows:

Repair and maintenance of civil works of R&R sites under MMRCL will include but will not be limited to:

1. Attending blockage of drainpipes, gully traps and manholes.
2. Attending the leakage from taps and valves, sanitary fixtures, fixtures for water supply.
3. Attending rectification of malfunctioning fittings on doors and windows.
4. Replacement of broken glass panes of doors and windows.
5. Attending rectification of wall plaster and floors in patchwork.
6. White washing, color washing, painting and external painting etc, if required.
7. Replacement of water supply fittings/sanitary fixtures.
8. Periodical cleaning of over-head tanks, underground tanks etc.
9. Testing of water for physical, chemical and bacteriological analysis.
10. Changing of fly proof mesh in doors, windows and ventilators.
11. Only Class-A Brick, fine & coarse sand, reputed brand of cement bag & TMT steel bars should be used as materials.
12. All materials shall be tested in lab wherever necessary, and the certificate will be provided by agency and submitted at the time of the billing.
13. Agency will maintain Manpower Muster Roll & Wage Register.
14. Whenever and wherever required, Agency will provide the Civil Engineer at site.
15. Agency will provide Uniform, Identity Cards, Name bearing Plates etc. to every deployed Staff.
16. All Tools & tackles, Plants, machineries, equipment and materials required to carry out the Civil work at site shall be provided by the Agency at his own cost.
17. The Agency shall have to display on signboard, Facility Manager/Engineer/Supervisor's name to be contacted with Telephone No's, in case in emergency or urgent work required.
18. The agency shall be responsible to depute their supervisor on working site.
19. The agency shall provide materials (Civil) as per ISI norms and quality mentioned.
20. The agency should ensure all safety precautions for its labourers.
21. Any other works as and when directed by the authorized person from MMRCL other than mentioned above falling under the domain of Civil Works.
22. Maintaining the overhead tank/ suction tank, covers mosquito proof.
23. Contractor's scope of works will be execution of maintenance works, minor works, external works of the entire campus as per the details below:

Repair / replacement in existing concrete/Water proofing work/ plaster / masonry work, woodwork, sewerage work, steel work, plumbing work, road work, painting work, flooring work, roofing work, and interior decoration works; removal of chokes, seepage, leakage, dampness; clearing malba, debris, wild vegetation, excavation of earth, road work, Furniture interior works, and any other miscellaneous work as directed. etc., and various preventive maintenance works as ordered by MMRCL as per complaints recorded in complaints register and work orders given by MMRCL from time to time.

SPECIFICATIONS

Detailed specifications of various items of work and standards of workmanship will be as per CPWD/MCGM norms and relevant I. S. Codes, unless noted otherwise. All materials to be used by contractor will be I.S.I. marked and of makes approved by DGM (Civil). Wherever ISI mark is not applicable, material will be got approved by DGM (Civil) before incorporation in the work. Wherever required, manufacturer's specifications and / or DGM (Civil) instructions will also be followed for special products.

MANPOWER DEPLOYMENT BY CONTRACTOR

(Routine Maintenance and External Cleaning Gang)

Carpenter (skilled)	:	1 No.
Plumber (skilled)	:	1 No.
Electrician (skilled)	:	1 No.
Helper (Unskilled)	:	2 Nos.
Supervisor (Graduate)	:	1 No.
Total Manpower	:	6 Nos.

Note: -

1. The above regular manpower will be deployed by the contractor on regular basis. Any extra labour required beyond the above referred regular staff will be deployed by Contractor as per the needs of the works and permission from DGM (Civil).
2. In case of non-competence of workers observed during execution of works, Contractor will have to replace them as per the instructions of DGM (Civil).
3. Supervisor appointed by the Contractor should be a Diploma in Civil Engg. with at least two years site experience or a Graduate with adequate site experience and should be engaged after DGM (Civil) clearance. He will receive all instructions and input from MMRCL, maintain all records of maintenance and minor works, get the works executed to the satisfaction of MMRCL, prepare the bills and also provide any technical help to MMRCL whenever needed. Supervisor minimum wages will not be less than the min. wages announced by Central Govt. for 'Graduates and above' category.
4. Contractor will also keep an experienced supervisor from his side to procure and organize material, labour, tools & tackles at site required for execution of the works given by MMRCL. (Supervisor mentioned in the manpower list will not be disturbed for these works and will be required to stay full time at site only). He will also assist the main supervisor in case of overload of works and will control the site in case of his absence. Wages for this supervisor will be taken into account by the contractor under his overheads. No separate payment will be made to contractor in this regard.

1. GENERAL

These Specifications contained herein shall be read in conjunction with other Bid documents.

The Work shall be carried out to the satisfaction of the Engineer-in-charge. The Contractor shall not take cognizance of any drawings, designs, specifications, etc. not bearing the signature and stamp of the Employer.

The specifications may have been divided into different sections / sub-heads for convenience only. They do not restrict any cross-references. The Contractor shall take into account inter-relations between various parts of works/trades. No claim shall be entertained on the basis of compartmental interpretations.

2. REFERENCE TO THE STANDARD CODES OF PRACTICE:

The Contractor shall make available at Site all relevant Codes of practice as applicable.

Legend:

MCGM Municipal Corporation of Greater Mumbai

CPWD Central Public Works Department

CSR Current Schedule of Rates

IRS Indian Railway Standards

IS Indian Standards

MORT&H Ministry of Road Transport and Highways

RDSO Guidelines for Railway Embankments

3. QUALITY ASSURANCE:

(i) The work shall conform to high standards workmanship and aesthetically pleasing. The Contractor shall conform to the Quality standards prescribed, which shall form the backbone for the Quality Assurance system.

(ii) The Contractor shall arrange for the proper stacking/storage of the construction materials at Site to ensure the quality requirement. The Contractor shall provide all the necessary equipment and qualified manpower to test the quality of materials, assemblies, etc., as directed by the Employer. The tests shall be conducted at specified intervals and the results of tests properly documented. In addition, the Contractor shall keep appropriate tools and equipment for checking alignments, levels, slopes and evenness of the surfaces.

a. The test shall be conducted at nominated Standard Laboratory selected by the Employer.

b. All testing shall be performed in the presence of Employer. Testing may be witnessed by the Contractor or his authorized representative if permitted by the Test House. Whether witnessed by the Contractor or not, the test results shall be binding on the Contractor.

The Employer shall have the right at all times to inspect all operations including the sources of materials, procurement, layout and storage of materials, all equipment and the quality control system. Such an inspection shall be arranged, and the Employer's approval obtained prior to starting of the particular item of work. This shall, however, not relieve the Contractor of his responsibilities. All materials which do not conform to these specifications shall be rejected and shall be removed from the Site immediately. The Employer shall have the powers to cause the Contractors to purchase and use materials from any particular source, as may in the Employer's opinion be necessary for the proper execution of work.

4. DIMENSIONS:

- (i) Figured dimensions on drawings shall only be followed and drawings to a large scale shall take precedence over those to a smaller scale. Special dimensions or directions in the specifications shall supersede all others. All dimensions shall be checked prior to execution.
- (ii) The levels, measurements and other information concerning the existing Site as shown on the drawings are believed to be correct, but the Contractor shall verify them for himself and also examine the nature of the ground as no claim or allowance whatsoever will be entertained on account of any errors or omissions in the levels or the description of the ground levels or strata turning out different from what was shown on the drawings.

5. SETTING OUT OF WORKS:

The Contractor shall provide suitable stones or steel plates with flat tops and build the same in concrete for temporary benchmarks. All the pegs, control pillars for setting out the works and fixing the levels required for the execution shall be built in masonry as directed by the Employer. The Contractor shall protect and preserve all benchmarks and control pillars till completion of assigned job. The Contractor shall submit overall survey report and layout of work and get it checked from Employer prior to commencement of work. The cost of all operations of setting out including construction of benchmarks is deemed to be included in the quoted rates / Bill of Quantities.

- (i) All the survey work except levelling work shall be carried out using total stations with minimum one second accuracy. The levelling work, however, shall be carried out using Auto level.
- (ii) The triangulations points given by the Employer before start of work shall be maintained during execution and handed back to the Employer after completion of work.

6. MATERIALS:

- (i) Source of Materials:

It shall be the responsibility of the Contractor to procure all the materials required for the construction and work completion according to the contract. The Contractor shall indicate in writing the source of materials well in advance to the Employer, after the award of the work and before commencing the work. If the material from any source is found to be unacceptable at any time, it shall be rejected by the Employer and the Contractor shall forthwith remove the material immediately from the Site as directed by the Employer.

- (ii) Quality:

All materials used in the works shall be new and of the best quality of their respective kinds as specified herein, obtained from sources and suppliers approved by the Employer and shall comply strictly with the tests prescribed hereafter, or where tests are not laid down in the specifications, with the requirements of the latest issues of the relevant Indian Standards.

- (iii) Sampling and Testing:

All materials used in the works shall be subjected to inspection and testing in addition to manufacturer's test certificates. Samples of all materials proposed to be used in the permanent works shall be submitted to the Employer at least 30 days in advance for approval before they are brought to the Site. Samples provided to the Employer for their retention are to be labelled and stored.

Materials or workmanship not corresponding in character and quality with approved samples will be rejected by the Employer. Samples required for approval and testing must be supplied sufficiently in advance for the fact that if the first sample is rejected further samples may be required. Delay to the works arising from the late submission of samples will not be acceptable as a reason for delay in completion of the works.

Materials shall also be tested on the Site, and they may be rejected; if not found suitable in accordance with the specification, notwithstanding the results of quarry test certificates or any approval given earlier.

(iv) Dispatch of Materials:

Materials shall not be dispatched from the manufacturer's works to the Site without written approval from the Employer.

(v) Rejection:

Any materials that have not been found to conform to the specifications shall be rejected immediately and shall be removed from the Site by the Contractor at his own cost within two weeks or as instructed by the Employer.

7. STORAGE OF MATERIALS AT SITE:

All materials used in the works shall be stored on racks, supports, in bins, under cover, etc. as appropriate to prevent deterioration or damage from any cause whatsoever and to the entire satisfaction of the Employer.

The storage of materials shall be in accordance with IS 4082 "Recommendation on stacking and storage of construction materials on site" and as per IS 7969 "Safety code for handling and storage of building materials".

The materials shall be stored in a proper manner at places at Site approved by the Employer. In case the place where material is stored by the Contractor is required by the Employer for any other purpose, the Contractor shall immediately remove the material from that place at his own cost and clear the place for the use of the Employer.

8. WATER:

(i) Water from approved source:

Potable water only shall be used for the works. The Contractor shall have his own source of water duly approved by Employer. 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.

(ii) Storage:

The Contractor shall make his own arrangements for storing water, if necessary, in drums or tanks as approval by the Employer. Care shall be taken to see that water is not contaminated.

(iii) Testing:

Before starting any concreting work with new water source and wherever the source of water changes, the water shall be tested for its chemical and other impurities to ascertain its suitability for the use in concrete. No water shall be used until tested and approved by the Employer. Cost of all such Tests shall be borne by the Contractor.

9. WORKMANSHIP:

(i) All works shall be true to level, plumb and square and the corners, edges and arises in all cases shall be unbroken and neat.

(ii) Any work not to the satisfaction of the Employer or his representative will be rejected.

(iii) Rejected work shall be removed and replaced or rectified with work of the required standard of workmanship at the discretion of Employer at no extra cost.

10. STRUCTURAL WORK:

(i) Unless specified, only controlled concrete with design mix and weigh batching shall be used for the work.

(ii) Minimum cement content specified in IS: 456-2000 specification is purely from durability point of view. Larger content of cement shall have to be provided if required by mix design.

- (iii) Provision of cement slurry to create bond between plain / reinforced concrete surface and subsequent applied finishes shall not be paid extra.
- (iv) Mix design using smaller aggregates of 10mm down shall also be done in advance for the use in the locations having congested reinforcement.
- (v) Procedure of mixing the admixtures shall be strictly as per the manufacturer's recommendation if not otherwise directed by the Employer.
- (vi) All the water tanks and other liquid retaining concrete structures shall undergo hydraulic testing.
- (vii) Special benches shall be provided at Site for stacking reinforcement bars of different sizes.
- (viii) Formwork for beams of RCC areas shall be designed in such a way that the formwork of the adjacent structures can be removed without disturbing the props / supports of the beams.
- (ix) Wherever there are tension / suspended concrete members which are suspended from upper-level structural members, the shuttering / scaffolding of such members at lower level shall have to be kept in place till the time the upper level supporting members gain minimum required strength. Cost of such larger duration of keeping in place the shuttering/scaffolding shall be deemed to be included in the rates quoted for respective structural members.
- (x) Formwork is required for full height at all locations. Special precaution for such tall formwork shall be taken to ensure its safety. Extra costs for such formwork shall be deemed to have been included in the rates quoted against relevant items.
- (xi) During the mobilization period, the Contractor shall carry out expeditiously and without delay the following works:
 - i. Material testing and mix designs of concrete as contemplated in the specifications.
 - ii. Any other pre-requisite items required for final execution.
 - iii. Site office for the use of the Employer staff.

11. SUPPLY OF PROGRESS PHOTOGRAPHS AND ALBUMS:

The work covers the supply of colour photographs and albums to serve as a permanent record of various stages/facets of work needed for an authentic documentation as approved by the Employer. The photographs shall be of acceptable quality, and they shall be taken by a professionally competent photographer with camera having the facility to record the date of the photographs taken in the prints and the negative. Each photograph in the album shall be suitably captioned and dated. The photographs and materials including soft copy shall form a part of the records for the Employer and prints of the same cannot be supplied to anybody else or published without the written permission of the Employer.

12. SURVEY WORK:

The said work involves at the very start of work taking-over of reference point from the Employer, establishment of control points, triangulation points, benchmarks, grid layout for all the structures maintaining horizontal and vertical control within the permissible limits, incorporating changes (if any), submission of full data in the tabulation form and survey drawings during the progress of work.

13. BARRICADING:

The work covers barricading for the work/site areas provided/allotted for construction of various works/structures/ storage and other working area. Barricading shall be done by the Contractor at his own cost. The detailed scope of work is as follows:

- a. Providing and installing the barricade as per the design and type as shown in the typical sketch furnished as per the approved plan to be installed

firmly to the ground and maintaining it during the progress of work for the entire Contract period.

- b. Lateral shifting of barricading if required for satisfactory execution of various works at Depot.
- c. Dismantling of barricading and other temporary installations from the Site and cleaning the Site as per direction of Employer upon completion and acceptance of work.

14. SUB-CONTRACTOR / SPECIALIZED FIRMS:

Works as listed below and those dealing with proprietary materials/ products/equipment may be carried out by the Contractor through the Sub-Contractors / Specialized Firms as may be approved by the Employer in writing. The Sub-Contractors / Specialized Firms must be firms of repute and long standing, having adequate experience and have complete facilities to carry out all items of work required for completion as per Specifications and expected quality to the satisfaction of the Employer. Contractor shall obtain approval of Employer in advance prior to nominating their subcontracting, specialized firm for carrying out works.

List of Works to be executed by Specialized Agencies:

- (i) Water Proofing Works
- (ii) Structural Glazing
- (iii) Aluminum Composite Paneling
- (iv) External Painting

15. APPLICABLE CODES, STANDARDS & PUBLICATIONS FOR EARTHWORK, STRUCTURAL & ARCHITECTURAL WORK:

The more important Codes, Standards and Publications to Contract are listed here under:

A. General

IS:2720 - (Part-I to part-XXXII) –Method of test for soils
SP 7 National Building Code of India
SP 23 (S&T) Handbook on Concrete Mixes

B. Bitumen

IS:3384 Specification for bitumen primer for use in waterproofing and damp-proofing

C. Building Construction Practices

IS: 1838 Parts I and II.

Specifications for preformed fillers for expansion joint in concrete pavements and structures.

IS: 11134 Code of Practice for setting out of buildings.

IS: 11433 Parts I and II. Specifications for one part Gun grade polysulphide based joint sealant

D. Cement

IS: 455 Portland Slag Cement

IS: 650 Specification for standard sand for testing cement

IS: 1489 (Part 1) Portland pozzolana cement: Fly ash based

IS: 6925 Methods of test for determination of water-soluble chlorides in concrete admixtures.

IS: 8042 White Portland Cement

IS: 8112 Specification for 43 grade ordinary Portland cement

IS: 12269 Specification for 53 grade ordinary Portland cement

IS: 12330 Specification for sulphate resistant Portland cement

E. Concrete

IS:456 Code of practice for plain and reinforced concrete

IS:460 (Parts I to III) Specification for Test Sieves

IS:516 Methods of test for strength of concrete

IS:1199 Methods of sampling & analysis of concrete

LIST OF PREFERRED MAKES FOR CIVIL WORKS

Sr. No.	Material Description	Approved Manufacture/ Brand Name
1	TMT bars – Fe 500D	SAIL, Tata Steel Ltd, RINL, Jindal Steel & Power Ltd. and Jindal Saw Ltd.
2	Cement (PPC/OPC)	A.C.C., Ultratech, Vikram, Shree cement, Ambuja, Jaypee Cement, Century Cement, Prism& J.K. Cement
3	Admixture	Fosroc, Sika, CICO
4	Ceramic/glazed Tiles	Kajaria, RAK, NITCO
5	White Cement	Birla White, J.K. White or equivalent
6	Primers, paints (Low VOC) (i/c water proofing cement paint) etc.	Nerolac, Asian, Burger, ICI
7	Putty	Birla, J.K. Putty
8	Wash Basin and WC PAN	Parryware, Hindware, Johnson, Jaquar
9	Clear glass	Modi Guard, Saint Gobain, AIS
10	G.I. pipes	Tata, Jindal (HISAR), Prakash Surya, APL Apollo
11	G.I. fittings	UNIK, NVR, Zoloto
12	Centrifugally Cast Iron Spun Pipes & fittings/Sand cast iron pipes	NECO, Electro Steel, SKF
13	DI Pipes & fittings	Kesoram, Electrosteel, Tata Ductura, Jindal
14	Brass / CP Brass fittings	Essco or equivalent
15	Aluminium sections	Hindalco, Jindal, Indian Aluminium Co.
16	Water proofing compound	WEBER, FOSROC, PIDILITE, CICO, Sika
17	Stainless steel sink	Neelkanth, Nirali, Jayna, PRAYAG
18	Particle board i/c lamination	ECO BOARD, MERINO or equivalent
19	Plastic W.C. seat cover	Parryware, Hindware, Johnson
20	PVC tanks	Sintex, Vectus or as approved by Engineer-in-Charge.
21	Mirrors	Saint Gobain, Modi Guard
22	CP waste & flush pipes	As approved by Engineer-in-Charge
23	PVC flushing cistern	Parryware, Hindware, Johnson, Cera
24	Tile Fixer / Adhesive	As approved by Engineer-in-Charge
25	Vitreous Floor Tiles	Kajaria, RAK, NITCO
26	Acrylic Exterior Paint	Asian, Burger, Nerolac, Dulux
27	Flush door shutter	Century, TATA Marine, Kitply, vGreenply
28	Fire rated doors	Shakti metdoor, Navair, Bhawani firevdoors
29	False ceiling- Gypsum	Lafarge, Saint Gobain
30	False ceiling- Metal	Saint Gobain, Armstrong
31	False ceiling- Calcium silicate	Aerolite or equivalent as approved by Engineer-in-Charge
32	Floor spring	Dorma, Godrej, Hardwyn
33	Hermetically sealed performance glass & toughened glass	Saint Gobain, ASI
34	Fire rated vision panel	Pilkington, Schott, Ferilite
35	Friction stays	Earl Bihari (Ebco), Godrej
36	EPDM Gasket	Haru, Anand, Ravon, Zero
37	Silicon sealant	GE Plastics, Dow corning, Wacker
38	Steel items	Dorma, Doorset or equivalent

LIST OF PREFERRED MAKES FOR ELECTRICAL WORKS

Sr. No.	Material Description	Approved Manufacture/ Brand Name
1	H.T. Switchgear. Siemens, L&T, Kirloskar, Bhel, English Electric, ABB, Jyoti, Crompton Greaves, C&S	H.T. Switchgear. Siemens, L&T, Kirloskar, Bhel, English Electric, ABB, Jyoti, Crompton Greaves, C&S
2	L.T Switchgear.	
	A) Enclosed in sheet steel with H.R.C. fuses for 63 Amps., and above.	L&T, Siemens, Havell's, Jyoti, CPL, Schneider,KEW, Kalki, Standard, IndoAsian, Versatrip, HPL, C&S, BCH, Ben c
	B) Cast iron with rewirable fuses.	Bosma, KEW, CPL, Kalki, Harisons, HPL, C&S,BCH, Bentec
	C) Cast iron or enclosed in sheet steel changeover switch.	KEW, Bosma, CPL, Havell's, Indo Asian, Kalki, Harisons, HPL, Legrand, Anchor, Cona, C&S, Bentec
	D) Circuit Breakers (Moulded case).	L&T, Siemens, Havell's, Indo Asian, Schnelder, MOS, ABB, Standard, HPL, Moeller HPL, Legrand, Anchor, Cona, BCH, Bentec
	E) Miniature Circuit Breakers	MOS, Havell's, Guts, Standard, Versatrip, Indo Asian, Guts, Siemens, Leader, Moeller HPL, HPL, Legrand, Cona, C&S, KOLORS, Bentec
	F) Cubical panel switchgear accessories.	
	I) TPN / DP Switches / Isolators.	L&T, Siemens, KEW, Standard, CPL, Havell's, Indo Asian, Versatrip, HPL , Legrand, Anchor, Cona,C&S, BCH, Polycab.
	Rotary CAM type, Selector switch.	Siemens, Thakoor, Kaycee, AEI, Standardgold HPL, C&S
	111) Start I Stop push button stations.	L&T, Siemens, Cutler-Hammer, Kaycee,Havell's, C&S, BCH.
	IV) Contactors.	Schneider, Havell's, L&T, Siemens, Cutler Hammer, ABB, HPL, C&S, BCH.
	Indicating lamp (Neon Type)	Siemens, Vaishno or equivalent approved by relevant standards, BCH.
	Indicating lamp filament type with resistance.	National, Kamla, BCH, or equivalent approved by relevant standards
	VII) Earth leakage circuit breakers.	Datar, Standard, L&T, Havell's, English Electric,Indo Asian, Guts, Versatrip, 'Guts ' Siemens, Leader, Moeller HPL, Cona, C&S, Bentec
	VIII) H.R.C. Fuse.	Siemens, L&T, English Electric, Kaycee, Havell's, IndoAsian, Versatrip, Guts, Standard, KEW, HPL
3	Power Transformer.	Essun, Kirloskar, Bhel, Bharat Bijlee, Emco,GEC, \oltamps, Crompton Greaves.
4	Distribution Boards.	
	A) With rewirable fuses.	Bosma, KEW, Stanley, CPL, Havell's, Indo Asian, Kalki, Standard, HPL, Legrand, Cona, BCH.
	B) With HRC Fuse	English Electric, L&T, Siemens, Kew, Kaycee, Havell's, IndoAsian, Standard, HPL, Legrand, Cona, BCH.

	C)	With MCB's.	MOS, Standard, Indo Asian, Havell's, Versatrip, Guts, HPL, Legrand, Cona, BCH, Bentec, Polycab .
5		Cables.	1st Category: Finolex, Polycab. Tropodur, Gloster, Asian, Nicco, Universal, Incab, Havell's, Torrent, Vishal, HPL, KEI, Avocab, Bentec. Anchor, RR Kabel
			2nd Category: Supreme, Rajcab, Fixocab, Rolex, Sunlight, Dicabs, Cona, Leader, Vinay, , Kenter, Rallison, Unicab, Ultracab, Ravin, Electrolite
6		Socket I Lugs.	Dowells, Jainson, HPL or equivalent approved by relevant standards
7 .		PVC Wires.	1st Category : Finolex, Polycab, Gaztek, Nicco, Havell's, Torrent, RR Kabel, Anchor, Vishal, HPL, KEI, Avocab, Bentec
			2nd Category : Rajcab, Poliplast, Supreme, Pyroflex, Philco, Rolex, Sunlight, Cona, 'GMC', Leader, Vinay, Kenter, Rallison, Unicab, KOLORS, GM, PRESS FIT, Electrolite
8		Conduit.	
	A)	M.S.Black and G.I. Conduit.	BEC, Vimco, BI, EWC.
	B)	Rigid PVC conduit and accessories.	Precision, Asian, Diamond, BEC, Circle Arc,Swastik, Premium, Polycab, GM, PRESS FIT
9		PVC casing-n-capping and accessories.	Presto-plast, Modi's, Sunplast, Precision,Diamond, Circle Ark, Alta, Super Plast, Shriplast, PRESS FIT
10		Screws.	Nettle Fold, King Fold, Precision Fastners.
11		Piano switches flush mounting (5 to 15 Amps.) / wall sockets & plugs (surface mounting), Modular Switches (5 to 15 Amp) holder pendant/ batten/ angle, three plate ceiling rose (for 3 core twisted flexible wire), 30 Amps. D.P. Ticcino type switch fuse with indicating lamp, bell push surface mounting, flush mounting.	Roma, Kalki, Strong, Leader, Cona, Modern 'ACE' , Modern 'FAME', Modern 'Image', SSK, Harisons, Havell's, Safron, Vinay, Precious, Standard, 'elle' of M/s Aerolite, 'elleys' of Elle Elec. Pvt. Ltd., Anchor, Legrand, Cona, C&S, KOLORS, GM, Precision, PRESS FIT, Hi-Fi
12		Wall socket and plugs metal clad (ray roll type).	GEC, AE, Havell's, Crompton Greaves, Indo Asian, Standard-Gold, SSK, Precision.
13		PVC Board.	Sunwood, Presto-Plast or ISi marked.
14		Special accessories concealed / decorative (plate switches).	CPL, Roma, Anchor, Precision, Indo Asian,Harisons, Kalki, elleys, Vinay.
15		Two / Three core flexible wires.	Polycab, Pyroflex, Philco, Fixocab, Rajcab, Poliplast, Anchor, RR Kabel.
16		Storage heater with thermostatic control.	Bajaj, Spherohot, Racold, Ketco, Crompton, Aqua Therm.
17		Lamps.	
	A)	GLS Filament.	Bajaj, Crompton, Philips, GEC, Mysore, ECE, HMT, Surya, Cerna, HPL.
	B)	Fluorescent, HPMV, HP/LP-SV, Halogen / MLL	Bajaj, Crompton, Philips, HMT, Anchor, ECE, Surya, Osram, Cerna, HPL.
	C)	Halogen / MLL & metal halide. I	
		GEC, Philips, Crompton, Bajaj	

	D)	CFL 8 to 24 Watts upto 36 watts, Groove type, pin type.	Bajaj, Crompton, Phillips, GEC, Mysor, Anchor, Wipro, Hykon, CEMA, Osram, GE, Halonix, HPL.
18		Fitting for fluorescent HPMV lamps and LP/ HPSV lamps with copper wound chokes and condensers. Bulkhead fittings, Duoflux / dispersive reflectors, flood light fittings. Recessed mounted CFL 36 Watt & Low Watt. Fittings which use energy saving light source like CFL, TL-5	1st Category : Philips, Anchor, Crompton, Bajaj, Wipro, Surya, Havell's, Kalki, Altralite, HPL, Halonix
			2nd Category: Monarch, Vikrant, Naman, National, Shakti, Ansu, Yogolite, Harisons, Fixolite, Gaztek, Glolite, Asian, GE, Osram, Kwality, Hykon, United, Jain Irrigation, Thorn, Cona, Eata, Pierlite, C&S
18A		ILED light fixtures.	Intelux, Pyrotech, Lance, Orient, RR Electric, I Vin
19		Special fittings.	Philips, Bajaj, Crompton, Canara, Geminiglobal, Tulip, Kalki, Gaztek, HPL.
20		Bell.	
	A)	Call bell / buzzer.	Bajaj, Kalki, Anchor, Harisons, Rider, Cona.
	B)	Gong bell / alarm bell.	Edison, Target, Modern, Kheraj, Harison, Leader.
21		Exhaust fans/ pedestal fans air circulators.	Crompton, Bajaj, Almonard, GEC-Alstom, Alfa, Ansu, Innova, Cinni, Adler.
22	A)	Ceiling fans with double ball bearings.	1 st Category : Crompton (high breeze), Bajaj (Kassels 50 ISI), Bajaj (Excel), Polycab, Anchor
			2nd Category : Orient (New Breeze and Summer Cool), Anchor, Crompton (high speed), R R Electric
	B)	Table fans wall mounting fans / cabin fans.	Crompton, Usha, Ralli, Innova, Alpha, Cinni, Bajaj
23		Copper Ballast for fluorescent lamp	Philips, Crompton, Bajaj, Kalki, Gaztek, HPL.
24	A)	Capacitor for motive power.	Epcos, Usha, Enco, Crompton-Greaves, Madhav, Khatau Junkar, RD, MSIL, Siemens, L&T, Shreem, Mahan, BCH.
	B)	Condenser for fluorescent (Repair work).	Epcos, Elconic, Priya, RD.
25		D.G.Set.	
	A)	Engine.	Kirloskar, Ruston, Greaves-Cotton, Mahindra, Cooper Corp
	B)	Alternator.	Kirloskar, Stanford, NGEF, Crompton Greaves.
26	A)	Submersible electrically driven water pump sets (Open Well)	Kirloskar, KSB, SU, Calama, Atlanta, Waterman, Laxmi, PEW, Darling, Agasti, C.R.I., Crompton Greaves, Perfect, Plugra, Shakti, Jasco, Lubi
	B)	4" & 6" Submersible electrically driven water pump sets (Bore Well)	Kirloskar, KSB, SU, Calama, Atlanta, Waterman, Laxmi, PEW, Darling, Agasti, C.R.I., Crompton Greaves, Perfect, Plugra, LADA, Shakti, Jasco, Lubi

	C)	D-watering pump sets	Kirloskar, KSB, SU, Calama, Atlanta, Waterman, Laxmi, PEW, Darling, Agasti, C.R.I., Crompton Greaves, Perfect., Lubi
27		Diesel engine driven pump sets.	Kirloskar, Laxmi, Birla, Yamaha, Honda.
28		Electrically driven pump set coupled type, mono block, self priming, jet pumps.	Kirloskar, Crompton, Jyoti, KSB, Mather & Platt, Bharat Bijlee, \,bltas, Beacon, Laxmi, PEW, JMP, Batliboi, C.R.I., Agasti., Lubi
29		Electric motors.	Kirloskar, Siemens, Bharat Bijlee, Crompton, Jyoti, Brown Boveri, Batliboi, GEC-Alstom, Laxmi, PEW.
30		Air breaks starters for motors.	Siemens, L&T, Crompton Greaves, Cutler Hammer, BCH.
		I Terminal block.	Elmex, Everest, Jyoti, Gaztek, Connectwell.
32		Meters: Ammeter & \,bltmeter (Analog).	Automatic Electric, Simpson Udey, Meco, Indian Meters, Kusum-Meco, HPL.
33		Energy meters.	Automatic Electric, Meco, Indian Meters, Havell's, HPL, Bentec
34		Water level control equipment.	S.B.Electricals, Su-Bhaskar, Minilec, Accent, AGMA22, RDS.
35		Emergency lights.	Prolite, Profile, Rider, Tekno-Vision, Kheraj, BPL, Glolite.
36		Plumbing accessories.	
37	A)	G.I.Pipes.	Zenith, Tata, Jindal, Lloydd, Bhushan Steel, Siddharth, Ambika, Indian tube, Surya, Georg Fischer
	B)	G.I.Bends.	Tata, Goel, Bhushan Steel, Georg Fischer
	C)	C.I.Pipes.	ISi Approved Brand, Georg Fischer
	D)	(a) Gate valve (gun metal).	Leader, Sant, New, ORBINOX, Georg Fischer, OR any ISi Marked Valve.
		(b) NRVs (gun metal).	Leader, Sant, ORBINOX, Georg Fischer OR any ISi Marked Valve.
		(c) Spring loaded gun metal foot valve.	Swati, DRP, ORBINOX, Georg Fischer OR any ISi Marked Valve,
		(d) Pressure Guages	Guru, Georg Fischer or equivalent approved by relevant standards,
		Wafer type butterfly / check valves.	Crowly & Ray, L&K, Univas, Advance, ORBINOX.
38		C.I.Pipe socket.	Indian Iron & Steel Company, Tisco, Georg Fischer
		C.I.NRVs.	Ujjain Pipe, Jamshedpur, Georg Fischer or equivalent approved by relevant standards,
		C.I. Foot valve.	Bhadravati, Kirloskar, IVC, Georg Fischer
		C.I.Sluice valve.	Swati, Mayur, Georg Fischer
39		Spray painting of C / Fans OR any equipment.	Asian Paints 'Apolite' Brand, Nerolac, Berger.
40		Highmast	Bajaj, ¼ Imont, Skipper
41		Bearings.	SKF, TATA, NBC.
42		Electronic Ballast	Philips, Asian, Ecolumen, Kalki, Eata, HPL, Intelux
43		Fan's Electronic Regulator	Vinay, Anchor, Rider, Kalki, Cona, Bajaj, GM, Precision, PRESS FIT
44		Fluorescent Tube 28 W - T 5,(4Ft) or (3Ft) or (2Ft)	Philips, Asian, GE, OSRAM, HPL, Bajaj, Halonix
45		DWC HOPE - double wall corrugated pipes	REX, Gemini, Georg Fischer or equivalent approved by relevant standards,

46		Cable Trays and its accessories.	Asian Anciliary Corporation, Legrand, universal
47		Solar Street light	Hykon, Kwality, Halonix , Reliance, Jain Irrigation, Waree
48		Solar Water Heaters	Hykon, Kwality, Halonix, Neutech, Solar products co., Jain Irrigation
49		Recommended approved makes for items not covered under FME schedule Items'	<p>i) 'Centrifugal & Screw Chillers' of M/s Kirloskar Chillers Pvt.Ltd.,</p> <p>ii) 'DMSGI' brand "Terec+ Earthing Backfill compound and ESE Lightning Protection System' of M/s SGI Engineers Pvt. Ltd.</p> <p>iii) 'Meters, PLCs, Temperature Controllers, Timers, Counters, Process Indicators, Protection relays' of M/s Selec Controls Pvt.Ltd.</p> <p>iv) 'Programmable Logic Controller (PLC), power saving controllers, digital meters, Controller panel, Biometric System(BMS), Microprocessor based control system for Factory Automation & Process Control.' of M/s Softhard Automation Pvt.Ltd.</p> <p>v) 'UES' brand Earthing Electrodes & Earthing Systems of M/s Universal Earthing System Pvt. Ltd.</p> <p>vi) Metal GI plain / perforated ceiling panels and Aluminium plain / perforated ceiling panels of M/s Shringar Industries</p> <p>vii) Double skin & Single skin floor mounted ceiling suspended AHU, Ductable units, Heat recovery units, Ventilation Supply & Exhaust Air units, Pre(Factory) fabricated regular GI/AI/SS ductings, Pre insulated Ductings, Pre insulated Pipes, GI/AI Volume control Dampers, FCU of M/s Zeco Aircon Ltd.</p> <p>viii) 'Isolation Transformers, online insulation fault location system' of M/s Bender India Pvt.Ltd.</p> <p>ix) Air Handling Unit, Fan coil unit, Blowers, Cooling and Heating Coils, IR Ducts of M/s Moosa Haji Patrawala Pvt.Ltd.</p> <p>x) Waree' brand Solar Lantern, Solar Home Lightning system, Roof top solar power plant, water pumping system, Solar Garden lights of M/s Waree Energies Ltd.</p> <p>xi) Fire Alarm system by M/s Ravel Electronics Pvt. Ltd, M/s Agnee Fire & Safety services ltd.</p> <p>xii) Fire extinguishers by Newage/minimax/Exflame/monsher</p>

Form of Performance Security (Guarantee)

Bank Guarantee Bond

In consideration of the MD, MMRC (hereinafter called “The MMRC”) having offered to accept the terms and conditions of the proposed agreement between.....and (hereinafter called “the said Contractor(s)”) for the work (hereinafter called “the said agreement”) having agreed to production of an irrevocable Bank Guarantee for Rs. (Rupees only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We, (hereinafter referred to as “the Bank”) hereby undertake to pay to the MMRC an amount not exceeding Rs. (Rupees..... Only) on demand by the MMRC.
2. We, (indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the MMRC stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor(s). 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 an amount not exceeding Rs. (Rupeesonly)
3. We, the said bank further undertake to pay the MMRC any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.
4. We, (indicate the name of the Bank) further agree 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 agreement and that it shall continue to be enforceable till all the dues of the MMRC under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in- Charge on behalf of the MMRC certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
5. We, (indicate the name of the Bank) further agree with the MMRC that the MMRC shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the MMRC against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not

be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the MMRC or any indulgence by the MMRC to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
7. We, (Indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the MMRC in writing.
8. This guarantee shall be valid up to with additional claim period of six months, unless extended on demand by the MMRC. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated theday offor.....(indicate the name of the Bank)

SCHEDULE 'A' - SCHEDULE OF QUANTITIES – CIVIL WROKS (PART-1)

Bill of Quantities for Civil Maintenance and Other Allied Works under Mumbai Metro Line - 3

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
1	CPWD 2021 Item No. 8.32	<p>Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building , for all heights and all levels etc. including:</p> <p>(a) Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design.</p> <p>(b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc.</p> <p>(c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material & labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base framework for ACP cladding is payable under the relevant aluminium items. The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. up to two decimal places.</p>	Sqm	₹ 5,962.89	100.00	₹ 5,96,288.84

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
2	CPWD 2021 Item No. 12.1	Providing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.				
(a)	12.1.1	1.00 mm thick with zinc coating not less than 275 gm/m ²	Sqm	₹ 1,759.67	2450.00	₹ 43,11,182.81
3	CPWD 2021 Item No. 22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: (i) Ist course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. (ii) IInd course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. (iii) IIIrd course of applying blown or residual bitumen applied hot at 1.7 kg. per sqm of area. (iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/sqm).	Sqm	₹ 1,031.86	50.00	₹ 51,593.20
4	CPWD 2021 Item No. 13.52	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.				
(a)	13.25.1	On steel work	Sqm	₹ 268.81	1500.00	₹ 4,03,216.64
5	CPWD 2021 Item No. 2.34	Supplying chemical emulsion in sealed containers including delivery as specified.				
(a)	2.34.1	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	Litre	₹ 267.74	100.00	₹ 26,774.49

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
6	CPWD 2021 Item No. 2.35	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :				
(a)	2.35.1	Treatment at points of contact of woodwork by chemical emulsion Chlorpyriphos/ Lindane (in oil or kerosene based solution) @ 0.5 litres per hole by drilling 6 mm dia holes at downward angle of 45 degree at 150 mm centre to centre and sealing the same.	M	₹ 343.24	1000.00	₹ 3,43,243.91
7	CPWD 2021 Item No. 12.45	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :				
(a)	12.45.1	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095-(Part I) :2011 (Board with BIS certification marks)	Sqmt	₹ 1,527.24	1800.00	₹ 27,49,029.87

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
8	CPWD 2021 Item No. 12.52	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.				
(a)	12.52.1	8 mm thick Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process.	Sqmt	₹ 2,121.30	200.00	₹ 4,24,260.40
9	CPWD 2021 Item No. 11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
(a)	11.26.1	25 mm thick	Sqm	₹ 2,274.43	30.00	₹ 68,232.97

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
10	CPWD 2021 Item No. 11.27	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	Sqm	₹ 2,716.83	20.00	₹ 54,336.62
11	CPWD 2021 Item No. 11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.				
(a)	11.41.2	Size of Tile 600x600 mm	Sqm	₹ 1,888.01	50.00	₹ 94,400.40
(b)	11.41.3	Size of Tile 800x800 mm	Sqm	₹ 2,505.46	50.00	₹ 1,25,273.03
12	CPWD 2021 Item No. 15.57	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	Sqm	₹ 61.97	1000.00	₹ 61,971.82
13	CPWD 2021 Item No. 4.20	Providing and laying in position ready mixed or site batched design mix cement concrete for plain cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana /Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering and finishing as per direction of the engineer-in-charge; for the following grades of concrete.				
(a)	4.20.1.1	Concrete of M10 grade with minimum cement content of 220 kg /cum	Cum	₹ 10,706.06	5.00	₹ 53,530.32
(b)	4.20.1.3	Concrete of M20 grade with minimum cement content of 270 kg /cum	Cum	₹ 11,177.78	5.00	₹ 55,888.92

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
14	CPWD 2021 Item No. 5.22A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
(a)	5.22A.6	Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	₹ 119.48	500.00	₹ 59,739.50
15	CPWD 2021 Item No. 10.28	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-incharge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg	₹ 815.96	100.00	₹ 81,596.23
16	CPWD 2021 Item No. 10.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	₹ 124.01	1500.00	₹ 1,86,015.41
17	CPWD 2021 Item No. 5.13A	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5 m clear span up to floor five level, including the cost of required centering, shuttering but excluding the cost of reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand including manufactured sand derived from Recycled Concrete Aggregate (RCA) upto 20% : 3 graded stone aggregate 20 mm nominal size Recycled Concrete Aggregate (RCA) upto 20%).	Cum	₹ 17,856.55	2.00	₹ 35,713.09
18	CPWD 2021 Item No. 10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.				
(a)	10.6.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	Sqm	₹ 4,009.91	50.00	₹ 2,00,495.49

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
19	CPWD 2021 Item No. 10.7	Providing and fixing ball bearing for rolling shutters.	No	₹ 565.34	25.00	₹ 14,133.57
20	CPWD 2021 Item No. 6.4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
(a)	6.4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	Cum	₹ 11,344.31	10.00	₹ 1,13,443.08
21	CPWD 2021 Item No. 6.13	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
(a)	6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	Sqm	₹ 1,356.78	100.00	₹ 1,35,678.30
22	CPWD 2021 Item No. 26.40	Providing & fixing in position Phenol bonded Bamboowood panelled or panelled and glazed shutters for doors windows, clerestorey windows with pre-molded minimum 30mm thick planks, in approved colours, texture & finish. It shall have 10mm wide, 25mm deep groove to fit in panels. The bamboo wood shall have minimum density of 1000 Kg/cum, minimum Hardness 1000 Kgf. All styles and rails shall have profiled interlocking system locked in place by bamboo pins, all complete as per direction of Engineer in charge. (The panelling will be paid for separately).	Sqm	₹ 7,336.26	50.00	₹ 3,66,813.19
23	CPWD 2021 Item No. 9.48	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
(a)	9.48.2	Fixed to openings /wooden frames with rawl plugs screws etc.	Kg	₹ 263.48	250.00	₹ 65,870.05
24	CPWD 2021 Item No. 9.51	Providing and fixing fly proof galvanized M.S. wire gauge to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm all complete.				
(a)	9.51.2	With 12 mm mild steel U beading	Sqm	₹ 1,082.71	50.00	₹ 54,135.38

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
25	CPWD 2021 Item No.9.74	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
(a)	9.74.1	250 mm Long	No.	₹ 498.89	10.00	₹ 4,988.93
(b)	9.74.2	200 mm Long	No.	₹ 400.55	10.00	₹ 4,005.51
(c)	9.74.3	150 mm Long	No.	₹ 309.59	10.00	₹ 3,095.93
(d)	9.74.4	100 mm Long	No.	₹ 213.64	10.00	₹ 2,136.36
26	CPWD 2021 Item No. 9.72	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete :				
(a)	9.72.1	125 x 85 x 5.5 mm (Heavy Type)	No.	₹ 305.06	10.00	₹ 3,050.61
(b)	9.72.3	100 x 85 x 5.5 mm (Heavy Type)	No.	₹ 234.16	10.00	₹ 2,341.60
(c)	9.72.5	75 x 65 x 4 mm (Heavy Type)	No.	₹ 196.51	10.00	₹ 1,965.11
(d)	9.72.7	50 x 40 x 2.5 mm (Ordinary Type)	No.	₹ 46.31	10.00	₹ 463.12
27	CPWD 2021 Item No. 9.92	Providing and fixing chromium plated brass handles with necessary screws etc. complete:				
(a)	9.92.1	125 mm long	No.	₹ 301.86	10.00	₹ 3,018.63
(b)	9.92.2	100 mm Long	No.	₹ 265.48	10.00	₹ 2,654.79
(c)	9.92.3	75 mm Long	No.	₹ 238.76	10.00	₹ 2,387.58
28	CPWD 2021 Item No. 9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	No.	₹ 1,366.91	100.00	₹ 1,36,691.17
29	CPWD 2021 Item No. 9.165	Providing and fixing bright /matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete.				

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
(a)	9.165.1	125 mm Long	No.	₹ 133.87	10.00	₹ 1,338.72
(b)	9.165.2	100 mm Long	No.	₹ 100.89	10.00	₹ 1,008.87
(c)	9.165.3	75 mm Long	No.	₹ 65.24	10.00	₹ 652.37
30	CPWD 2021 Item No. 9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	No.	₹ 146.07	10.00	₹ 1,460.67
31	CPWD 2021 Item No. 9.88	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	No.	₹ 1,089.50	10.00	₹ 10,895.05
32	CPWD 2021 Item No. 8659	Waterproof ply 12mm thick.	Sqm	₹ 699.68	200.00	₹ 1,39,936.36
33	CPWD 2021 Item No. 9.59	Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc. complete :				
(a)	9.59.3	100 mm	No.	₹ 262.15	20.00	₹ 5,242.95
34	CPWD 2021 Item No. 9.6	Providing and fixing bright finished brass double acting spring hinges with necessary brass screws etc. complete :167 Municipal C)100mm				
(a)	9.6.3	100 mm	No.	₹ 297.80	20.00	₹ 5,955.96
35	CPWD 2021 Item No. 6228	600x120 mm glass shelf with anodised aluminium angle frame, C.P. brass brackets and guard rail of standard size	No.	₹ 399.82	20.00	₹ 7,996.36
36	CPWD 2021 Item No. 13.91	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	Sqm	₹ 27.79	5000.00	₹ 1,38,936.82
37	CPWD 2021 Item No. 1371	Lettering with black Japan paint of approved brand and manufacture	per letter per cm height	₹ 6.73	2000.00	₹ 13,460.55

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
38	CPWD 2021 Item No. 13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqmt	₹ 285.60	500.00	₹ 1,42,801.73
39	CPWD 2021 Item No. 13.78	Providing and applying 12 mm thick (average) premixed formulated one coat gypsum lightweight plaster having additives and light weight aggregates as vermiculite/ perlite respectively conforming to IS: 2547 (Part - 1 & II) 1976, applied on hacked / uneven background such as bare brick/ block/ RCC work on walls & ceiling at all floors and locations, finished in smooth line and level etc. complete.	Sqmt	₹ 484.38	150.00	₹ 72,656.96
40	CPWD 2021 Item No. 14.72	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it thereafter .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineerin- charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding. Note: - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done.	Sqmt	₹ 379.83	300.00	₹ 1,13,948.18
41	CPWD 2021 Item No. 17.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :				
(a)	17.2.2	W.C. pan with ISI marked black solid plastic seat and lid	No.	₹ 7,232.44	10.00	₹ 72,324.44

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
42	CPWD 2021 Item No. 14.80	Providing & fixing White vitreous china water closet squatting pan (Indian type) along with "S" or "P" trap including dismantling of old WC seat and "S" or "P" trap at site complete with all operations including all necessary materials, labour and disposal of dismantled material i/c malba, all complete as per the direction of Engineer-in charge.				
(a)	14.80.2	Orissa pattern W.C Pan of size 580x440 mm	No.	₹ 5,131.87	5.00	₹ 25,659.33
43	CPWD 2021 Item No. 17.5	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required :				
(a)	17.5.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern	No.	₹ 13,498.26	10.00	₹ 1,34,982.62
44	CPWD 2021 Item No. 17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
(a)	17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	No.	₹ 4,521.74	10.00	₹ 45,217.44
45	CPWD 2021 Item No. 17.18	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.				
(a)	17.18.1	10 litre capacity - White	No.	₹ 1,363.45	10.00	₹ 13,634.47
46	CPWD 2021 Item No. 17.20	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete :				
(a)	17.20.1	White solid plastic seat with lid	No.	₹ 781.71	5.00	₹ 3,908.56
47	1313	8 mm dia C.P. Brass/ S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate for European type W.C.	No.	₹ 266.55	250.00	₹ 66,636.36

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
48	CPWD 2021 Item No. 7257	C.P. Brass bibcock 15 mm	No.	₹ 399.82	20.00	₹ 7,996.36
49	CPWD 2021 Item No. 7260	C.P. Brass stop cock (concealed) 15 mm	No.	₹ 559.75	20.00	₹ 11,194.91
50	CPWD 2021 Item No. 18.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
a)	18.47.1	15 mm nominal bore	No.	₹ 910.12	10.00	₹ 9,101.19
b)	18.47.4	32 mm nominal bore	No.	₹ 1,106.30	10.00	₹ 11,062.97
c)	18.47.6	50 mm nominal bore	No.	₹ 1,706.29	10.00	₹ 17,062.91
d)	18.47.8	80 mm nominal bore	No.	₹ 2,178.81	10.00	₹ 21,788.09
51	CPWD 2021 Item No. 7119	Flexible (coil shaped) PVC waste pipe for sink and wash basin 32mm dia with length not less than 700 mm i/c PVC waste fittings	No.	₹ 46.65	100.00	₹ 4,664.55
52	CPWD 2021 Item No. 17.29	Providing and fixing 100 mm sand cast Iron grating for gully trap.	No.	₹ 56.31	20.00	₹ 1,126.15
53	CPWD 2021 Item No. 17.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
a)	17.32.2	Rectangular shape 453x357 mm	No.	₹ 1,544.56	10.00	₹ 15,445.64
b)	17.32.4	Rectangular shape 1500x450 mm	No.	₹ 2,421.83	10.00	₹ 24,218.32
54	CPWD 2021 Item No. 17.35	Providing and fixing soil, waste and vent pipes :				

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
a)	17.35.1	100 mm dia.				
(i)	17.35.1.2	Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989.	Rmt	₹ 1,435.88	20.00	₹ 28,717.61
b)	CPWD 2021 Item No. 17.35.2	75 mm diameter :				
(i)	17.35.2.2	Centrifugally cast (spun) iron socketed pipe as per IS: 3989.	Rmt	₹ 1,388.84	20.00	₹ 27,776.70
55	CPWD 2021 Item No. 17.36	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :				
a)	17.36.1	75 mm dia pipe	No	₹ 184.85	5.00	₹ 924.25
b)	17.36.2	100 mm dia pipe	No	₹ 217.83	5.00	₹ 1,089.17
56	CPWD 2021 Item No. 17.37	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. :				
a)	17.37.1	For 100 mm dia. Pipe	No	₹ 411.08	20.00	₹ 8,221.59
b)	17.37.2	For 75 mm dia. Pipe	No	₹ 405.75	20.00	₹ 8,114.98
57	CPWD 2021 Item No. 17.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
a)	17.38.1	100 mm dia				
(i)	17.38.1.2	Sand cast iron S&S as per IS - 3989	No	₹ 796.44	5.00	₹ 3,982.19
b)	17.38.2	75 mm dia				
(i)	17.38.2.2	Sand cast iron S&S as per IS- 3989	No	₹ 604.26	5.00	₹ 3,021.29

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
58	CPWD 2021 Item No. 17.39	Providing and fixing plain bend of required degree.				
a)	17.39.1	100 mm dia				
(i)	17.39.1.2	Sand cast iron S&S as per IS : 3989	No	₹ 586.07	5.00	₹ 2,930.33
b)	17.39.2	75 mm dia				
(i)	17.39.2.2	Sand cast iron S&S as per IS - 3989	No	₹ 397.42	5.00	₹ 1,987.10
59	CPWD 2021 Item No. 17.41	Providing and fixing double equal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :				
a)	17.41.1	100x100x100x100 mm				
(i)	17.41.1.2	Sand cast iron S&S as per IS - 3989	No	₹ 1,206.05	5.00	₹ 6,030.26
b)	17.41.2	75x75x75x75 mm				
(i)	17.41.2.2	Sand cast iron S&S as per IS - 3989	No	₹ 960.90	5.00	₹ 4,804.48
60	CPWD 2021 Item No. 17.42	Providing and fixing double equal plain junction of required degree.				
a)	17.42.1	100x100x100x100 mm				
(i)	17.42.1.2	Sand cast iron S&S as per IS - 3989	No	₹ 1,174.47	5.00	₹ 5,872.33
b)	17.42.2	75x75x75x75 mm				
(i)	17.42.2.2	Sand cast iron S&S as per IS - 3989	No	₹ 878.87	5.00	₹ 4,394.34
61	CPWD 2021 Item No. 17.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
a)	17.43.1	100x100x100 mm				
(i)	17.43.1.2	Sand cast iron S&S as per IS - 3989	No	₹ 974.76	5.00	₹ 4,873.78

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
b)	17.43.2	75x75x75 mm				
(i)	17.43.2.2	Sand cast iron S&S as per IS - 3989	No	₹ 764.72	5.00	₹ 3,823.59
62	CPWD 2021 Item No. 17.44	Providing and fixing single equal plain junction of required degree :				
a)	17.44.1	100x100x100 mm				
(i)	17.44.1.2	Sand cast iron S&S as per IS - 3989	No	₹ 942.64	5.00	₹ 4,713.19
b)	17.44.2	75x75x75 mm				
(i)	17.44.2.2	Sand cast iron S&S as per IS - 3989	No	₹ 664.90	5.00	₹ 3,324.49
63	CPWD 2021 Item No. 17.45	Providing and fixing double unequal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :				
a)	17.45.1	100x100x75x75 mm				
(i)	17.45.1.2	Sand cast iron S&S as per IS - 3989	No	₹ 1,688.03	5.00	₹ 8,440.16
64	CPWD 2021 Item No. 17.46	Providing and fixing double unequal plain junction of required degree:				
a)	17.46.1	100x100x75x75 mm				
(i)	17.46.1.2	Sand cast iron S&S as per IS - 3989	No	₹ 1,477.59	5.00	₹ 7,387.97
65	CPWD 2021 Item No. 17.54	Providing and fixing sand cast iron S&S off sets as per IS: 3989.				
a)	17.54.1	75 mm off sets				
(i)	17.54.1.1	With 75 mm dia pipe	No	₹ 450.93	5.00	₹ 2,254.64
b)	17.54.2	150 mm off sets				
(i)	17.54.2.2	With 100 mm dia Pipe	No	₹ 774.18	5.00	₹ 3,870.91

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
66	CPWD 2021 Item No. 17.55	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts & nuts complete :				
a)	17.55.1	100 mm				
(i)	17.55.1.2	Sand cast iron S&S as per IS - 1729	No	₹ 948.04	5.00	₹ 4,740.18
b)	17.55.2	75 mm				
(i)	17.55.2.2	Sand cast iron S&S as per IS - 1729	No	₹ 577.47	5.00	₹ 2,887.35
67	CPWD 2021 Item No. 17.56	Providing and fixing terminal guard:				
a)	17.56.1	100 mm				
(i)	17.56.1.2	Sand cast iron S&S as per IS - 3989	No	₹ 586.07	5.00	₹ 2,930.33
b)	17.56.2	75 mm				
(i)	17.56.2.2	Sand cast iron S&S as per IS - 3989	No	₹ 415.21	5.00	₹ 2,076.06
68	CPWD 2021 Item No. 17.57	Providing and fixing collar:				
a)	17.57.1	100 mm				
(i)	17.57.1.2	Sand cast iron S&S as per IS - 3989	No	₹ 586.07	5.00	₹ 2,930.33
b)	17.57.2	75 mm				
(i)	17.57.2.2	Sand cast iron S&S as per IS- 3989	No	₹ 361.77	5.00	₹ 1,808.84
69	CPWD 2021 Item No. 17.58	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter:				
a)	17.58.1	100 mm	No	₹ 732.53	5.00	₹ 3,662.67
b)	17.58.2	75 mm	No	₹ 621.58	5.00	₹ 3,107.92

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
70	CPWD 2021 Item No. 17.59	Providing and fixing M.S. stays and clamps for sand cast iron/ centrifugally cast (spun) iron pipes of diameter :				
a)	17.59.1	100 mm	No	₹ 171.46	5.00	₹ 857.28
b)	17.59.2	75 mm	No	₹ 106.75	5.00	₹ 533.76
71	CPWD 2021 Item No. 17.70.1	Providing and fixing PTMT Bottle Trap for Wash basin and sink. Bottle trap 31mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 260 gms	No	₹ 433.27	30.00	₹ 12,998.09
72	CPWD 2021 Item No. 17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	No	₹ 194.98	80.00	₹ 15,598.24
73	CPWD 2021 Item No. 17.74	Providing and fixing PTMT shelf 440 mm long, 124 mm width and 36 mm height of approved quality and colour, weighing not less than 300 gms.	No	₹ 809.03	10.00	₹ 8,090.32
74	CPWD 2021 Item No. 17.75	Providing and fixing PTMT 15 mm Urinal spreader size 95x69x100 mm with 1/2" BSP thread and shapes, weighing not less than 60 gms.	No	₹ 123.61	10.00	₹ 1,236.10
75	CPWD 2021 Item No. 17.76.1	Providing and fixing PTMT urinal cock of approved quality and colour. 15 mm nominal bore, 80 mm long, 42 mm high and 30mm wide with BSP female threads weighing not less than 48 gms	No	₹ 199.84	10.00	₹ 1,998.42
76	CPWD 2021 Item No. 18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall				
a)	18.7.1	15 mm nominal outer dia. Pipes.	Rmt	₹ 341.04	5.00	₹ 1,705.22

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
b)	18.7.2	20 mm nominal outer dia. Pipes.	Rmt	₹ 433.27	5.00	₹ 2,166.35
c)	18.7.3	25 mm nominal outer dia .Pipes.	Rmt	₹ 544.49	5.00	₹ 2,722.43
d)	18.7.4	32 mm nominal outer dia. Pipes.	Rmt	₹ 667.63	5.00	₹ 3,338.15
e)	18.7.5	40 mm nominal outer dia. Pipes.	Rmt	₹ 898.72	5.00	₹ 4,493.62
f)	18.7.6	50 mm nominal outer dia. Pipes.	Rmt	₹ 1,235.44	5.00	₹ 6,177.19
77	CPWD 2021 Item No. 18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold-water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. :Concealed work, including cutting chases and making good the walls etc.				
a)	18.8.1	15 mm nominal outer dia .Pipes.	Rmt	₹ 587.93	5.00	₹ 2,939.66
b)	18.8.2	20 mm nominal outer dia .Pipes.	Rmt	₹ 684.69	5.00	₹ 3,423.44
c)	18.8.3	25 mm nominal outer dia .Pipes.	Rmt	₹ 834.35	5.00	₹ 4,171.77
d)	18.8.4	32 mm nominal outer dia .Pipes.	Rmt	₹ 949.90	5.00	₹ 4,749.51
78	CPWD 2021 Item No. 18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching ,refilling & testing of joints complete as per direction of Engineer in Charge External Work				
a)	18.9.1	15 mm nominal outer dia Pipes	Rmt	₹ 295.00	5.00	₹ 1,475.00
b)	18.9.4	32 mm nominal outer dia Pipes	Rmt	₹ 579.80	5.00	₹ 2,899.02
c)	18.9.6	50 mm nominal outer dia Pipes	Rmt	₹ 1,081.97	5.00	₹ 5,409.87
d)	18.9.7	75 mm nominal inner dia Pipes	Rmt	₹ 2,101.58	5.00	₹ 10,507.89

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
e)	18.9.9	100 mm nominal inner dia Pipes	Rmt	₹ 3,747.30	5.00	₹ 18,736.48
f)	18.9.10	150 mm nominal inner dia Pipes	Rmt	₹ 7,824.78	5.00	₹ 39,123.88
79	CPWD 2021 Item No. 18.10	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. : Internal work – Exposed on wall.				
a)	18.10.1	15 mm dia. nominal bore	Rmt	₹ 405.35	5.00	₹ 2,026.75
b)	18.10.2	20 mm dia. nominal bore	Rmt	₹ 497.57	5.00	₹ 2,487.87
c)	18.10.3	25 mm dia. nominal bore	Rmt	₹ 654.64	5.00	₹ 3,273.18
d)	18.10.4	32 mm dia. nominal bore	Rmt	₹ 751.13	5.00	₹ 3,755.63
e)	18.10.5	40 mm dia. nominal bore	Rmt	₹ 966.43	5.00	₹ 4,832.14
f)	18.10.6	50 mm dia. nominal bore	Rmt	₹ 1,190.39	5.00	₹ 5,951.96
80	CPWD 2021 Item No. 18.11	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe including painting with anticorrosive bitumastic paint, cutting chases and making good the wall:				
(a)	18.11.1	15 mm dia. nominal bore	Rmt	₹ 646.64	20.00	₹ 12,932.79
(b)	18.11.2	20 mm dia. nominal bore	Rmt	₹ 721.14	20.00	₹ 14,422.77
81	CPWD 2021 Item No. 18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	One Litre	₹ 12.93	2500.00	₹ 32,318.64
82	CPWD 2021 Item No. 18.54	Providing and fixing PTMT bib cock of approved quality and colour.				
(a)	18.54.3	15 mm nominal bore, 165 mm long. Weighing not less than 110 gms.	No	₹ 208.77	10.00	₹ 2,087.72

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
83	CPWD 2021 Item No. 18.55	Providing and fixing PTMT stop cock of approved quality and colour.				
(a)	18.55.3	Concealed stop cock, 15 mm nominal bore, 108mm long. Weighing not less than 108 gms.	No	₹ 244.42	10.00	₹ 2,444.22
84	CPWD 2021 Item No. 18.56	Providing and fixing PTMT pillar cock of approved quality and colour .				
(a)	18.56.2	15mm nominal bore, 125 mm long foam flow. Weighing not less than 120 gms.	No	₹ 258.75	10.00	₹ 2,587.49
85	CPWD 2021 Item No. 18.58	Providing and fixing PTMT grating of approved quality and colour.				
(a)	18.58.1	Circular type.				
(i)	18.58.1.1	100 mm nominal dia.	No	₹ 44.25	10.00	₹ 442.47
(ii)	18.58.1.2	125 mm nominal dia with 25 mm waste hole.	No	₹ 60.31	10.00	₹ 603.06
86	CPWD 2021 Item No. 19.20	Supplying and fixing C.I. cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5 kg	No	₹ 895.26	10.00	₹ 8,952.60
87	CPWD 2021 Item No. 22.23	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI- 212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage.				

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
(a)	22.23.1	For vertical surface two coats @ 0.70 kg per sqm	Sqm	₹ 541.42	30.00	₹ 16,242.61
(b)	22.23.2	For horizontal surface one coat @ 1.10 kg per sqm.	Sqm	₹ 415.14	30.00	₹ 12,454.34
88	CPWD 2021 Item No. 8778	12 mm toughened Glass panes	Sqm	₹ 2,332.27	80.00	₹ 1,86,581.82
89	CPWD 2021 Item No. 8724	12 mm thk. (5 ply) marine ply conforming to IS 1328 BWP grade	Sqm	₹ 959.56	80.00	₹ 76,765.09
90	CPWD 2021 Item No. 2481	9 mm thk. (5 ply) commercial ply of superior quality	Sqm	₹ 1,206.12	80.00	₹ 96,489.45
91	CPWD 2021 Item No. 14.76	Cleaning and desilting of gully trap chamber, including removal of rubbish mixed with earth etc. and disposal of same, all as per the direction of Engineer-in-charge.	Nos	₹ 119.21	100.00	₹ 11,921.25
92	CPWD 2021 Item No. 14.77	Cleaning of choked sewer line by diesel running vehicle mounting hydraulic operated high pressure suction cum jetting sewer cleaning machine fitted with pump having 4000 litres suction capacity and 6000 litres water jetting tank capacity including skilled operator, supervising engineer etc. for cleaning and partial desilting of manholes and dechocking of sewer lines. Dechocking and flushing of sewer line from one manhole to another by high pressure jetting system of 2200 PSI for sewer line from 150mm dia upto 300mm	Mtr	₹ 381.03	50.00	₹ 19,051.34
93	CPWD 2021 Item No. 14.78	Cleaning of under ground sump, Over Head R.C.C. Tank (independent staging) including disposal of slit and rubbish, all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:- (i) Tank shall be emptied of water by pumping & bottom shall be cleaned of silt and other deposits. (ii) Entire surface area of the sump shall then scrubbed thoroughly with wire brush etc. and pressure washed with water. (iii) Chlorination of RCC internal surface by liquid chlorine. (iv) The treated surface shall be dried using air jetting and all loose particles shall be removal from the surface. (v) Finally the surface shall be treated with ultraviolet radiation etc. as per direction of Engineer-in-Charge.	Sqmt	₹ 381.03	50.00	₹ 19,051.34

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
94	CPWD 2021 Item No. 15.12	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
(a)	15.12.1	Of area 3 sq. metres and below	Each	₹ 403.42	15.00	₹ 6,051.25
(b)	15.12.2	Of area beyond 3 sq. metres	Each	₹ 552.48	15.00	₹ 8,287.23
95	CPWD 2021 Item No. 14.75	Repair to plaster of thickness 12mm to 20 mm in patches of area 2.5 sqm and under, including cutting the patch in proper shape, raking out joints and preparing plastering the wall surface with white cement-based polymer modified self-curing mortar, including disposal of rubbish, all complete as per the direction of Engineer-In-Charge.	Sqm	₹ 720.14	500.00	₹ 3,60,069.59
96	CPWD 2021 Item No. 7270	30 mm thick prelaminated flush door shutter	Sqm	₹ 1,146.15	50.00	₹ 57,307.27
97	MCGM SOR 2018 Item No. R2-CS-FL- 92	Providing and laying at site 9mm thick laminated flooring having an inbuilt 1mm soundbloc CS backing - class of use 33/23, wear resistance AC-5, impact resistance - IC 3, (as per EN 13329), top surface having a MLC (Multi Layer Composite) high pressure laminate, top surface treated with (Aluminium Oxide) surface guard (tm) plus on top of high density fibreboard substrate (density 910 kg/m3) specially developed core; of plank size 1994mm x 194mm having smart lock tounge and groove joints to secure long lasting joint. The edge of tounge and groove of planks duly impregnated with paraffin. The approved decor planks to be placed on underly - 0.2mm thick alkali resistant polyethylene sheet (Density 935 Kg/m3) to resist any moisture movement from the sub floor and secure floating floor installation. Pergo original conforms to EN 13329, ASTM C 1028, DIN 52185, DIN 54345, EN 717-2, DIN 4102.oring	Sqm	₹ 2,447.00	100.00	₹ 2,44,700.00

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
98	MCGM SOR 2018 Item No. R2-CS- RW-12	Supplying, fabricating, transporting to site and erecting 3.12mm thick MS gutter with all necessary supporting arrangement laid to proper slope, at all heights and levels, including surface cleaning, Grinding and removing the welding burr and applying one coats of red oxide zinc chromate primer and two coats of synthetic enamel paint on underside before erection & one coat of rubberized waterproof paint on upper side after erecting including making necessary connections with rain water pipes etc complete as directed.				
(a)	R2-CS- RW-12-d	Girth upto 1001 to 1200 mm	Rmt	₹ 1,087.00	120.00	₹ 1,30,440.00
99	MCGM SOR 2018 Item No. R2-CS-PL- 24	Providing and applying 15 mm thick external sand faced cement plaster upto 10m from ground level and at all locations in cement mortar 1:4 in two coats for masonry (except stone masonry) and concrete surfaces including, racking out joints, hacking of concrete surface, providing bands, drip moulds, grooves etc. finishing, curing, scaffolding etc complete as directed By Engineer In Charge.	Sqm	₹ 251.00	300.00	₹ 75,300.00
100	MCGM SOR 2018 Item No. R2-CS-PL- 05	Providing and applying 12 mm thick internal plaster in cement mortar 1:3 with neeru finish at all heights and locations in one coat for masonry (except stone masonry) and concrete surfaces including racking out joints, hacking of concrete surface, watering, finishing, curing, scaffolding etc. complete.	Sqm	₹ 361.00	300.00	₹ 1,08,300.00
101	MCGM SOR 2018 Item No. R2-CS- RM-76	Refixing C.I. and UPVC vent , soil, waste and rain water pipe of any size including cleaning and making good masonry of walls cornices etc. before fixing including fitting such as W.I. clamps, accessories of approved make with scaffolding etc. complete.	Rmt	₹ 152.00	200.00	₹ 30,400.00
102	MCGM SOR 2018 Item No. R2-CS- DD-37	Dismantling C.I., UPVC and asbestos vent pipes and shaft, soil, waste, rain water pipe, mild steel, GI and asbestos gutters, ridge and hips with fittings and clamps including stacking the material within 50 metres lead :				

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
(a)	R2-CS- DD-37-b	100 mm dia pipe	Rmt	₹ 44.00	200.00	₹ 8,800.00
103	MCGM SOR 2018 Item No. R2-CS- RW-10	Removing Existing Mangalore tiles / AC / GI / Galvalume Sheets/polycarbonate plain and corrugated sheets from roof / cladding / partitions etc., excluding supporting structure but including scaffolding, handling, transporting, sorting and stacking at site lead up to 150m and or disposing etc complete as directed.	Sqm	₹ 98.00	1500.00	₹ 1,47,000.00
104	MCGM SOR 2018 Item No. R2-CS- RW-21	Providing and fixing polycarbonate multiple wall sheet roofing 16mm thick gauge of approved make UV coated of approved make and of approved colour and with aluminium framing for fixing polycarbonate sheet using pressure plates with EPDM gasket (compatible to polycarbonate) breather tape, screws and covering the pressure plates complete and making the entire system water tight by using sealant as per architectural drawings and specification.(Rate does not include cost of structural steel framing which will be paid separately)	Sqm	₹ 4,398.00	50.00	₹ 2,19,900.00
105	MCGM SOR 2018 Item No. R2-CS- RW-16	Providing and fixing UV resistant selffit UPVC pipes of approved make for Rainwater downtakes conforming to IS 13592:1992 Type A suitable for 4kg/sqcm pressure for following pipe diameters including rainwater receiving recess with pvc plug bend necessary fittings such as offsets shoes, fixing the pipes on wall with clips filling the joints with solvent/cement and necessary scaffolding etc. complete as directed by Engineer In Charge.				
(a)	R2-CS- RW-16-b	100mm dia	Rmt	₹ 406.00	100.00	₹ 40,600.00
106	MCGM SOR 2018 Item No. R2-CS-FL- 06	Providing and laying 6mm thk. ceramic tiles as specified below conforming to I.S.15622-2006 for flooring of an approved, quality, make, size and pattern /design, for flooring including cement mortar bedding of 25 mm thick in 1:4 proportion, neat cement float, cutting, leveling, jointing, filling the joints by neat cement slurry or approved colour grout, curing, finishing etc complete as directed by Engineer In Charge.	Sqm	₹ 1,416.00	100.00	₹ 1,41,600.00

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
107	MCGM SOR 2018 Item No. R2-CS-FL- 31	Providing and fixing 6mm thk. ceramic tiles as specified below conforming to I.S. 15622-2006 of approved quality, pattern and colour for dado in the wet area including preparing the surface and levelling in the desired line, backing of 20 thk. cement mortar in porportion 1:3 with approved waterproofing compound, square cut top edge or chamfered top edge in cement mortar 1:3, cement float, machine cutting, leveling, jointing, filling the joints with neat cement slurry or approved colour grout, finishing, curing etc complete as directed by Engineer In Charge.	Sqm	₹ 1,480.00	100.00	₹ 1,48,000.00
108	MCGM SOR 2018 Item No. R2-CS-PN- 10	Providing and applying first coat of approved Waterproof primer, and two coats of waterproof acrylic based textured exterior paint of an approved make and colour as per manufacturers specifications to textured sand faced or other surfaces, upto 10m height from ground level and at all locations as directed including preparing surfaces for painting by any approved means, scaffolding, cleaning and curing etc. complete as directed by Engineer-in-charge.	Sqm	₹ 203.00	5000.00	₹ 10,15,000.00
109	MCGM SOR 2018 Item No. R2-CS-PN- 5	Providing and applying first single coat of approved primer and two coats of acrylic plastic emulsion paint of an approved make and colour as per manufacturers specifications to any surface, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting by any approved means etc. complete as directed by Engineer-in-charge.	Sqm	₹ 126.00	5000.00	₹ 6,30,000.00
110	MCGM SOR 2018 Item No. R2-CS-PN- 3	Providing and applying first single coat of approved primer and two coats of acrylic distemper (oil bound distemper) of an approved make and colour as per manufacturers specifications to any surface, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting with broom by any approved means, etc. complete as directed by Engineer-in-charge	Sqm	₹ 98.00	2000.00	₹ 1,96,000.00

S. No.	CPWD 2021/MCGM SOR 2018	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
111	MMRDA Tender Item No. A-119	Providing, Supplying & installing Roller Blinds manufactured by Hunter Douglas, Verosol or Equivalent make in SECLUSION series with specification of Basic Material -1005 Polyester, Fabric width 200/250 cm, Fabric Weight-20/295 g/sq.m. Thickness-0.50 mm, Finishing-Blackout Fabric, reverse & front side pigment colour coated colour fastness >5/6, Rubbing Fastness-Depending on Colour, shrinkagewarp : < 0.5% with approved shade fabric, (For External windows) comprising of polymer coated fibre fabric. The roller mechanism shall be a moulded unit made from engineering grade plastic polymer with PVC spring support. The fabric shall be attached to the roller tube with high-quality self-adhesive tape with manual operation. The fabric shall be attached to the tube with adhesive strip. It should have minimum one ton fabric which must be placed on the roller before the working section of fabric start. Operational action shall be smooth and upto the satisfaction of the Engineer In charge.	Sqm	₹ 2,200.00	100.00	₹ 2,20,000.00
112	SSR 2021- 22 Item No. 37	Lock for Drawer/Cupboard	No.	₹ 143.85	200.00	₹ 28,770.00
113	As per Market Rate	Water Tanker Supply to Transit Office	Litre	₹ 0.10	15000000.00	₹ 15,00,000.00
114	As per Market Rate	Sun Control Black Film	Sqm	₹ 1,006.96	100.00	₹ 1,00,696.00
115	As per Market Rate	Waterproof Tarpaulin Shed	Sqm	₹ 182.24	3000.00	₹ 5,46,720.00
Civil Works (A)					₹ 1,88,69,641.31	

SCHEDULE 'A' - SCHEDULE OF QUANTITIES – ELECTRICAL WROKS (PART-2)

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
116	Electrical Items No. 2-12-17	Supplying and erecting exhaust fan heavy duty 230 V A.C. 50 cycles 375/380 mm. 1400 RPM complete erected in position as per specification no.FG-FN/EXF	Nos.	₹ 3,935.30	10.00	₹ 39,353.00
117	Electrical Items No. 2-1-22	Supplying & erecting LED 18W tube light fitting (4 feet) with polycarbonate housing, heat sink, integrated HF electronic driver complete.	Nos.	₹ 711.54	20.00	₹ 14,230.80
118	Electrical Items No. 2-1-4	Supplying and erecting LED square / circular 13 to 15W down lighter having pressure die-cast aluminum housing,opal translucent cover, mounting arrangement with board for surface type or spring loaded mounting clips for flush type complete.	Nos.	₹ 1,477.36	120.00	₹ 1,77,283.20
119	Electrical Items No. 2-1-5	Supplying and erecting LED square / circular 16 to 20W down lighter having pressure die-cast aluminium housing, opal translucent cover, mounting arrangement with board for surface type or spring loaded mounting clips for flush type complete.	Nos.	₹ 1,511.58	100.00	₹ 1,51,158.00
120	Electrical Items No. 5-5-1	Providing & erecting 3 Pole MCCB upto 100A, 415V, with short circuit rating 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and fixed magnetic setting with provided leads, provision for installation of shunt/ UV/ trip alarm contact and MCCB should have phase barriers both sides, in provided enclosure on iron /GI frame as per specification no. SW-SWR/MCCB	Nos.	₹ 5,629.78	2.00	₹ 11,259.56

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
121	Electrical Items No. 5-5-1	Providing & erecting 4 Pole MCCB upto 100A, 415V, with short circuit rating 25 kA (Ics=100% of Icu), adjustable thermal (overload) setting and fixed magnetic setting with provided leads, provision for installation of shunt/ UV/ trip alarm contact and MCCB should have phase barriers both sides, in provided enclosure on iron /GI frame as per specification no. SW-SWR/MCCB (*For use of 4 pole MCCB in place of 3pole MCCB add 20% in overall rate of 3 pole MCCB.)	Nos.	₹ 6,755.74	2.00	₹ 13,511.47
122	Electrical Items No. 5-5-2	Providing & erecting 4 Pole MCCB of 200A,415V capacity with short circuit rating 25 kA (Ics=100% of Icu) adjustable thermal (overload) setting and fixed magnetic setting with provided leads, provision for installation of shunt/ UV/ trip alarm contact and MCCB should have phase barriers both sides, in provided enclosure on iron /GI frame as per specification no.SW-SWR/MCCB (*For use of 4 pole MCCB in place of 3 pole MCCB add 20% in overall rate of 3 pole MCCB.)	Nos.	₹ 13,449.17	1.00	₹ 13,449.17
123	Electrical Items No. 5-3-2	Supplying, erecting & marking SPMCB 6A to 32A, C-series (for motor/power) in provided distribution board as per specification no.SW-SWR/MCB	Nos.	₹ 194.70	7.00	₹ 1,362.90
124	Electrical Items No. 5-3-3	Supplying, erecting & marking SPMCB 6A to 32A, B- series (for lighting) in provided distribution board as per specification no.SW-SWR/MCB	Nos.	₹ 193.52	7.00	₹ 1,354.64
125	Electrical Items No. 5-3-6	Supplying, erecting & marking DPMCB 6A to 32A, C- series (for motor/power) in provided distribution board as per specification no.SW-SWR/MCB	Nos.	₹ 575.84	7.00	₹ 4,030.88
126	Electrical Items No. 5-3-7	Supplying, erecting & marking DPMCB 6 A to 32 A B- series (for lighting) in provided distribution board as perspecification no. SW-SWR/MCB	Nos.	₹ 542.80	7.00	₹ 3,799.60

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
127	Electrical Items No. 5-3-16	Supplying, erecting & marking FPMCB 6A to 32A in provided distribution board as per specification no. SW-SWR/MCB	Nos.	₹ 1,126.90	7.00	₹ 7,888.30
128	Electrical Items No. 5-3-8	Supplying, erecting & marking DPMCB 40A to 63A, C-series (for motor/power) in provided distribution board as per specification no. SW-SWR/MCB	Nos.	₹ 783.52	7.00	₹ 5,484.64
129	Electrical Items No. 5-3-9	Supplying, erecting & marking DPMCB 40A to 63A, B-series (for lighting) in provided distribution board as per specification no. SW-SWR/MCB	Nos.	₹ 733.96	7.00	₹ 5,137.72
130	Electrical Items No. 5-6-2	Providing, erecting and commissioning 2 pole RCCB only of electromagnetic type with 30/100/300 mA sensitivity and having capacity of 40A complete as per specification no. SWRCCB/RCCB	Nos.	₹ 2,330.50	2.00	₹ 4,661.00
131	Electrical Items No. 5-6-6	Providing, erecting and commissioning 4 pole RCCB of electromagnetic type with 30/100/300 mA sensitivity and having capacity of 63A complete as per specification no. SW-RCCB/RCCB	Nos.	₹ 3,293.38	2.00	₹ 6,586.76
132	Electrical Items No. 5-6-9	Supplying & fixing CRCA sheet Box with earthing terminals for housing 2 Pole RCCB on iron frame/laminated board complete.	Nos.	₹ 232.46	2.00	₹ 464.92
133	Electrical Items No. 5-6-10	Supplying & fixing CRCA sheet Box with earthing terminals for housing 4 Pole RCCB on iron frame/laminated board complete.	Nos.	₹ 317.42	2.00	₹ 634.84

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
134	Electrical Items No. 5-4-1	Supplying and erecting triple pole and neutral distribution board (TPNDB) surface/ flush mounted suitable for SPMCB of 12 poles on iron / GI frame (horizontal busbar type) as per specification no. SWSWR/ MCBDB	Nos.	₹ 2,094.50	2.00	₹ 4,189.00
135	Electrical Items No. 5-4-4	Supplying and erecting triple pole and neutral distribution board (TPNDB) surface/ flush mounted SP/TP MCBs of 12 poles/4 ways on iron / GI frame (vertical busbar type) as per specification no. SW-SWR/MCBDB	Nos.	₹ 4,787.26	2.00	₹ 9,574.52
136	Electrical Items No. 5-4-5	Supplying and erecting triple pole and neutral distribution board (TPNDB) surface/ flush mounted SP / TP of 24 poles/8 ways on iron / GI frame (vertical busbar type) as per specification no.SW-SWR/MCBDB	Nos.	₹ 6,180.84	2.00	₹ 12,361.68
137	Electrical Items No. 5-4-6	Supplying & erecting triple pole and neutral distribution board (TPNDB) surface/ flush mounted SP / TP MCB of 36 poles/12 wayson iron / GI frame (vertical busbar type) as per specification no. SW-SWR/MCBDB	Nos.	₹ 7,752.60	2.00	₹ 15,505.20
138	Electrical Items No. 5-4-25	Supplying & erecting triple pole and neutral distribution board (TPNDB) with door surface/ flush mounted suitable for 3 pole MCCB as incomer & outgoing SPMCB (12 poles) or TP MCB of 4 ways (12 poles)on iron/GI frame. (Vertical busbar type) as per specification no. SW-SWR/MCBDB	Nos.	₹ 6,950.20	2.00	₹ 13,900.40
139	Electrical Items No. 5-4-24	Supplying and erecting blanking plate of suitable size on MCB DB complete.	Nos.	₹ 15.34	7.00	₹ 107.38
140	Electrical Items No. 1-2-9	Supplying and erecting PVC trunking (PVC casing-n-capping) of size 20 mm with accessories on wall/ceiling as per specification No: WG-MA/CON.	Meter	₹ 42.48	50.00	₹ 2,124.00

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
141	Electrical Items No. 1-2-10	Supplying and erecting PVC trunking (PVC casing-n-capping) of size 25 mm with accessories on wall/ceiling as per specification No: WG-MA/CON.	Meter	₹ 44.84	50.00	₹ 2,242.00
142	Electrical Items No. 1-2-11	Supplying and erecting PVC trunking (PVC casing-n-capping) of size 32mm with accessories on wall/ceiling as per specification No: WG-MA/CON.	Meter	₹ 53.10	50.00	₹ 2,655.00
143	Electrical Items No. 7-4-1	Providing & erecting epoxy straight through joint outdoor/indoor for LT XLPE armoured cable 2.5 to 16 sq.mm. cable, with necessary material as per specification no.CB-JT/LT	Nos.	₹ 2,401.30	3.00	₹ 7,203.90
144	Electrical Items No. 7-4-2	Providing & erecting epoxy straight through joint outdoor/indoor for LT XLPE armoured cable 25 to 50 sq.mm. cable, with necessary material as per specification no. CB-JT/LT	Nos.	₹ 2,830.82	3.00	₹ 8,492.46
145	Electrical Items No. 1-9-1	Point wiring for light/fan/bell in 20 mm metal conduit with 1.5 sq.mm (2+1E) FR grade copper wire, flush type switch, earthing and required accessories as per specification No: WGPW/SW	Point	₹ 872.02	25.00	₹ 21,800.50
146	Electrical Items No. 1-9-9	Point wiring for light/fan/bell concealed type in min 20 mm ISI marked HMS PVC conduit with 1.5 sq.mm. (2+1E) FR grade copper wires, modular type switch, earthing and required accessories as per specification No: WG-PW/CW	Point	₹ 749.30	25.00	₹ 18,732.50
147	Electrical Items No. 1-9-31	Point wiring for independent plug in ISI mark HMS PVC conduit with 1.5 sq.mm (2+1E)FR grade copper wire, modular type switch, earthing and required accessories as per specification No: WG-PW/SW	Point	₹ 995.92	25.00	₹ 24,898.00

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
148	Electrical Items No. 1-6-2	Supplying & erecting mains with 2x1.5 sq.mm. and earth wire 1.5 sq.mm FRLSH PVC copper wire, in HMS PVC conduit min. 20mm dia as per specification No: WG-MA/PC.	Meter	₹ 141.60	300.00	₹ 42,480.00
149	Electrical Items No. 1-6-4	Supplying & erecting mains with 2x2.5 sq.mm. and earth wire 1.5 sq.mm FRLSH PVC copper wire in HMS PVC conduit min. 20mm dia. as per specification No: WG-MA/PC.	Meter	₹ 164.02	300.00	₹ 49,206.00
150	Electrical Items No. 1-6-6	Supplying & erecting mains with 2x4 sq.mm. and earth wire 2.5 sq.mm FRLSH PVC copper wire in HMS PVC conduit min. 20mm dia, as per specification No: WGMA/PC.	Meter	₹ 197.06	250.00	₹ 49,265.00
151	Electrical Items No. 1-3-13	Supplying & erecting mains with 3x4 sq.mm FR copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WGMA/BW	Meter	₹ 130.98	150.00	₹ 19,647.00
152	Electrical Items No. 1-3-15	Supplying & erecting mains with 3x6 sq.mm F.R copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WGMA/BW	Meter	₹ 187.62	150.00	₹ 28,143.00
153	Electrical Items No. 1-3-11	Supplying & erecting mains with 3x2.5 Sq.mm F.R copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WGMA/BW	Meter	₹ 93.22	150.00	₹ 13,983.00
154	Electrical Items No. 7-1-28	Supplying, erecting & terminating XLPE armoured cable 4core10 sq.mm. aluminium conductor with continuous 5.48 sq. mm. (12 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	Meter	₹ 192.34	50.00	₹ 9,617.00

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
155	Electrical Items No. 7-1-29	Supplying, erecting & terminating XPLE armoured cable 4core 16 sq. mm. aluminium conductor with continuous 5.48 sq. mm. (12 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	Meter	₹ 225.38	50.00	₹ 11,269.00
156	Electrical Items No. 7-1-30	Supplying, erecting & terminating XLPE armoured cable 4core 25 sq. mm. aluminium conductor with continuous 5.48 sq. mm. (12 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	Meter	₹ 278.48	50.00	₹ 13,924.00
157	Electrical Items No. 1-8-55	Supplying and erecting ISI mark modular safety power strip with one modular switch 16A and three sockets each 13A combination with overload and surge protection unit on double mounting plate, duly erected complete.	Nos.	₹ 1,426.62	50.00	₹ 71,331.00
158	Electrical Items No. 1-7-1	Supplying and erecting shockproof 6A ISI mark porcelain base T.Switch / bell push erected on filled polypropylene board or polished double wooden block / 3 mm thick hylam sheet /4mm thick plywood pasted with 1.5 mm thick laminate with SM screws and duly connected.	Nos.	₹ 37.76	30.00	₹ 1,132.80
159	Electrical Items No. 1-7-3	Supplying and erecting shockproof T. switch 16 A porcelain base surface mounting type / flush mounting type erected on filled polypropylene board or polished thick varnished double wooden block/folded or screwed board with top of either wooden/ 3 mm thick hylam sheet/ 4mm thick plywood pasted with 1.5 mm thick Laminate with SM screw sand duly connected.	Nos.	₹ 86.14	30.00	₹ 2,584.20
160	Electrical Items No. 1-7-7	Supplying and erecting Ceiling rose / Batten holder / Slanting holder / hanging cord switch / hanging bell push / pendent holder bakelite base 6A. erected on filled polypropylene board or polished double wooden block/ PVC junction box.	Nos.	₹ 41.30	30.00	₹ 1,239.00

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
161	Electrical Items No. 1-7-16	Supplying 6 amp. 3 pin plug Top bakelite type of 230 V. A.C. supply.	Nos.	₹ 41.30	50.00	₹ 2,065.00
162	Electrical Items No. 1-7-17	Supplying 16 amp. 3 pin plug Top bakelite type of 230 V A.C. supply.	Nos.	₹ 63.72	50.00	₹ 3,186.00
163	Electrical Items No. 1-7-15	Supplying and erecting recess type 3 pin plug socket 6A with piano switch 6A combined unit erected on M.S box made up of 16-gauge sheet and covered with sunmica and with connecting leads	Nos.	₹ 127.44	25.00	₹ 3,186.00
164	Electrical Items No. 1-8-1	Supplying and erecting ISI mark modular type switch 6A / 10A duly erected on provided plate and box with wiring connections complete.	Nos.	₹ 82.60	25.00	₹ 2,065.00
165	Electrical Items No. 1-8-2	Supplying and erecting ISI mark modular type switch 16A duly erected on provided plate and box with wiring connections complete.	Nos.	₹ 110.92	25.00	₹ 2,773.00
166	Electrical Items No. 1-8-3	Supplying and erecting ISI mark modular type bellpush 6A / 10A duly erected on provided plate and box with wiring connections complete.	Nos.	₹ 119.18	25.00	₹ 2,979.50
167	Electrical Items No. 1-8-6	Supplying and erecting ISI mark modular type switch 16 / 20 A with indicator, duly erected on provided plate and box with wiring connections complete.	Nos.	₹ 158.12	25.00	₹ 3,953.00

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
168	Electrical Items No. 1-8-43	Supplying and erecting 16 / 20 / 25 A starter (modular range) 2 module for AC unit on provided box complete & duly concealed with necessary material and connected.	Nos.	₹ 433.06	25.00	₹ 10,826.50
169	Electrical Items No. 1-8-24	Supplying and erecting ISI mark modular type blanking plate one module, duly erected on provided plate & box.	Nos.	₹ 22.42	15.00	₹ 336.30
170	Electrical Items No. 1-8-25	Supplying and erecting ISI mark modular type blanking plate two module, duly erected on provided plate & box.	Nos.	₹ 28.32	15.00	₹ 424.80
171	Electrical Items No. 1-8-23	Supplying and erecting ISI mark modular type (two module) electronic step regulator for fan, duly erected on provided plate and box with wiring connections complete.	Nos.	₹ 434.24	10.00	₹ 4,342.40
172	Electrical Items No. 9-1-1	Providing earthing with galvanized iron earth plate size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification no. EA-EP	Nos.	₹ 5,000.84	2.00	₹ 10,001.68
173	Electrical Items No. 9-1-2	Providing earthing with copper earth plate size 30 x 30 x 0.315 cm complete with all materials, testing & recording the results as per specification no. EA-EP	Nos.	₹ 6,928.96	2.00	₹ 13,857.92
174	Electrical Items No. 9-2-1	Supplying and erecting aluminium strip of required sizes used for earthing on wall and/or any other purpose with necessary aluminium clamps fixed on wall painted with bituminous paint in an approved manner with joints required. As per specification no EA-EP.	Kg.	₹ 427.16	10.00	₹ 4,271.60

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
175	Electrical Items No. 9-3-1	Supplying & erecting conventional spike type air termination suitable to carry lightning stroke made up of heavy gauge 40 mm dia copper pipe of standard length with 5Nos. copper spikes fixed on copper ball as air terminals duly threaded in copper pipe erected on provided foundation in an approved manner.	Nos.	₹ 5,804.42	2.00	₹ 11,608.84
176	Electrical Items No. 1-12-2	Supplying and fixing cat-6 LSZH cable suitable for LAN /WAN as per specification complete	Meter	₹ 63.72	100.00	₹ 6,372.00
177	Electrical Items No. 1-10-1	Supplying & erecting telephone copper cable 2 pair with 0.5mm dia. laid in provided PVC casing capping/ conduit as per specification No. WG-TW	Meter	₹ 27.14	100.00	₹ 2,714.00
178	Electrical Items No. 1-10-18	Supplying & installing co-axial copper cable low voltage grade RG-11 as per specification No. WG-TW	Meter	₹ 80.24	100.00	₹ 8,024.00
179	Electrical Items No. 1-14-1	Supplying, installing & testing UTP connector (RJ-45) as per specification No. WG-NAS/UTPC.	Nos.	₹ 107.38	50.00	₹ 5,369.00
180	Electrical Items No. 1-8-17	Supplying and erecting ISI mark modular type computer jack RJ 45 with safety shutter, duly erected on provided plate and box with wiring connections complete.	Nos.	₹ 128.62	50.00	₹ 6,431.00
181	Electrical Items No. 10-2-32	Supplying and erecting D.C.P. type fire extinguisher 6 kg capacity cartridge type with gun metal cap 150 gram CO2 gas cartridge, powder and brackets conforming to IS 2171-1985/ IS-15683 and complete erected with necessary clamps made from 50x6 mm M.S. flat with nuts & bolts grouted in wall complete.	Nos.	₹ 3,974.24	3.00	₹ 11,922.72
182	Electrical Items No. 10-2-35	Supplying and erecting ABC powder type fire extinguisher as per IS : 13849/15683 of 1 kg capacity with necessary clamp for erection on wall.	Nos.	₹ 2,619.60	3.00	₹ 7,858.80

S. No.	CSR- SPWD FY 2021- 22	Description of Item	Unit	Rate (Incl. GST)	Quantity	Amount
183	Electrical Items No. 10-2-36	Supplying and erecting ABC powder type fire extinguisher as per IS : 13849 /15683 of 6 kg capacity with necessary clamp for erection on wall.	Nos.	₹ 4,171.30	3.00	₹ 12,513.90
184	Electrical Items No. 10-2-34	Supplying & erecting Carbon Dioxide (CO2) fire extinguisher of 4.5 kg. capacity cartridge type conform to IS 2878 /15683 complete erected with necessary clamp made from 50 x 6 mm. M. S. flat with nut & bolts grouted in wall complete.	Nos.	₹ 10,609.38	3.00	₹ 31,828.14
185	Electrical Items No. 10-2-39	Refilling of fire extinguisher of DCP type by dismantling from site to workshop for refilling which includes removing of existing powder and cleaning the cylinder, delivery pipe, nozzle internally and refilling new powder complete with reinstalling properly at site with necessary certificate	Kg.	₹ 271.40	3.00	₹ 814.20
186	Electrical Items No. 10-2-40	Refilling of fire extinguisher of ABC type by dismantling from site to workshop for refilling which includes removing of existing powder and cleaning the cylinder, delivery pipe, nozzle internally and refilling new powder complete with reinstalling properly at site with necessary certificate.	Kg.	₹ 310.34	3.00	₹ 931.02
187	Electrical Items No. 10-2-41	Refilling of fire extinguisher of CO2 type by dismantling from site to workshop for refilling which includes removing of existing powder and cleaning the cylinder, delivery pipe, nozzle internally and refilling new powder complete with reinstalling properly at site with necessary certificate.	Kg.	₹ 225.38	3.00	₹ 676.14
					Electrical Works (B)	₹ 10,90,591.40
					Sub Total (A+B)	₹ 1,99,60,232.71
					Round Off (Including GST)	₹ 1,99,60,233.00

APPENDICES

All relevant appendices published by CPWD General Conditions of Contract 2020 shall be applicable.

FORM 'A'

FINANCIAL INFORMATION

1. Financial Analysis – Details to be furnished duly supported by figures in balance sheet/ profit & loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

Years

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- b. Gross Annual turnover on construction works.
 - c. Profit/Loss.
2. Financial arrangements for carrying out the proposed work.
 3. Solvency Certificate from Bankers of the bidder in the prescribed Form "B".

Signature of Chartered Accountant with Seal

Signature of Bidder(s).

FORM 'B'

FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s./ Sh..... having marginally noted address, a customer of our bank are/is respectable and can be treated as good for any engagement upto a limit of Rs..... (Rupees.....)

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature)
For the Bank

NOTE:

1. Bankers certificates should be on letter head of the Bank, sealed in cover addressed to tendering authority.
2. In case of partnership firm, certificate should include names of all partners as recorded with the Bank.

FORM 'C'

DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE LAST FIVE YEARS ENDING PREVIOUS DAY OF LAST DAY OF SUBMISSION OF BIDS

S. No.	Name of work/project and location	Owner or sponsoring organization	Cost of work in crores of rupees	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Litigation/ Arbitration cases pending/in progress with details*	Name and address / telephone number of officer to whom reference may be made	Remarks
1	2	3	4	5	6	7	8	9	10

NOTE: The above works shall be accompanied by WORK ORDERS, LETTERS OF EXTENSIONS (if any) and COMPLETION CERTIFICATES mandatorily.

* Indicate gross amount claimed and amount awarded by the Arbitrator.

Signature of Bidder(s)

FORM 'D'

PROJECTS UNDER EXECUTION OR AWARDED

S. No.	Name of work/project and location	Owner or sponsoring organization	Cost of work (in crores of rupees)	Date of commencement as per contract	Stipulated date of completion	Upto date percentage progress of work	Slow progress if any and reasons thereof	Name and address / telephone number of officer to whom reference may be made	Remarks
1	2	3	4	5	6	7	8	9	10

Certified that the above list of works is complete, and no work has been left out and that the information given is correct to my knowledge and belief.

Signature of Bidder(s)

FORM 'F'

STRUCTURE & ORGANISATION

1. Name & address of the bidder
2. Telephone no./Telex no./Fax no.
3. Legal status of the bidder (attach copies of original document defining the legal status)
 1. An Individual
 2. A proprietary firm
 3. A firm in partnership
 4. A limited company or Corporation

4. Particulars of registration with various Government Bodies (attach attested photocopy)

Organization/Place of registration

Registration No.

1. _____
2. _____
3. _____

5. Names and titles of Directors & Officers with designation to be concerned with this work.
6. Designation of individuals authorized to act for the organization
7. Was the bidder ever required to suspend construction for a period of more than six months continuously after he commenced the construction? If so, give the name of the project and reasons of suspension of work.
8. Has the bidder, or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment.
9. Has the bidder, or any constituent partner in case of partnership firm, ever been debarred/blacklisted for tendering in any organization at any time? If so, give details
10. Has the bidder, or any constituent partner in case of partnership firm, ever been convicted by the court of law? If so, give details.
11. In which field of Civil Engineering construction, the bidder has specialization and interest?
12. Any other information considered necessary but not included above.

Signature of Bidder(s)

FORM 'G'

**DETAILS OF TECHNICAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED
FOR THE WORK**

S. No	Designation	Total Number	Number available for this work	Name	Qualifications	Professional experience and details of work carried	How these would be involved in this work	Remarks
1	2	3	4	5	6	7	8	9

Signature of Bidder(s)

FORM 'H'

**DETAILS OF CONSTRUCTION PLANT AND EQUIPMENT LIKELY TO BE USED IN
CARRYING OUT THE WORK**

S. No.	Name of equipment	Nos.	Capacity or type	Age	Condition	Ownership status			Current location	Remarks
						Presently owned	Leased	To be purchased		
1	2	3	4	5	6	7	8	9	10	11