

**MEHKAR MUNICIPAL COUNCIL, MEHKAR
DIST- BULDHANA**



**TENDER DOCUMENT
FOR**

**Construction of 216 EWS Houses with all Infrastructural Services
under (AHP) PMAY (U)-2.0 Vertical-3 at Mehkar, Dist- Buldhana.
(EPC/C Tender Notice) City: Mehkar, District: Buldhana**

PRICE
Rs. 3540/-
(Non-Refundable)

MUNICIPAL COUNCIL, MEHKAR, DIST- BULDHANA

EPC/C TENDER NOTICE

E-tender Notice No. of 2026-27

Main Portal: <http://mahatenders.gov.in>

Chief Officer, Municipal Council, Mehkar Dist. Buldhana through the process of e-tendering invites digitally signed & unconditional online e-Tender for below mentioned work. Detail Tender document is available for download on <http://mahatenders.gov.in>. All right for acceptance or rejection of tenders has been reserved by Chief Officer Municipal Council Mehkar Dist. Buldhana. Conditional tenders will be rejected.

Sr. No.	Name of Work	EMD (Rs.)	Time Limit for Completion of Work	Security Deposit (Rs. in Lakhs)	Cost of Blank Tender Form
1	Construction of 216 EWS Houses with all Infrastructural Services under (AHP) PMAY (U)-2.0 Vertical-3 at Mehkar, Dist- Buldhana	19,37,542	24 month	1937542	3540

Online Tender Schedule: -

Sr. No.	Stage Description	Start Date and Time
1	Publish Date / Download	07/05/2026, 11:00 am to 25/05/2026, 03:00 pm
2	Pre-Bid Meeting	14 /05/2026, 12:00 am
3	Document Sale Start	07 /05/2026, 11:00 am to 25 /05/2026, 03:00 pm
4	Bid Submission Start / End	07/05/2026, 11:00 am to 25 /05/2026, 03:00 pm
5	Technical Bid Opening	26/05/2026, 04:00 pm
6	Financial Bid Opening	27/05/2026, 11:00 am or thereafter Financial bid opening date will be intimated online separately after technical bid scrutiny and appraisal.

- All tenderers to note that, Chief Officer, Municipal Council, Mehkar reserves the right to extend/change the aforesaid dates.
- Pre-Bid-Conference will be held on 14/05/2026 at 11:00 AM hours in the Office of Chief Officer, Municipal Council, Mehkar.
- Before Pre-Bid Conference, all bidders shall visit and ensure the site in all respects. However, combine site visit will be scheduled 14 /05/2026 at 11 am hours from the Office of Chief Officer, Municipal Council, Mehkar. After Pre-Bid Meeting, no quarries regarding site will be entertained.
- Certificate will be issued after site visit will be enclosed with tender submission.
- Financial Bid will be held on 27 /05/2026
- नगर पालिकेशी किंवा नगर पालिकेच्या अधीन किंवा नगरपालिकेने किंवा नगरपालिकेच्या वतीने करण्यात येणाऱ्या संविदेमध्ये नगरपरिषदेच्या कोणत्याही नगरसेवकाचा कोणताही हितसंबंध किंवा आमच्याशी भागीदारी नाही. याबाबतचे विहित नमुन्यातील प्रतिज्ञापत्र किंवा नोटलाईज अॅथोरिटी लेटर रु. ५००/- च्या स्टॅम्प पेपरवर सादर करणे आवश्यक राहिल. तसेच सदरचे प्रतिज्ञापत्र हे ऑनलाइन निविदा सादर करतेवेळी अपलोड करणे बंधनकारक राहिल. या प्रतिज्ञापत्राचा नमुना विहित निविदेमध्ये दिलेला आहे त्यानुसार सादर करावा.
- सदरची अपलोड केलेली कागदपत्रे ही खरी असल्याबाबतचे सत्यप्रतिज्ञापत्र रु. ५००/- च्या स्टॅम्प पेपरवर सादर करणे बंधनकारक राहिल.
- काँक्रीटीकरणाच्या कामासाठी काँक्रीटींग वर्क हे बॅच मिक्स काँक्रीट प्लांटद्वारे करणे आवश्यक आहे.
- बॅच मिक्स काँक्रीट प्लांट याबाबतचे निविदाधारकाचे स्वतःचे मालकीचा अथवा विहित नमुन्यातील भाडेकरार रु. ५००/- च्या स्टॅम्प पेपरवर करून सदर कराराची प्रत निविदेबरोबर सादर करावी.
- कंत्राटदाराने न. प. चे अधिकारी यांचे सोबत स्थळ पाहणी (Site Visit) करावी आणि त्यानंतर स्थळ पाहणीचा अहवाल नगर परिषदे कडे सादर करावा.
- शासन निर्णय क्र. बी डी जी २०१६/ प्र. क्र. २/ इमा. २ मंत्रालय, मुंबई दिनांक १२/०२/२०१६ नुसार Performance Security करिता दिलेल्या शासन निर्णयानुसार कार्यवाही केली जाईल, याची नोंद प्रत्येक निविदाकाराने घ्यायची आहे.
- साईटवर सध्यस्थितीत असणाऱ्या लाभार्थ्यांची प्रकल्प पूर्ण होईपर्यंत राहण्याची व्यवस्था कंत्राटदाराने करणे अनिवार्य आहे, ही बाब प्रत्येक निविदाकाराने लक्षात घ्यायची आहे.

1) Blank tender document and other details can be downloaded by the registered Bidder from website <http://mahatenders.gov.in>. The tenders shall only be received online in two envelopes system Technical Bids will be opened by Chief Officer, Municipal Council Mehkar on as mentioned above or thereafter. All the notifications and detailed terms and conditions regarding this tender notice here after will be published online on website <http://mahatenders.gov.in>

2) Interested Bidder has to be enrolled one-Tendering system. As the Bid Data on the System is required to be encrypted and digitally signed online, Bidders are required to obtain Class-2 Digital signature certificate at the earliest.

- 3) The bid price for blank tender documents and other is **Rs. 3540/- (Rs.Three Thousand Five Hundred Fourty only)** (Non refundable). Bid must be accompanied with scanned copies of Online Receipt for Tender form fee and Earnest Money Deposit (EMD) from the above mentioned e-Tendering Portal through Online Receipt System. Bid shall be treated as invalid if the above scanned copies are not submitted online along with the Bid. The Bidders are required to submit Online Receipt towards the payment of Tender form fee and E.M.D. on or before **25/05/2026** upto 4:00pm. Original Online Receipt submitted shall be the same as scanned copy submitted along with the bid.
- 4) In case of any queries, Bidders may contact to the service provider on any working day on contact nos. **0120-4711508, 0120-4001002, 0120-4001005, 0120-6277787**(toll free no.), e-mail–support -support-eproc@nic.in
- 5) Bidder shall have valid GST Registration Certificate, Permanent Account Number of Income Tax, and Work Contract Tax Registration Certificate.
- 6) The Agency shall have to give under taking that they have not been blacklisted by any organization and any criminal complaint regarding fraud with any organization was not lodged against the agency any time previously. **(on Rs. 500/- Stamp paper)**
- 7) Conditional tender shall not be considered and shall be summarily rejected.
- 8) EWS Tenements and related development work covered in this tender are approved under PMAY Scheme by the Government of India, hence bidder should have experience for minimum **7500 sqm.** construction Scheme of works experience Government or any other.
- 9) Central Government has announced "Housing for All" through "Pradhan Mantri Awas Yojana". The mission is being implemented during **2015-2022** and provides Central & State assistance to urban local bodies and other implementing agencies through states. Central Government has been formulated keeping in view the changing Socio-Economic parameters of the urban areas and growing requirements of shelter. The policy seeks to promote various types of public private partnership for realizing the goal of "Affordable Housing for All" with the special emphasis on the urban poor. Central and State Government are sanctioning cost subsidy to the beneficiaries under this scheme.
- 10) The bidder shall submit the Hard Copy in "Sealed Envelope" of Technical & Financial Bids as specified in NIT after the online submission of Bid ("Bid Lock") within 24 hrs.
- 11) Right for any amendments for terms and conditions of tender and the **right to reject any or all offers without assigning any reason thereof is reserved with The Chief Officer, Mehkar Municipal Council, Mehkar.**

Municipal Engineer
Municipal Council, Mehkar
Dist. Buldhana

Chief Officer
Municipal Council, Mehkar
Dist. Buldhana

MUNICIPAL COUNCIL, MEHKAR DIST – BULDHANA

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PROCEDURE UNDER E-TENDERING INSTRUCTION TO BIDDERS:

Tender form, conditions of contract, specifications and contract drawings can be downloaded from <https://mahatenders.gov.in> after entering the details payment of Rs. 3540/- (Rupees Three Thousand Five Hundred Fourty Only) should be paid online using payment gateway. The fees of tender document will be non refundable.

Further information regarding the work can be obtained from the above office. Affidavit on Rs. 500/- stamp paper in prescribed form given in Annexure Is worn before Executive Magistrate /Notary, Additional Performance Security Deposit (if required) scan copy of original should be submitted online only. Bids will be opened as per the Tender Schedule, in the presence of such intending Tenderers or his /their authorized representatives who may be present at that time.

TENDERING PROCEDURE:

1.1. Blank Tender Forms.

1.1.1 Tender Forms can be downloaded from the Tendering portal of i.e.

<https://mahatenders.gov.in> after entering the details of payment towards Tender Fees as per the Tender Schedule.

1.1.2 The tender submitted by the tenderer shall be based on the clarification, additional facility offered (if any) by the Department, and this tender shall be unconditional. Conditional tenders will be summarily **REJECTED**.

1.1.3 All tenderers are cautioned that tenders containing any deviation from the contractual terms and conditions, specifications or other requirements and conditional tenders will be treated as non-responsive. The contractor should clearly mention in forwarding letter that his offer (in envelope No.1& 2) does not contain any condition, deviations from terms and conditions stipulated in the tender.

1.1.4 Tenderers should have valid Class II/III Digital Signature Certificate (DSC) obtained from any Certifying Authorities. In case of requirement of DSC, interested Bidders should go to <https://mahatenders.gov.in> and follow the procedure mentioned in the document; Procedure for application of Digital Certificate.

1.1.5 For any assistance on the use of Electronic Tendering System, the Users may call the below Toll-Free Ph.No. **180030702232/7878107985-86** E-Mail: eproc.support@mahatenders.gov.in

1.2 PRE-TENDER CONFERENCE:-

1.2.1 Pre-tender conference open to all prospective tenderers who have purchased tender form before the date of Pre-tender Conference, will be held at **Mehkar** on **1405/2026** at **11:00 AM** in the office of the **Chief Officer, Municipal Council Mehkar Dist. Buldhana** where in prospective Tenderers will have an opportunity to obtain clarifications regarding the work and the Tender Conditions.

1.2.2 The prospective tenderers are free to ask for any additional information or clarification either in writing or orally concerning the work, and the reply to the same will be given by the **Chief Officer / Municipal Engineer Municipal Council Mehkar, Dist. Buldhana**, in writing and this clarification referred to as Common Set of Conditions/Deviations (C.S.D.), shall form part of tender documents and which will also be common and applicable to all tenderers. The point/points if any raised in writing and/or verbally by the contractor in pre-tender conference and not finding place in C.S.D. issued after the pre-bid conference, is/are deemed rejected. In such case the provision in NIT shall prevail. No individual correspondence shall be made thereafter with the contractor in this regard.

1.2.3 The tender submitted by the tenderer shall be based on the clarification, additional facility offered (if any) by the Department, and this tender shall be unconditional.

Conditional tenders shall be summarily **REJECTED**.

1.2.4 All tenderers are cautioned that tenders containing any deviation from the contractual terms and conditions, specifications or other requirements and Conditional tenders will be treated as non-responsive. The contractor should clearly mention in forwarding letter that his offer (in envelope No.1&2) does not contain any conditions, deviations from terms and conditions stipulated in the tender.

1.3 Special Instructions to the Contractors/Bidders for the e-submission of the bids online through this tender site : <https://mahatenders.gov.in>

- 1) Bidder must register themselves on <https://mahatenders.gov.in> portal by clicking “Online Bidder Enrollment” and then map Digital Signature certificate.
- 2) Bidder then login to the site giving user id /password chosen during registration.
- 3) Thee-to-ken that is registered should be used by the bidder and should not be misused by others.
- 4) The Bidders can update well in advance, the documents such as certificates, purchase order details etc., under **My Documents** option and these can be selected as per tender requirements and then attached along with bid documents during bid submission.
- 5) After downloading / getting the tender schedules, the Bidder should go through them carefully and then submit the documents as asked, otherwise, the bid will be rejected.
- 6) If there are any clarifications, this may be obtained online through the tender site, or through the contact details. Bidder should take into account of the corrigendum published before submitting the bids online.
- 7) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender schedule and they should be in PDF/xls /rar/dwf formats. If there is more than one document, they can be clubbed together.
- 8) Bidder should get ready the EMD as specified in the tender in the form of Cash or BG. The original should be posted/couriered/given in person to the Tender Inviting Authority, with in the bid submission date & time for the tender.
- 9) The bidder reads the terms & conditions and accepts the same to proceed further to submit the bids.
- 10) The bidder has to submit the tender document online well in advance before the prescribed time to avoid any delay or problem during the submission process.
- 11) After the bid submission, the acknowledgement number, given by thee-tender in system should be printed by the bidder and kept as a record of evidence for online submission of bid for the particular tender.
- 12) The details of the Earnest Money Deposit document submitted physically to the Dept and the scanned copies furnished at the time of bid submission online should be the same otherwise the Tender will be summarily rejected
- 13) The **Tender Inviting Authority (TIA)** will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders.

- 14) The bidder may submit the bid documents either by online mode through the site (<https://mahatenders.gov.in>) as indicated in the tender.
 - 15) The tendering system will give a successful bid up dating message after uploading all the bid documents submitted & then a bid summary will be shown with the bid no, date & time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed using the e-token of the bidder and then submitted.
 - 16) The bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening date.
 - 17) Bidder should log into the site well in advance for bid submissions otha the submits the bid intimei.eon or before the bid sub mission end time. If there is any delay, due to other issues, bidder only is responsible.
 - 18) The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected.
 - 19) The time settings fixed in the server side & displayed at the top of the tender site, will be valid for allactions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time during bid submission
 - 20) All the data being entered by the bidders would be encrypted using PKI encryption Techniques to ensure the secrecy of the data. The data entered will not viewable by Unauthorized persons during bid submission & not be viewable by any one until thetimeofbidopening.Overall,the submitted tender documents become readable only after the tender opening by the authorized individual.
 - 21) The confidentiality of the bids is maintained since the secured Socket Layer 128 bit encryption technology is used. Data storage encryption of sensitive field sis done.
 - 22) The bidders are requested to submit the bids through online e-tendering system to the TIA well be for the bid submission end date & time (**as per Server System Clock**).
 - 23) The bidder should log out of the tendering system using the normal log out option available at the top right- hand corner and not by selecting the (X)option in the browser.
 - 24) The bidder should upload the technical document in.rar format single file to upload in technical cover and then BOQ in.xls format single file to uploading Finance cover.
 - 25) For any other queries, the bidders are asked to contact through Mail:
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Additional General Information to Bidders:**I) Name of Work:**

Construction of 216 EWS Houses with all Infrastructural Services under (AHP) PMAY (U)-2.0 Vertical-3 at Survey no. 19, Janephal Road, Mehkar, Dist- Buldhana

II) Land Details:

Sr. No. 19, Janephal Road

City: Mehkar, District: Buldhana.

III) Details of Project: As per Layout Plans enclosed with Tender**BUILT-UP AREA STATEMENT (As per Municipal Drawings):**

Sr.No	Type of Building	Nos of Building	Floors in Building	Floor wise Area (Sq.Mtr)	Total Area of Building (Sq.Mtr)	Type of Construction
1	TYPE I	3	Stilt Floor	2490.00	10401.72	
			First Floor	1946.52		
			Second Floor	1946.52		
			Third Floor	1946.52		
			Fourth Floor	2072.16		
2	TYPE II	2	Stilt Floor	1422.50	7134.58	
			First Floor	1407.08		
			Second Floor	1407.08		
			Third Floor	1407.08		
			Fourth Floor	1490.84		
	Total	5			17536.00	

PROJECT DETAILS:

Status of Project Site	MEHKAR Municipal Council Owned Land
Area of Project Site	Sr. No. 19, Janephal Road City: Mehkar, District: Buldhana.
Land use of Proposed Site	Residential
Total number of houses proposed in the Project	216 EWS DUs
Carpet Area of per DU's	TYPE I- 44.95 Sq.Mtr TYPE II- 40.96 Sq.Mtr
B/up Area of Development
Estimated cost of the Project (excluding GST)
Basic Civil Infrastructure	Proposed in the Project
Social Infrastructure	Proposed in the Project
Project Timeline	
Defect Liability Period	10 years from the date of handover to Beneficiary or completion of project in all respect.

Note: RERA registration & its provisions are applicable.

Summary of Beneficiary Share and Government Fund Share/ Unit					
EWS Units	Beneficiary Share	GoI Grant	GoM Grant	TIG	Solar Subsidy
216 Units	As per Tender Quote Without GoI GoM Grant	Rs. 1.50 Lakhs / House	Rs. 1.00 Lakhs / House	Rs. 0.45 Lakhs / House	Rs. 0.10 Lakhs / House

Notes:

1. Above Built-Up Area is only for reference and will not be taken as measurement for payment. The Tenderer shall fully satisfy himself regarding Built-Up Areas. If any discrepancy is noticed between drawings and built-up area statement as above, by the tenderer, it shall be brought to the notice of the MMC before or at the time of the Pre-Bid Conference.
2. Time limit for completion of the work shall be upto 31st Dec. 2028 including monsoon from the date of issuance of the work order.
3. The tenderer shall submit their quote for sale price of 100% EWS including the construction of the said work / project with all Housing & Infrastructure amenities, as mentioned in 1.1 (III) above and as per the scope of work mentioned in the document.
4. **Mode of Development: Public Private Partnership**
5. Implementing Agency: Municipal Council, Mehkar.
6. Method of selection of Beneficiaries: Beneficiary will be selected from the prospective buyers and as per enlisted by Council by Lottery system. It is mandatory for Beneficiary to fulfill eligibility criteria of PMAY scheme.
7. Method of Recovery of Beneficiary Contribution: Beneficiary Contribution will be deposited (by own fund and loan) to Council Account, by GoM/MHADA. GoI grant of Rs. 1.5 Lakhs and GoM grant of Rs. 1.00 Lakhs (Additional Subsidy i.e. TIG Rs. 0.45 Lakhs & Solar Subsidy Rs 0.10 Lakhs) per Beneficiary will also be deposited in Council Account. Council will pay Construction Agency in stages as per actual development at site.
8. **Preference Policy for Allotment of House: The allotment of houses will be done by first come first serve basis by Council to eligible PMAY Beneficiary within seven days from the result of Lottery system. However, the Municipal Council (ULB) will give preference to the families who have disabled persons, senior citizens, widows; first floor preference will be given such beneficiaries.**
9. Schedule of Rates (SOR) Adopted: State Schedule of Rates (SSR) adopted are PWD:2022-23, MJP:2023-24
10. Provision of Cost Index over SOR Rates: Cost index over SOR is not considered in the proposed project and not allowed in project.
11. **O & M of the Proposed Project:** O&M is not the part of this project; however, the Resident Society will be form for the day-to-day maintenance of the project by the Construction Agency. In Consultation with Chief Officer, Construction Agency has to collect O&M charges separately& deposit to society account at most three months from forming Resident Society. However, up to three month of complete project handover Construction Agency has to do every aspect of O&M. Other liability of agency will be under DLP.
12. Revision in Tender Drawing and Technology
 - Before registration of RERA, if required; Tenderer can carry out revision in Drawings & Technology as listed in GHTC-I (Compendium of Innovative Emerging Technologies, as per Govt. guidelines without changing carpet area and Tender specifications & conditions).

- Time period for completion of project as mentioned in the scope of work shall remain same
- No Extension in time period shall be granted for planning, designing, necessary statutory approvals.
- All necessary charges for drawings and technology, approval, scrutiny charges, consultancy charges etc. shall be borne by the tenderer, as approved by Chief Officer, MMC.

13. Implementation & Management Framework:

- Chief Officer, along with Municipal Engineer will be part of implementation from MMC side.
- Municipal Engineer will ensure all technicalities and co-ordinate with all concerned persons.
- Project Engineer (PMAY-CLTC) and his supporting staff are dedicated for this project under Municipal Engineer.
- PMC is engaged by the Council for day-to-day supervision & monitoring to support with dedicated staff.
- City Level Technical cell is established for effective co-ordination of the project.
- PMC, Technical cell & ULB officer along with Construction Agency will ensure the quality, speed and timely completion of the project.
- Monthly expenditure wise Labor Cess - 1%
- Approved DPR, Mojani sheet and Approved Municipal Plans.
- Supports in Trunk Infrastructure.
- Council will validate & support in EWS Beneficiary selection.
- Construction Agency shall pay PMC fees for Project Management Consultancy/ Supervision work shall be paid monthly as per progress of work from the date of work order as directed by Chief Officer MMC.
- MMC is doing follow-up for GHTC grant and Construction Labor Welfare Fund, for this construction agency need to support MMC.

14. Incentives to Beneficiary from GoI and GoM:

- Rs. 1.50 Lakhs as GoI grant and Rs. 1.00 Lakh as GoM grant for EWS. (Additional Subsidy i.e. TIG Rs. 0.45 Lakhs & Solar Subsidy Rs 0.10 Lakhs)

15. Loan cases and Stage wise Completion of Project:

- Council will support for loan cases of Beneficiary like Loan Mela/ meeting with Bankers and Financial Institute.
- Individual Loan case for Beneficiary will be done by project proponent/ Construction Agency in consent with Beneficiary.
- After stage wise completion, EMI will be started at the time of handover.
- In case Construction Agency wishes to complete Project earliest, it will be appreciated.

16. In case of any discrepancy between provision of tender documents and RERA act provision,

RERA acts provision will be considered for decision.

17. The work shall be carried out as per the tender drawings, documents, specifications and instructions including obtaining necessary permissions, No Objection Certificates (NOC), Completion Certificates, Licenses, from various competent authorities by the construction agency.
18. The Construction Agency shall pay all fees/ deposits (refundable/ nonrefundable) / charges/ supervision charges/ permission charges / approval charges/ any other charges, etc. if any, required to be paid to various local/public/statutory authorities (such as Municipal Council, Fire Department, Director of Town Planning, Maharashtra State Electricity Board and or its subsidiaries, Irrigation Dept. etc.) on behalf of the MMC, as a requirement and up to completion of the said work/Project including all contractual obligations/scope etc. within stipulated time period and to the satisfaction of MMC. The Construction Agency shall consider all the payments while quoting the bid. Construction Agency shall submit receipt on recommendation of the PMC for clearance of monthly releases as mentioned in payment chapter for MMC verification, if necessary. No claim for extension in time limit shall be consider against the any delay from MMC in any case. The Construction Agency shall ensure to pay the said charges due on time.
19. It is the responsibility of Construction Agency to obtain all required NOCs and approvals at his own cost.
20. The Project Development & Management Consultant (PMC) is appointed by Municipal Council and the said work will be supervised by the PMC. The PMC charges will be paid by the tenderer/bidder/Construction Agency and other charges if any, as stated in tender or by the Chief Officer MMC.
21. Construction Agency shall make an agreement with Municipal Council, Mehkar related to Stamp Duty and Registration Charges and the respective charges shall be borne by Construction Agency.
22. RERA registration and all concerned activities related to it shall be done by Construction Agency at his own cost. MMC shall be a co-applicant.
23. The tender documents consisting of general specifications to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen at the website free of cost. Those contractors not registered with the website www.mahatenders.gov.in are required to get registered before submitting the tender online. If needed they can be imparted training on tendering process as per details available on the website www.mahatenders.gov.in
24. The bidders or one of their authorized representatives having proper authority on letter head of the bidders will be allowed into the premises where tenders will be opened online.
25. Bidder should quote price in financial bid in the total unit carpet Including all Work i.e. Residential and Infrastructural etc. as shown in Tender Drawings attached with this tender.

26. Labour law to be complied by the contractor. 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 abide by the provisions of the Child Labour (Prohibition and Regulation) Act 1986. 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. The contractor shall ensure the registration of all eligible workers (inclusive of those of sub-contractors and petty contractors) with construction workers welfare board. Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.
27. Payment to the contractor will be made stage wise as per schedule attached with the tendered documents.
28. A) GST or any other tax will be applicable as per Government Rules and Regulations
 B) i) All tendered rates shall be exclusive of all taxes and levies payable under respective status. However, pursuant to the Constitution (46th Amendment) Act, 1982, if any further tax or levy is imposed by states, after the last stipulated date for the receipt of tender including extensions if any and the contractor or the contractor shall necessarily and properly pay such taxes/ levies, the contractor shall not be reimbursed.
 ii) The contractor shall keep necessary books of accounts and other documents for the purpose of the 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 further shall furnish such other information/ document as the Engineer-in Charge
29. As per the Bombay Stamp Rules Act – 1958, Appendix – 1, Article 5, the Contractor shall enter into an Agreement with the Council as per the government Rules and Regulations.
30. The Bidder shall submit only one bid in his name. Submission of any additional bids, for the same package in the name of their partner /associates/ group company etc. shall disqualify them.
31. Bidder shall submit PF registration certificate along with tender document.
32. MMC has employed Project Management Consultant & Third-party Inspection Agency to monitor & supervise the said work. And Payment of TPI will be paid by Contractor.
33. The Chief Officer reserves the right to reject or accept any or all tenders without assigning any reason whatsoever.
34. Tenders which do not fulfill all or any of conditions or are submitted incomplete in any respect will be rejected. Chief Officer Reserves the rights to increase/ decrease the scope of work and contract without assigning any reason thereof, No claim to that effect shall be entertained.
35. No separate price variation /price escalation shall be paid to bidder throughout the Completion of project & bidder should quote accordingly.
36. The contractor shall get the electrical and plumbing works executed through the Experienced person or firm having sound technical knowledge & having qualified Staff in accordance to contractual provisions and should consulting documents with this tender documents. And should submit consultant documents with this tender document.
37. The Civil & Electrical works shall be carried out as per directives issued by the PMC/MMC.

38. The bidders shall not without the consent in writing of the Chief Officer as sign or sublet the contract nor make any subcontract with any person or persons for the execution of the any portion of the work other than for raw materials /Labour or for any part of the work of which the manufacturers are named on his contract.
39. Contractor shall have to make his own arrangements for Drinking and Temporary water, drainage and electricity for the purpose of construction work at site at his own expenses.
40. Contractor should make arrangements of project affected peoples (Beneficiaries) shifting & rental upto completion of project and allocation of houses to beneficiaries.

SCOPE OF WORK

1. Scope of work mentioned below is only indicative and not exhaustive. In addition the contractor shall be responsible for executing all items required for completing the houses in all respect to make the dwelling units habitable and ready for occupation in all respect including all services, environment-fit for habitation with electrical, landscaping works, water supply, sewerage work, storm water, drain, rainwater harvesting system, roads, compound wall, Sewerage Treatment Plant etc. complete as per direction.
2. The successful Tenderer shall construct all the buildings of said work/ project shall be executed as per Tender drawings and specifications. The said work shall be executed under supervision of the PMC/Client as per terms and conditions of the contract.
3. Preparations such as cleaning and grubbing of entire site, levelling of sites by cutting and filling including conveyance and disposal of any excess/unserviceable excavated material, dumped waste etc. to disposal field. Dismantling of existing structures, as per requirements and removing dismantled excess/ unserviceable materials/ debris from site, cutting or replantation's of trees, removing/shifting electric lines, telephone lines, plumbing lines, drains, sewer lines, chambers etc. as per requirement and reconnecting the same to proposed service lines as necessary. The disposal and conveying of dismantled or dumped material shall be carried out as directed by Client / PMC. The site has to be kept clean all the time of all debris, rubbish, and dirt & surplus/waste material. Raised ground shall be taken as per contour on site and shall be fill by approved material. Ground Level is to be levelled as per contour on site.
4. Excavation for foundation in required depth as per soil condition and disposal Engineer/ Geotechnical Engineer before further execution. If any modifications are observed during execution, say change in depth of footing or in footing type or any of its structural detail, etc. resulting in change in structural and working drawings, the Construction Agency has to execute as per the modified drawings and as per site conditions as directed by Structural Engineer & PMC and no extra payment will be made or any discrepancy will not be considered.
5. All works shall be carried out in a workman like manner as per the best technique for the particular item. The Construction Agency is responsible for the correctness of measurement, dimensions, height etc. as per the approved plan.
6. Foundation, ground level and plinth level shall be as per tender drawing etc. complete.

7. Filling and soling with approved material as directed. Plinth and stilt level of buildings shall be taken as per drawing. **Changes, if any, would not affect the agreed rates and no claim on this account shall be entertained.**
8. PCC work of required grade and thickness shall be done as per drawing and specifications etc. complete.
9. Complete RCC work of **M-25 grade** in foundations, columns, beams, lintels, slabs and landings, chajja, waist slab and steps of staircase, ramps, pardi, coping, canopy, fins etc. of required grade concrete as per detail drawings and specifications etc. complete.
10. Masonry work using Burnt bricks/ fly ash bricks in extra fine jointing mortar along with the provision of coping band at sill and lintel level, chicken mesh etc. complete.
11. Shahabad box type water proofing treatment to basement and underground floors, **water proofing work with brickbat coba to terraces**, water proofing work with brickbat coba with water proofing compound for flooring of bath, WC, toilet, washup, balcony, enclosed balcony, otta, all sunken areas, terrace, OHT etc. complete as per detail drawings and specifications.
12. Internal walls cement plaster 12 mm thick, ceiling plaster 6mm thick, external walls sand faced double coat plaster finished with neeru finish, wall care putty, priming coat etc. complete as per tender drawings and specifications.
13. Vitrified matt/glossy finish flooring, dado and skirting in rooms, lobby and corridor areas as per tender drawing and specifications etc. complete.
14. Machine cut machine polished kotah flooring, skirting, dado to lobby and corridor area and staircase steps and landing etc. complete as per detail drawing and specifications.
15. Kitchen Platform of granite with stainless steel sink, fascia patti, black kadappa as shelves, and vertical supports etc. as per detail drawing and specifications.
- 16. Green Marble for window boxing of all windows as per detail drawings and specifications.**
17. washable oil-bound distemper paint of approved colour to all internal walls of buildings and two coats of textured synthetic paint to all exterior surface of buildings.
18. Front door and internal doors are solid core flush door in CC-M 40 framing. Toilets doors are solid core flush door along with CC-M 40 framing, fiber glass reinforced polyster door to fire escape areas, service areas, Double shuttered aluminium extruded powder coated openable door ,grill doors, grill gates, rolling shutters, etc. as per tender drawing and specifications etc. complete.
19. Aluminium sliding window of three, four or required tracks, aluminum openable window with the provision of mosquito net, mild steel grill work and granite window boxing as per tender drawings and specifications etc. complete.
20. Aluminium louvered ventilator with provision of mosquito net, exhaust fan as per drawings and specifications etc. complete.

21. Roofing with polycarbonate sheet for toilet ducts and ventilation shaft with necessary structural steel work as per tender drawings and specifications etc. complete.
22. All internal plumbing, sanitary ware and electrical fittings with fixtures of approved make as per tender drawing and specifications, etc. complete.
23. RCC overhead water tank for domestic, flushing, fire water storage tank as per tender drawings and specifications etc. complete.
24. Infrastructural work includes construction of BT roads, compound wall, RWH, landscaping, complete water supply and external plumbing and electrical work etc. complete shall be carried out as per detail drawing and specification.
25. Complete BT road considered in infra work as per tender drawings and specifications etc. complete.
26. Compound wall for building, open space, front entrance as per tender drawing and specifications etc. complete.
27. Rain water harvesting pit system well connected with rain water pipes including brick masonry chambers, inspection chambers, recharging pits with filter media chamber as per drawing and specifications etc. complete.
28. Complete external plumbing, water supply work, drainage, sewage work, electrical work shall be done to make it fully functional as per detail drawing and specification etc. complete.
29. Complete fire fighting work to make it fully operational as as per detail drawing and specification etc. complete.
30. Broachers of the Project indicating drawings, pictorial view specification and common amenities are to be prepared by the Construction Agency as per the instruction of Engineer Incharge in sufficient quantity for the circulation to the Beneficiaries. Bidder has to advertise the scheme at site as well as near to the plot.
31. Temporary 3 to 4 meter high fencing the site up to completion of the project.
32. De-silting shall be done by the Construction Agency before handing over the completed Project. All machine, equipment and labour for this purpose will be arranged by Construction Agency.

Plumbing Work:

Internal & external plumbing, electrical and fire fighting work shall be done as per drawing & specifications.

- a. Drainage using UPVC, PVC, RCC pipes for rainwater, soil and waste water, gully traps, manholes, surface drains and sewer pipes.
- b. External surface drainage by grated SWD channel.
- c. CPVC pipes for water supply distribution.
- d. Chromium plated sanitary fittings and fixtures.
- e. Sanitary wares of approved make as per detailed Drawings.

- f. Automated pumps and equipments, valves, puddle flanges, pressure reducing valves of adequate capacity.
- g. Water distribution to whole building from over head water tank.
- h. Water supply and distribution from underground water tank.

Electrical Works (Internal):

- a. Meter Panels, main cables, panels, pumps and panel.
- b. LT work, cables and panels.
- c. Distribution boards and accessories.
- d. Internal and common internal electrification including point wiring, switch, sockets, fixtures and fans etc. complete.
- e. Earthing and lightning protection.
- f. PV solar cells etc.

Electrical Works (External):

- a. LV Cables and network, panels.
- b. Capacitors, Switchgears, Feeder panels.
- c. DG work and AMF panels.
- d. STP Panel, water pumps and panel.
- e. Street Light and Bollards.
- f. Lightning Protection Arrangement.
- g. Lift installation work.
- h. Main cables.
- i. Main panels (after Transformer).
- j. Transformer, RMU.
- k. Solar power generation plant work.
- l. HT RMU, HT Cable work and incoming line, BAY etc.

Fire Fighting Works:

- a. Vertical fire pumps in fire pump room.
- b. Control valves, hydrants, sprinklers, piping and accessories.
- c. Fire extinguishers.
- d. Pendant sprinkler below false ceiling and upright sprinkler system above false ceiling in commercial floors and pendant sprinklers in residential floors.
- e. Wet riser sprinkler system.
- f. Down comer system.

Fire Alarm and Fire detection:

- a. Addressable detection and fire alarm system.
- b. Addressable repeater panel, Hooters, speaker.
- c. Manual call points, response indicator.
- d. Smoke detectors, gas detectors.
- e. Exit signages.
- f. Cables for ELV systems.

1.4 ELIGIBILITY CRITERIA:

- i. To be eligible for participation in the tendering the Tenderer shall have to pay **Rs. 3540/-** as the tender form fee and **0.5%/- amount as Earnest Money Deposit** through online Payment Gateway system to MMC and produce evidence of the same. Out of this, **Rs. 3540/-** is non-refundable as a tender form fee. Payment in the form of Cash/ Demand Draft/ Term Deposits / Pay order, etc. will not be accepted.
- ii. To be eligible the tenderer shall be required to upload **colored scanned copy of original documents / Certificates as below;**
 - a) **For Registered Construction Agency work experience:**
Experience of having successfully completed similar works of construction of Residential / Administrative, RCC / Precast buildings during last **5 years** ending previous day of last date of submission of bids:
 - Three similar works each costing not less than 40% of the estimated cost put to bid. OR
 - Two similar works each costing not less than 50% of the estimated cost put to bid. OR
 - One similar work costing not less than 60% of the estimated cost put to bid.
 - b) The Construction Agency registered with PWD, prior will be eligible to bid the tender till further order or having experience in private sector.
 - c) The Bidder shall have minimum average annual turnover not less than **50%** of tender cost of project in the last **5 years**. Bidder should submit certificate signed by chartered accountant and also audited balance sheet.
 - d) **Valid Registration Certificate in “Class – 1 (A) &Above”** of PWD, Government of Maharashtra.
OR
 - e) **Valid Registration Certificate** of registered Construction agency’s with CIDCO, MHADA and other Corporations of Government of Maharashtra, MCGM, and CPWD or other State Government agencies, Railways, MES, etc.; shall be eligible if they are registered in appropriate class equivalent to Class of P.W.D. Govt. of Maharashtra as mentioned in Clause 1.1 above.
OR
 - f) This Invitation for bids is open to all competitive bidders. It is not necessary for bidders to be

registered with state PWD, any competent bidder who fulfills the terms and conditions in the bid document is eligible for bidding.

- i. The Tenderer shall upload **Audited Certified Balance Sheet** under the hand and seal of Chartered Accountant for five years i.e., **2020-21, 2021-22, 2022-23, 2023-24, 2024-25 and 2025-26 (If Audited)** for verification of bid capacity. Bid capacity shall be calculated as per clause 1.2.1 below. Details of the works carried out in last five financial year should be given in **form no. V as the case may be** and shall be signed by the tenderer or holder of his Power of Attorney.
- ii. The Construction Agency or his identified Sub-Construction Agency should possess required valid Electrical License for executing the building electrification works and should have executed similar electrical works. The details shall be furnished before undertaking work of electrification.
- g) As regards similar works, the work completed certificates clearly stating the scope of the work, the date of the work order, stipulated and actual date of completion, levy of damages / penalty, if any, etc., shall invariably be submitted. In case of private work letter of award of work, the work done certificate under the hand and seal of the Owner / Architect /Project Management Consultant or Structural Design Engineer shall be submitted along with commencement and completion certificate of Municipal Council, Corporations or Town Planning Authority, etc.
- h) The base year is taken as **2022-23**. No price escalation shall be admissible. The prices shall remain firm for the entire tenure of the Contract.
- iii. **In addition, following documents shall also be uploaded:**
 - a) Undertaking in the prescribed format as given in chapter 17, Clause 17.01 declaring the truthfulness of the documents, and clause 17.02 declaration of conversant with bye laws and site on stamp paper of Rs. 500/- each shall be submitted for eligibility/ qualification criteria.
 - b) Income Tax Returns for last five financial years.
 - c) Information regarding Aadhaar, PAN, GST, Income Tax Circle, or ward of the district in which he is assessed to Income Tax.

Notes:

- i. Certificates as mentioned in qualification criteria are required to be obtained from the officer not below the rank of Executive Engineer or equivalent officer, if Government work done by tenderer, original certificates shall be scan and uploaded.
 - ii. **Form No. I to V** enclosed in **chapter no. 17** shall be filled in and signed properly. If these forms are found incomplete, incorrect, kept blank or wrongly filed, tenderer's envelope shall not be opened.
 - iii. The abstract of work completed in all classes of Civil Engineering construction works during last five years shall be given in Form no. V & 1.2 for qualifying criteria.
- 1.4.1 Tenderer who meets the minimum eligibility criteria shall be qualified only if their available Bid capacity is more than the total bid value. The available bid capacity shall be calculated as under;

Assessed Available bid capacity = [(Ax N x 2) – B)], where

A = Maximum annual turnover in all classes of civil engineering works during the last Five years.

N = Number of years prescribed for completion of the said work for which the bids are invited.

B = Existing commitments and ongoing works to be completed during period of completion of the said work for which bids are invited i.e., **upto 2026** from date of submission of tender.

Note:

The Form No. I showing the value of existing commitments and ongoing works as well as the stipulated period of completion, remaining for each of the works listed shall be signed by the bidder/ tenderer and counter signed by the authority / agency / Executive Engineer or equivalent.

1.4.2 Even though the tenderers meet the above qualifying criteria, they are liable to be disqualified and their financial bid shall not be opened, if they have:

- a. Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements and/or
- b. Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history or financial failures, etc.and/or
- c. Participated in the previous bidding for the same work and had quoted unreasonably high bid price and could not furnish rational justification to the employer.
- d. Adverse past performance of tenderer regarding quality, workmanship, timely completion and directly/ indirectly subletting of works.

Any company/ entity blacklisted by the competent authority are prohibited in participating in this tender.

1.5 INSTRUCTION TO TENDERERS:

- a. To participate in the e-Tender process the tenderer has to pay through the payment gateway system of Chief Officer, Municipal Council, Mehkar. Out of this Tender fee is non refundable. Payment in any other mode, including but not limited to cash/demand draft/term deposits/pay order will not be accepted.
- b. MMC shall not be responsible for any delay in submission of Tender.
- c. **Address for Communication/queries:**

Chief Officer,
Municipal Council, Mehkar.

Tel No. [REDACTED] :

Email : mcmehkar@gmail.com

- d. MMC reserves the right to reject any or all the tenders without assigning any reasons whatsoever.
- e. Canvassing or lobbying in connection with the tender in any form, if noticed, tender by concern tenderer shall be liable for rejection.
- f. The Tenderer if firm or company in their forwarding letter, shall mention the name and details of all the partners/directors of the firms or the company (as the case shall be) and the name of the partner/director who holds the power of attorney with attested copy of registered power of attorney, authorizing him to conduct transaction on behalf of the firms or company.
- g. The Council shall not release any foreign exchange.
- h. The tender notice along with all the tender documents including common set of deviation (CSD) shall form part of the contract agreement.
- i. The Tenderer shall give a declaration that he is conversant with local conditions/ laws and availability of labor and materials specifications, tender drawings and he has quoted his offer with the consideration to all these factors.
- j. The MMC reserves right to revise or amend the Tender documents fully or part thereof, prior to the date notified or amended for the receipt to tender. Such deviations/amendments if any shall form part of contract agreement and communicated in the form of corrigendum, common set of deviation (CSD) or by a letter as shall be considered suitable and shall form the part of the Contract Agreement.
- k. The MMC reserves right to revise layout or building plan by relocating the buildings shown in the tender documents (Layout) within the same site and same Built-up area for which no additional payment shall be made for executing work as per revised layout plan.
- l. The Construction Agency may revise layout by relocating the buildings shown in the tender documents (Layout) within the same site and same Built-up area with no extra payment and with the approval from Chief Officer/ PMC.
- m. The tenders containing deviations from the contractual terms and conditions, specifications or other requirement and / or conditional tenders, shall be rejected.
- n. The acceptance of tender will be communicated to the successful tenderer through email or by registered letter or fax by the MMC.
- o. The tender being uploaded by a firm, the tender shall be signed by each partner thereof or it shall be signed on behalf of firm by a person holding a registered Power of Attorney authorizing him to do so.
- p. In the event of the Tender being submitted by a Company, the Tender shall be signed by a director or it shall be signed on behalf of Company by an authorized representative holding a registered Power of Attorney along with the resolution of the Board authorizing him to do so.
- q. In the event of the Tender being submitted by a sole proprietor, the Tender shall be signed by

the sole Proprietor.

- r. The online opening of tender shall be as per Clause 1.8. In the event of a tender being accepted, the Construction agency(s) shall, for the purpose of identification, sign each page of the contract documents.
- s. The amount of earnest money shall be refunded by the MMC to the unsuccessful Tenderers except Lowest three tenderers through **RTGS/ NEFT** only.
- t. All corrections and additions or pasted slips in the uploaded documents shall be initialed by the authorized person of the Tenderer

1.6 DOCUMENTS COMPRISING BID:

e-Tender process shall be carried out in two stages i.e., Technical Bid and Financial Bid.

(i) Technical Bid:

Technical Bid shall contain the following uploaded documents.

- a. UTR (Unique Transaction Reference) number of electronic payments towards the Earnest Money Deposit (EMD) amounting 0.5%/- . Tender form fee including (GST) Rs 3540/- by RTGS/ NEFT through directions as available on our e-tender web site. Out of this, Rs. 3540/- is non-refundable as a tender form fee. The tenderer shall submit the bank details for refund of EMD. If details of bank are not correct and the amount refunded is transferred to any other account, the MMC shall not be held responsible.
- b. Valid registration with CIDCO, MHADA, and other Corporations of Government of Maharashtra, MCGM, and CPWD, and Corporations of Central Government, Railways, MES and private work experience etc. (Upload scanned original copy of registration).
- c. Details of the works tendered for and in hand with the value of work unfinished on the last date of submission of tender. The certificates from the Executive Engineer or equivalent under whom the works are in progress shall be enclosed (Form No. I (A) & 1(B)).
- d. List of machinery and plants immediately available with the tenderer for use on this work and list of machinery proposed to be deployed on this work, but not immediately available and the manner in which it is proposed to be procured. (Form No. II).
- e. Details of works of similar type and magnitude including R.C.C. building works using Conventional Formwork along with all finishes and services carried out by the Tenderer. (Form no. III).
- f. Details of Technical Personnel with name, qualifications and experience in similar works, and a period of his working with Bidder's organization, who will be working on this project as technical key persons for supervision, to receive technical instructions issued by the PMC/MMC from time to time. (Form No.IV).
- g. Details of payment received in all class of civil engineering construction work during last Five years certified by Chartered Accountant [Form No.V (A) and V B)].

- h. Scanned copy of original Power of Attorney for signing of tender document.
- i. Certified balance sheets under seal of Chartered Accountant for last five financial years.
- j. Any other additional documents / profile etc. in support of technical qualification.

(ii) Financial Bid:

- a. For Quoting financial bid, download the Price Bid (**Financial Offer Format**) given in Commercial bid section, fill the details and quote price in the form as mentioned on e-Tendering Portal.
- b. If Price Bid file is blank then bid of such bidder will not be considered.
- c. Bidder should quote with all taxes including GST, dues, statutory payments, other cost mention in tender for sale price.

(iii) Documents not submitted but still part of Contract:

- a. Common Set of Deviation (CSD).
- b. Corrigendum.
- c. Letter of Acceptance (LOA).
- d. Work Order.
- e. Standard Specifications of works i.e., Red Book.
- f. National Building Code, Public Works account Code.
- g. All Indian Standard Codes for Civil Work.
- h. Public Works Manual.
- i. GHTC-I guidelines and Compendium of Innovative Emerging Technologies

1.7 BID PRICES:

- a. The tenderer shall fill lump sum quote in Financial Bid.
- b. Price quoted shall be inclusive of all Taxes.
- c. Applicability of Prices (frozen).
- d. Currencies: All the prices shall be INR (Indian Rupees)
- e. Tenderer should quote below the Sale price (considering GST and other Taxes).

Bid validity:

The bid of the Tenderer shall remain valid for **120 days** (One Hundred Twenty Days Only) after the deadline date for submission of e-Tender or withdrawn by Tenderer in writing after 120 days whichever is later. The bid valid for a shorter period shall be rejected by the MMC as non-responsive. However, in exceptional cases, with intimation to the eligible tenderers, the MMC reserves the right to extend such validity maximum up to 120 more days unilaterally and the same shall be binding on the tenderer.

Conditional Proposals:

The Conditional Proposals shall be summarily rejected.

All Pages to Be Signed:

All the pages shall be duly signed by the Construction Agency or his authorized representative (Authorization certificate is mandatory) at the time of agreement. At the time of tender process digitally sign will be accepted.

1.8 MANNER OF SUBMISSION OF TENDER AND ITS ACCOMPANIMENTS:**Submission of Tender:**

The tenderer shall ensure that Chief Officer, Municipal Council, Mehkar receives his e-tender before the expiry of the date and time.

In the upload able document type of templates, the Tenderers are required to select the relevant document/ compressed file (containing multiple documents) already uploaded in the briefcase.

Notes:

- a. The Tenderers shall upload a single document or a compressed file containing multiple documents against each upload able option.
- b. The Hashes are the thumbprint of electronic data and are based on one – way algorithm. The Hashes establish the unique identity of Bid Data.
- c. The bid hash values are digitally signed using valid Class 1A Digital Certificate issued any Certifying Authority. The Construction agencies are required to obtain Digital Certificate in advance.
- d. After the hash value of bid data is generated, the Tenderers cannot make any change/ addition in its bid data. The Tenderers shall modify bids before the deadline forbid preparation and has submission as per Time Schedule mentioned in the e-Tender documents.

1.9 BIDS FROM JOINT VENTURES:**Tender by Joint Venture of two or more registered /unregistered contractors.**

Two or more contractors registered with Government of Maharashtra or un registered contractor/ individual/firm can form a Joint Venture (JV) to bid for the work subject to following conditions.

1. The JV for the whole period of the contract work including defect liability period.
2. The JV shall neither be dissolved nor can any partner retire till all liabilities of the contract work is liquidated and till the expiry of defect liability period.
3. The JV shall nominate one lead partner who is registered in highest class/ higher work done as contractor amongst the partners of JV, and whose share in the partnership shall not be less than 50% in the JV.
4. Lead Partner or both the JV partners have experience in similar housing scheme, without this JV will not be acceptable.

5. The capacity of the JV to bid for the tender will be that of the contractor registered in highest class/work done capacity.
6. The annual turnover, work in hand, items of important works shall be computed on the basis of total of all partners in the JV.
7. All the documents required to be uploaded by bidder shall be applicable to each partner of JV.
8. The contractor shall take care to see that all required documents like certificate of turnover, registration etc. and other of every partner of JV is uploaded in envelope. If any document of any partner is not uploaded, the tender of JV is likely to be summarily rejected.
9. All online activities of e-tendering shall be performed by the lead partner and in his name.
10. No partner in JV shall be permitted to bid for the same work on the basis of his individual registration.
11. For participating in bid, they shall register online in the name of Joint Venture on the given site or authorized lead partner to submit the Bid in his name.
12. In case of Joint Venture, the scanned & digitally signed copy of notarized Joint Venture (partnership) deed, as acceptable to Register of firms, shall be submitted in Technical Envelope. If joint venture firm is found lowest at the time of opening of bids, the tenderer shall register the joint venture with the Registrar of Firm as per the law and submit the same to the Chief Officer, Municipal Council, Mehkar, Dist. Buldhana within 120 days from the date of opening of tender, failing which his bid shall be considered on responsive and the Bid Security shall be forfeited.
13. The registration of Joint Venture deed with the registrar of firms shall be mandatory. And deed should be submitted to Employer as mentioned above.

1.10 OPENING OF TENDER:

On the date specified in the tender notice, following procedure will be adopted for opening of the tender:

1. Technical Bid

Technical Bid of the tender will be opened online, in the presence of the Tenderer(s) who has/have submitted tenders or their authorized representatives who chose to attend, to verify its contents as per requirements. If the various documents contained in this bid do not satisfy the requirements of the MMC, a note shall be recorded accordingly by the tender opening authority and the said tenderer's Financial Bid shall not be opened.

2. Financial Bid

Financial Bid shall be opened, in the presence of the Tenderer(s) who has/have submitted tenders or their authorized representatives who chose to attend on notified date, only if contents of Technical Bid are found to be acceptable to the MMC. The lump sum amount quoted shall then be read out.

3. The MMC reserves the absolute right to accept any offer not necessarily the lowest, based up on

its final decision regarding tenderer's capacity, competency, financial status, experience, machineries available, experienced technical staff with the Tenderer etc. The past experience/ track record/ performance of tenderer in Municipal Council, Mehkar regarding quality, workmanship, punctuality, leakages – dampness – seepage in toilet blocks, terrace floor, underground - overhead water tanks, peripheral walls of building, and directly/ indirectly subletting of works, will be minutely reviewed during scrutiny of tender/awarding works, and even if the tender emerges as the lowest among the tenderers, he will be treated as ineligible for award of the work in view of clause 1.2.2 above.

4. **Rejection of Bids**

Notwithstanding anything contained in this Bid Document, the MMC reserves the right to reject any Bid and reject all bids at any time without any liability or any obligation for such acceptance, rejection or annulment and without assigning any reason therefore.

5. **Confidentiality**

Information relating to examination, clarification, evaluation, comparison of bids and recommendations for award of the contract shall not be disclosed to any bidder/person who is not officially concerned with the Bidding process until the award to the successful bidder has been announced. Any effort by a bidder to influence the MMC or his representative in bid process or award decision may result in rejection of bid.

1.11 **AWARD OF WORK:**

1.11.1 Responsive Price Bid shall be evaluated on the basis of Cost Based Selection process. 100% weightage will be given to the quoted EWS Unit Price.

The Authority shall evaluate and compare only bids determined to be substantially responsive. Bids are considered which obtained maximum marks in financial evaluation.

The 1st ranked bidder shall be given the right to give the revised quote to match the lowest Project Cost as per MMC expectations.

If the negotiations with the 1st ranked bidder fails, MMC may call upon 2nd ranked bidder and repeat the process till the time it can get best offer for the project.

The right to negotiate with any of the bidders whose offer has been found to be responsive and attractive to the MMC is reserved with MMC. MMC may either choose to accept the Tender of the Preferred Tenderer or to negotiate with him or reject the Tender.

If negotiations fail with all the bidders and/ or bidders are not willing to revise their quote to match the lowest bid, MMC may invite the 1st ranked bidder for fresh negotiations.

If more than one Tenderer quotes same total amount, then such Tenderers (whose total amount are same) shall be called for submitting revised price Bid.

Upon acceptance of the Tender of the Preferred Tenderer with or without negotiations, Chief Officer, Municipal Council, Mehkar shall declare the Preferred Tenderer as the successful Tenderer and enter into an agreement.

The successful Tenderer shall be liable to accept the award of work. Any denial to accept the award of work at the price quoted by a bidder before the end of bid validity period may attract a penalty, maximum to the extent of Earnest Money Deposit submitted by him.

The acceptance of the bid shall be communicated to the successful bidder in writing either by the bid opening authority or any other officer of the MMC authorized to do so. The bidder shall then be asked to pay the security deposit amount as mentioned in the tender document and enter into an agreement with the Mehkar Municipal Council within 30 days of MMC communicating the award in writing. In the event of failure of the successful bidder to sign the agreement within the stipulated time frame, he would be disqualified and his EMD will be forfeited. Subsequently the next most competitive bidder/s would be invited to take up the project.

The successful bidder/s and the MMC will enter into an agreement comprising the original copy of the bid documents including common set of deviations, revisions amendments, and correspondence with and by the Department and the drawings, in the prescribed form of agreement of MMC.

The Earnest Money Deposit of the successful bidder/s shall be converted to part of security deposit.

The Earnest Money Deposit of the unsuccessful bidders will be returned within 30 days after the concession agreement is signed with the successful bidder as above or after expiry of bid validity period whichever is later. No interest shall be paid for the EMD amount by MMC.

1.11.2 Notification of Award and Signing of Agreement:

- i. The Preferred Tenderer whose Bid has been accepted be notified of the award by the MMC prior to expiration of the Tender validity period by cable, telex or facsimile confirmed by registered letter, email. This letter (hereinafter and in the conditions of Contract called the "Letter of Acceptance") shall state the sum that the MMC shall pay the Construction Agency in consideration of the Design, execution, completion, and DLP of the Works by the Construction Agency as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- ii. The Letter of Acceptance of award shall constitute the formation of the Contract, subject only to the furnishing of a Security Deposit in accordance with Clause 1.11(B) below.
- iii. The Agreement shall incorporate all agreements between the MMC and the successful Tenderer.
- iv. Within **twenty-eight (28) days** of receipt of the Contract Agreement, the successful Tenderer shall sign, date, and return it to the MMC.
- v. On receipt of Letter of Acceptance of award from the MMC, the successful Tenderer shall furnish the Security Deposit in accordance with the conditions of contract.
- vi. The successful Construction Agency has to bear all the related expense required for signing of contract.

1.11.3 Corrupt or Fraudulent Practices of fake document and information:

The proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt, fraudulent practices, fake documents & information in competing for the contract in question shall be rejected and will be declared ineligible, either indefinitely or for a stated period of time as decided by the MMC. EMD of such tenderer will be forfeited and debarred for future tender of project.

- 1.11.4 Failure of the successful Tenderer to submit the Security Deposit including additional Security Deposit, if any or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD. In that event the MMC may award the Contract to the next lowest evaluated Tenderer whose offer is substantially responsive.

1.12 SOURCE OF FUNDS:

The expenditure on this project will be met from Central & State Grant and Beneficiary Shares as mentioned in the Tender. The bidder shall be able to invest a minimum cash up to 50% of contract value of work during implementation of work.

After the commencement of the project, GOI & GoM Grant and Beneficiary share will be deposited in Municipal Council, Mehkar account. In case, Beneficiary is willing to take loan from bank then agreement will be prepared with Beneficiary, Bank and Council. Contractor will be paid as per the Payment Schedule as mentioned in Chapter 9 only after receiving the payment from GoI & GoM grant and Beneficiary share. If there is any delay in the above payment, Contractor will have to continue the work by making his own investment without any claim.

1.13 BID SECURITY:

A. Refund of EMD:

- a. The EMD shall not carry any interest.
- b. The earnest money deposit of the tenderer shall be forfeited if the tenderer withdraws the bid after tender submission during the bid validity period.
- c. The amount of earnest money shall be refunded to the unsuccessful Tenderers except Lowest three tenderers, within a month from date of opening of financial bid. The tenderer shall submit the Bank details for refund of EMD. If details of Bank are not correct and the amount refunded is transferred to any other account, the MMC shall not be held responsible.
- d. In case of the successful tenderer, Earnest Money Deposit shall be converted to Initial Security Deposit and completing the agreement formalities mentioned in the tender document.
- e. Earnest Money Deposit of second and third lowest tenderer shall be refunded on payment of initial security deposit and completing the agreement formalities mentioned in the tender document by the successful tenderer.
- f. If successful tenderer does not pay the security deposit as per clause 1.11.(B) below within time limit and does not complete the agreement formalities and / or does not execute the contract within prescribed time limit then his/their Earnest Money Deposit shall be forfeited by MMC.

B. Security Deposit:

i.	Name of Work	Construction of 216 EWS Houses with all Infrastructural Services under (AHP) PMAY (G)-2.0 Vertical-3 at Survey no. 19, Janephal Road, Mehkar, Dist- Buldhana City: Mehkar, District: Buldhana.
ii.	The Amount of Earnest Money to be Deposited.	Tender form fee including GST Rs. 3540/- and Earnest Money Deposit (EMD) amounting Rs. 0.5%/- through Payment Gateway system to Chief Officer, Municipal Council, Mehkar.
iii.	Amount of Security Deposit to be Deposited.	Security Deposit– (SD) 10 % of the Tendered Cost or Contract Sum i.e., Accepted Tendered Amount, whichever is Higher for Project Period plus Ten-Year Defect Liability Period. Out of which, 1% of Total Security Deposit which is equivalent to EMD is converted to Security Deposit. 2% of on Total amount of tender FDR of Nationalized Bank shall be deposited to Municipal Council Mehkar before Work Order for the stipulated time period + 6 Months 7% of Total amount of tender will be deducted from every R.A. bill as a Security Deposit
iv.	Period of Contract	Period allowed for the completion of whole work from the date of written work order to commence the work including monsoon period.

- i) If the successful tenderer does not pay initial security deposit and additional security deposit within 15 days, including Government holidays, issue of letter of acceptance of tender, then E.M.D. paid may be forfeited and his tender shall be liable to be rejected.
- ii) The Term Deposit Receipt of Initial Security Deposit shall be kept valid for the **Project Period (upto 31st Dec. 2028) + 10-year Defect Liability Period for the said work.** Before expiry of the Bank Guarantee/ Term Deposit Receipt, the Construction Agency shall renew it or submit new Bank Guarantee/ Term Deposit Receipt of required period well before the expiry date, if necessary, or otherwise the Guarantee/ Term Deposit Receipt will be encashed accordingly.
- iii) In case of non-renewal of Bank guarantee/ Term Deposit Receipt or non-submission of Bank guarantee / Term Deposit Receipt well in time, a penalty of Rs. 5000/- (Rupees Five Thousand per day (after the expiry of the date) shall be imposed till submission of renewed Bank

Guarantee / Term Deposit Receipt or new Bank guarantee.

- iv) All compensation or other sums payable by the Construction Agency under the terms of this contract or any other contract or an any account shall be deducted from his Security Deposit or from any sums which may be due to him or may become due to him by MMC on any account and in the event of the Security deposit being reduced by reason of any such above noted deductions the Construction Agency shall within ten days of receipt of notice of demand from the MMC make good the deficit and reinstate the security deposits.
- v) There shall be no liability on the MMC to pay any interest on the Security Deposit paid by or recovered from the Construction Agency.

**C. Refund Of Security Deposit:
SD will be released as below:**

- After 5 Years of completion of Project - 5% (will be released)
- From 6th year every Year 1% will be released (up to 10 Years of DLP)
Provided that there is no defect detected within the said periods.

1.14 ADVANCE PAYMENT AND LOAN AMOUNT FROM EWS BENEFICIARY:

- a. Individual loan case of EWS beneficiary will be done by Construction Agency.
- b. Advance payment from EWS beneficiary will be deposited in Council Account.
- c. Loan disbursement amount from bank will also be deposited in Council Bank Account.

CHAPTER NO.2
ADDITIONAL INSTRUCTIONS TO TENDERER

2.1 DEFINITIONS:

- 2.1.1 In the tender documents the following words and expressions shall have the meanings stated;
1. **“Client”** shall mean Chief Officer, Municipal Council, MEHKAR (MMC).
 2. **“General Body”** shall mean the elected members from Prabhag having capacity to decide the policy.
 3. **“GoM”** shall mean the Government of Maharashtra.
 4. **“GoI”** shall mean the Government of India.
 5. **“PMAY”** shall mean Pradhan Mantri Awas Yojana.
 6. **“HFA”** shall mean the Housing For All - 2022.
 7. **“HFAPoA”** shall mean the Housing For All Plan of Action.
 8. **“AHP”** shall mean the Affordable Housing in Partnership.
 9. **“PWD”** means the Public Works Department of the Govt. of Maharashtra.
 10. **“Project Development and Management Consultant (PDMC)/(PMC)”** shall mean a person, firm so appointed by the Client for comprehensive planning, architectural services, detailed design scrutiny, approval to design and drawings, DPR construction, supervision and any other activity pertaining to Planning Designing, construction, etc.
 11. **“Engineer / Engineer Incharge”** shall mean the person from the PMC for the purposes of the contract or any person appointed by the Client from time to time and notified to the Construction Agency under the contract.
 12. **“Representative of Client”** shall mean any person authorized by the Client as his representative for the purposes of this contract having access to the site from time to time.
 13. **“Engineer’s Representative”** shall mean as Assistant of the Engineer, notified in writing to the Construction Agency by the Client/Engineer from time to time.
 14. **“Contract”** shall mean these Conditions, Specifications, the Drawings, the Tender, the Letter of Acceptance, the Contract Agreement (if completed) and such further documents as may be expressly incorporated in the Letter of Acceptance or Contract Agreement.
 15. **“Construction Agency”** shall mean a person(s) named as Construction Agency in the letter of acceptance by the Client and legal successor in title to this person (s).
 16. **“Construction Agency’s Representative”** shall mean as Assistant of the Construction

Agency notified in writing to the Client/PMC by the Construction Agency from time to time.

17. **“Day”** shall mean a calendar day of 24 hours from midnight to midnight irrespective of the number of hours worked in any day.
18. **“Drawing”** shall mean the drawings enclosed in the bid document and any modifications approved in writing by the PMC/Client and any drawings issued from time to time and approved in writing by the PMC/Client. If During execution of work, there is modifications in drawing due to site conditions, the Construction agency has to execute as per the modified drawings provided to him and as directed by PMC/ Client and no extra payment will be made or any discrepancy will not be considered.
19. **“Plant”** shall mean every plant/equipment temporary and necessary or considered necessary by the Engineer to execute, construct, complete and maintain the works and used in altered, modified substituted and additional work ordered in the time and the manner herein provided and all temporary materials and special and other articles of appliances of every sort, kind and description whatsoever, intended or used therefore. The Construction Agency shall have all the plants/equipments that are necessary during execution work.
20. **“Schedule of rates”** or simply D.S.R/e-D.S.R/SSR, shall mean the Schedule of the rates of the District / State in which jurisdiction the work lies.
21. **“Tenderer / Bidder”** shall mean the one who has submitted its offer or participated in bid process of this Tender.
22. **“Site”** shall mean the lands, plot, and/or other places on which the works are to be executed under the contract which shall be allotted by Client/ Users or any other places as may be specified by the Client.
23. **“Structural Design Engineer (SDE)”** shall mean a person complying with the criteria stipulated in the Bid document and appointed by the PMC who shall carry out structural designs and prepare Good for Construction (GFC) drawings of all buildings in the said work/project. Construction Agency have to follow all the instructions given by him during execution of work.
24. **“Good for Construction Drawings”** shall mean the drawings prepared by the PMC and approved in writing by the Client.
25. **“Temporary works”** shall mean all temporary works of every kind required on site for the execution and completion of permanent works and remedying any defects, or maintenance of the works.

26. **“User agency”** shall mean any unit for whom work is carried out and who will be the end user of the Project (s).
27. **“Urgent works”** shall mean any measures which, in the opinion of the PMC/Client, become necessary during the progress of the works to obviate any risk or accident or failure or which become necessary for security of the work or the persons working, thereon.
28. **“Affordable Housing Project”** Housing projects where minimum 35% of the houses are constructed for EWS category.
29. **“Pradhan Mantri Awas Yojana (PMAY) - Housing for All”** Mission for urban area is being implemented during 2015-2022 and this Mission will provide central assistance to implementing agencies through States and UTs for providing houses to all eligible families/ beneficiaries by 2026.
30. **“Family Definition for Eligibility”** A Beneficiary family will comprise of husband, wife, unmarried sons and/or unmarried daughters. The Beneficiary family should not own a pucca house (an all weather dwelling unit) either in his/her name or in the name of any member of his/ her family in any part of India.
- An adult earning member (irrespective of marital status) can be treated as a separate household; provided that he/she does not own a pucca house (an all weather dwelling unit) in his/her name in any part of India.

31. Category wise guide for carpet area and Income limit

Type	Carpet area	Income limit
EWS	21 Sq.m to 30 Sq.m	Upto 3.00 Lakhs
LIG	Upto 60 Sq.m	3.00 to 6.00 Lakhs
MIG - 1	Upto 160 Sq.m	6.00 to 12.00 Lakhs
MIG - 2	Upto 200 Sq.m	12.00 to 18.00 Lakhs

2.2 ERRORS, OMISSIONS, DISCREPANCIES AND INTERPRETATIONS:

- a) In case of following errors and/or discrepancies a reference shall be made to Client/ PMC, whose elucidation, elaboration or decision shall be considered as final and binding on Construction Agency without any claim.
- i. Between actual scaled and written dimension or description on a drawing/s.
- ii. Between the written description and dimension in the drawings and corresponding in the specifications.

- b) In case of discrepancy between lump sum amount quoted in figures and in words.
- c) The special provision if any in scope of work shall gain precedence over corresponding contradictory provision (if any) in the detailed item specifications and standard specifications.
- d) Where the context so requires, words importing the singular only also include the plural and vice-versa.

2.3 TENDERER TO STUDY THE SITE CONDITIONS AND TENDER DOCUMENT:

- i. The Tenderer shall have before bidding be deemed to have visited and thoroughly studied the site carefully, examined and understood the nature of the said work, site conditions, foundation strata, the terrain, the climatic condition, water, electricity, resources, drainage connection, or drainage outlet points including availability of materials and labours, tax structure, applicable law, transport and communication facilities, the availability of land for right of way, temporary office and accommodations, quarters, and all other facts and facilities necessary or relevant for the formulation of the tender. Also the general and the special conditions, the specification schedules and drawings shall be deemed to have been studied by the tenderer and have fully informed himself regarding the local conditions and carefully gone through the PWD, M.J.P's standard specifications, PWD hand book, manual account code and the schedule of rate and carried out his own investigations at his own cost to arrive at the offer quoted in the tender.
- ii. In this regard tenderer shall refer necessary information given in this document/ drawings/ specifications. In no case shall the Client be liable for any, loss, claim or damage arising out of any discrepancy in such information.
- iii. In case there is any doubt/ omission regarding the wording in general conditions or the special conditions or the scope of work or the specifications and drawing or any other matter concerning the contract, the Bidder shall in good time, submit them to the Client to reach him before schedule pre-bid conference date and time in writing in order that such doubts can be clarified before submission of the Tender.
- iv. The clarification given by the Client, in respect there of, as well as, any further information which the Client shall chose to furnish to the tenderers in the form of Common Set of Deviation (CSD) shall form a part of the Tender. Any claim at a later date based on either incorrectness or inadequacy of the information/ data made available by the Client shall

not be entertained. The Client shall be fully free from blame and all liabilities in this regard.

2.4 BRIEF SCOPE OF WORK:

2.4.1 The work shall be carried out as per the tender drawings, document, specifications and instructions on site including supplementary and explanatory drawings issued during execution along with obtaining necessary permissions, No Objection Certificates (NOC), Completion Certificates, Licenses, etc.

2.4.2 Construction Agency have to obtain all the Statutory Clearance/NOCs from the concerned authority as and when required i.e. Town Planning, PWD, MSEDCL, Fire, Airport Authority, Civil Aviation, Heritage, Environment Department's approval, approval for water supply, drainage, electrical services or for any other services from the concerned authority etc. and no extra cost will be provided to Construction Agency.

2.4.3 The construction of all buildings shall be of Reinforced Cement Concrete (RCC) Frame Structure.

2.4.4 The detailed scope of work shall be as given in Chapter 1, 3, 5 and **Schedule 'B'** given in Chapter 6.

2.5 ASSISTANCE IN PROCURING PRIORITIES NOC'S, PERMITS, ETC:

The Client, on a written request by the Construction Agency, shall provide support in form of letters to the concerned authorities if found necessary. However, for the non-availability of such support or delay in this regard from the Client, no claims shall be entertained by the Construction Agency. The documents which form the part of the Contract will be the Tender Notice. Detail Tender Notice include Corrigendum to Tender Notice, instruction to tenderers, General Conditions of Contract, Specifications, Drawings, items of work, Special Conditions of Contract and Common Set of Deviation and other documents including acceptance of Tender and Construction agency's letter for acceptance thereof and work order, Guidelines of GoI, GoM, GR/ Circular or any relevant Documents for 'Housing For All' Pradhan Mantri Aawas Yojna upto date and release from time to time are/ will be the part of contract document.

2.6 CO-ORDINATION WITH AGENCIES:

- i. When several agencies for different sub-works on the project, work simultaneously on the project, there shall be full co-ordination and co-operation between different agencies to ensure timely completion of the whole project smoothly. The schedule dates for completion specified in contract shall therefore, be strictly adhered to the Construction Agency shall make his independent arrangement for water, power, housing, etc. However the Construction Agencies are at liberty to make mutual agreement and make joint arrangement with other agency with the approval of the PMC. The Construction Agency shall not cause any disruption, discontent or disturbance of work, labour or arrangement etc., of other agencies working in the project location. No extra payment shall be considered as charges for coordination with other agencies.
- ii. In case of any dispute, disagreements between the agencies, the Client's decision regarding the co-ordination, co-operation and facilities to be provided by the agencies shall be final and binding and such a decision(s) shall not vitiate contract neither absolve the Construction Agency of his obligations under the contract nor consider for any claim.

2.7 RELATION WITH PUBLIC AUTHORITIES:

The Construction Agency shall comply with all rules regulations by laws and directions given from time to time by any local or public authority in connection with this work and shall pay fees or charges which are levied on it.

2.8 TREASURE-TROVE:

In the event of discovery by the Construction Agency or his employees, during the progress of the work any treasure, fossils, mineral or any other article of value or interest, the Construction Agency shall give immediate intimation thereof to the Client and forthwith hand-over to the Client such treasure of things which shall be the property of the Council.

2.9 PATENTED DEVICE:

Whenever the Construction Agency desires to use any devices, materials or process covered by the letter of patent or copyright, the right for such use shall be secured by suitable legal arrangement and agreement with patent owner and the copy of their

agreement shall be filed with the Client if so desired by the later. The Construction Agency shall indemnify the Client against the claims by any party on account of any infringement or unauthorized use by the Construction Agency.

2.10 EXPLOSIVES:

- i. The Construction Agency shall at its own expenses construct and maintain proper magazines, if such are required for the storage of explosives for use in connection with the work and such magazine being situated, constructed and maintained in accordance with rules applicable. The Construction Agency shall at his own expenses, obtain such license or licenses as shall be necessary for storing and using explosive. Notwithstanding that the location, etc. or storage of explosive are approved by the licensing authority, the Client shall not be liable whatsoever in connection with storage and use of explosive on the site or any accident for use of such explosives.
- ii. Any hazardous materials brought on site by the Construction Agency, for the execution of the work, shall be the sole responsibility of the Construction Agency. The Construction Agency shall at his own expenses obtain such license as shall be necessary for storing and using such hazardous materials. The PMC/ Client shall not be liable whatsoever in connection with storage and use of such hazardous materials on the site or any accident involving the use of such hazardous materials.
- iii. The Construction Agency shall indemnify the Client, PMC and its respective employees, Directors and officers and agents from and against any claims, demands, loss, damage or expenses (including council fees and legal cost) relating to bodily injury or death of any person or damage to real and/ or tangible property directly caused by the use or storage of such explosives and hazardous materials by the Construction Agency.

2.11 QUARRIES

- i. Quarries are not available with the Council. The Construction Agency (s) shall have to arrange the same itself. Getting permission from Concerned Department or any statutory body shall be the responsibility of Construction Agency.
- ii. The Construction Agency shall maintain at his own cost the books, registers etc., required to be maintained under the relevant rules and regulations regarding quarrying and as directed by the Client. These books shall be open for inspection at all times by the

Construction Agency or his representative and the Construction Agency shall furnish the copies or extracts of books or registers as and when required.

- iii. Quarrying permission shall be directly obtained by the Construction Agency from the Collector of the District, concerned for which purpose the Council shall render necessary assistance. Royalty charges or any other taxes shall be borne by the Construction agency.
Note: Regarding royalty charges refer Clause No. 12.63 of chapter no.12 "Conditions of Contract".

2.12 ACCIDENT:

- i. In the event of an accident involving serious injuries or damages to human life or death of any of his employees and/or contract labours the same shall be reported forthwith to the nearest Police Station and within twenty-four hours of the occurrence to the Client and to the Labour Commissioner.
- ii. In case of fatal accident or serious non-fatal accidents, Construction Agency shall pay compensation to injured worker/dependents of deceased workers as decided by Labour Commissioner as per Workmen Compensation Act. The amount of compensation likely to be payable shall be kept under deposit by withholding that amount from running bills payable to the Construction Agency. Such amount shall be withheld till the final bills payable to Construction Agency and till the final decision is received from the Labour Commissioner whichever is later.
- iii. In case of sudden collapse of any structure or part thereof, due to faulty execution of work or due to lack of supervision or negligence from the Construction agency, he shall be entirely responsible for damage of lives of people, structure and any losses to the Client, etc.

2.13 POLICE PROTECTION

- i. For the special protection of labour camp of the Construction Agency and its equipment, etc., the Council will help the Construction Agency as far as possible to arrange for such protection with the concerned authorities, if so, requested by the Construction Agency in writing. The full cost of such protections shall be borne by the Construction Agency.
- ii. The Construction Agency shall also prevent the encroachment/ trespass, dumping of the waste/debris, unauthorized construction, whether permanent or temporary in nature, on

the common/open areas in the sites. The Construction Agency shall file a complaint in the concerned police station in this respect and it shall be Construction Agency responsibility to remove the same with the assistance of the Client on taking proper police protection.

2.14 PROTECTION / SHIFTING OF UTILITIES :

i. Identified utilities, where quantum of work is pre-determined

During the execution of work, the Construction Agency shall be required to deal with utilities such as underground/ overhead live or dead telephone cable, HT, LT electrical cables, poles, existing live/ dead water supply or sewer's lines etc. It shall therefore, be the responsibility of the Construction Agency to protect/ shift them carefully at his own cost as per the provisions in the contract. During shifting/ protecting these utilities, any damage whatsoever to these utilities shall be made good by him at his own cost, as directed by the Client and relevant authorities.

The Construction Agency should keep proper margin from the nearby drain/water body if any as per norms. In case if any drain is passing the plot; the Construction Agency has to rehabilitate it & it should be covered with RCC slab with proper drawings & design without any extra cost.

ii. Un-identified utilities.

During the execution of work, if the Construction Agency is required to deal with un-identified utilities such as underground live or dead telephone cable, electrical cables, water supply or sewer lines, etc. shall bring to the notice of Client and concerned department about the same. The Construction Agency shall protect/ shift them carefully as directed by the Client/agency. During shifting/ protecting these utilities, if any damage whatsoever to these utilities shall be made good by him at his own cost, as directed by the Client and relevant authorities.

iii. If any delay occurs on account of shifting of above stated utilities, and also cutting and shifting of trees and other structures obstructing the work, where permissions have been accorded by the relevant authorities for such removal or shifting, no compensation or extension on account of delay, shall be entertained.

2.15 WORKING METHODS AND CONSTRUCTION PROGRAMME

- i. a) The Construction Agency shall furnish to the PMC with the copy to the Client, within **15 days** from the date of work order, construction programme containing working layout plan bar chart PERT Chart, etc. in quadruplicate indicating the date of actual start, the monthly progress to be achieved and the anticipated completion date of each major item of work to be done by him, also indicating dates of procurement and setting up of plants and machinery. The programme shall be such as to be, practicable of achievement towards the completion of whole work in the time limit; the particular item on the due dates specified in the contract and shall have the approval of the Client. No revised programme shall be operative without such acceptance of the Client in writing. (The PMC is further empowered to ask for detailed programme say week by week, for any item or items, as will be directed by him including working method). The Construction Agency shall be responsible for maintaining the progress according to milestone laid down in Clause no. 12.12 of the contract.

The monthly progress report shall be submitted by the Construction Agency which shall include Physical Progress and Financial Progress of the project.

b) Format for Monthly progress Report will be supplied by PMC/ Client. Besides MPR following Mandatory compliance to be submitted by Construction Agency. Receipts of the Payments of Development Charges, Labour Cess, DPR Preparation & supervision charges to PDMC as mentioned in the tender document. Default in these Mandatory Compliance will be treated as default.

- ii. The Construction Agency shall deploy sufficient plant, equipment and labour as shall be necessary during execution to maintain the progress. The Construction Agency shall have to make his own arrangements for transportation and procuring plants and machinery required for the work. The working and shift hours restricted to one shift a day for operation to be done under the Council supervision shall be such as shall be approved by the Client. Night work that requires supervision shall not be permitted except when specifically allowed by Client each time, if requested by the Construction Agency. The Construction Agency shall provide necessary lighting arrangements and safety measures, etc. for night work as directed by the Client without extra cost.
- iii. Construction Agency shall erect batch mix plant fully automatic of required capacity as directed by PMC/ Client, computerized for preparation of Design mix concrete as per IS code at his own cost and shall prepare all concrete accordingly. Contractor shall approve

RMC plant from PMC/ Client.

- iii. Electric supply and water supply for construction purposes shall be arranged by the Construction Agency at his own cost including necessary connection and consumption charges. The Client shall however, render all reasonable assistance by way of recommendation only without no obligation/ liability.
- iv. Further the Construction Agency shall submit the progress report of work in prescribed forms, charts, statements, photographs on yammer, reports, etc. at periodical intervals as shall be specified by the PMC/Client.
- v. The Construction Agency shall maintain details regarding machinery, equipment, labour, materials, etc. as shall be specified by the PMC/Client and submit the same at periodical intervals as shall be specified by the Client.
- vi. The Construction Agency shall establish and operate SCADA from the date of work order till end of construction period. He shall also establish proper platform for keeping steel and construct cement godown for storage. Materials shall be stored in such a manner as to prevent damage, deterioration or intrusion of foreign matter and to ensure the preservation of their quality.

2.16 THE CLIENT AND HIS REPRESENTATIVE:

- i. The Client shall from time to time, in writing delegate to PMC any powers and authorities vested in the Client and shall furnish to the Construction Agency a copy of all such delegations of powers and authorities. Any written instructions of approval given by the representative of the Client to the Construction Agency within the terms of such delegation (but not otherwise) shall bind the Construction Agency.
- ii. Approval of any work by the PMC or any part thereof or materials shall not prejudice the power of the Client to disapprove such work or materials and the Construction Agency shall comply with the directions of the Client at any stage of the work without any additional cost.
- iii. The Client shall have full authority regarding inspection of the work and all such matters.

2.17 MANAGEMENT OF WORKS BY THE CONSTRUCTION AGENCY:

- i. The Construction Agency shall himself manage the work and engage authorized full time Project Engineer (possessing the qualification as mentioned herein) on the site capable of managing and executing the work and understanding the specifications and contract conditions. The Project Engineer shall take orders from the PMC/Client as he will be responsible for carrying out the work. The Project Engineer shall not be changed without prior permission from Client.

The Construction Agency shall deploy staff as given in table below:

Sr. No.	Minimum Qualification of Staff appointed by Construction Agency	Minimum Year of Experience	Duties / Responsibilities
1	Architect- G.D. Arch / B. Arch.	5 years	<ul style="list-style-type: none"> • Verification of layout, D.P. requirements drawings, location, dimension, etc. • Preparation of working drawing and getting approval of PMC/Client
2	Structural Engineer- M.Tech/M.E. (Structure)M.S. or equivalent)	5/10/15 years (as per site requirements)	<ul style="list-style-type: none"> • Verification of structural detailing shown in drawing, actual placing of reinforcement at site, sizes of RCC member,
3	Project Engineer- B.E.Civil, B.Tech. (Civil)	7-10 years	<ul style="list-style-type: none"> • Total management of project and completion within scheduled time period, furnishing Monthly progress report with photographs etc.
4	Site Engineer cum Quality assurance and quality control Engg. - B.E/DCE.	5 -7 years	<ul style="list-style-type: none"> • Quality and workmanship of work / material, progress of work as per Bar chart • Bar Bending Schedule (BBS) • Day to day check for work as per safety standards / Manual • Testing and keeping records of tests on site
5	Electrical Engineer- B.E./ DEE	5 years	<ul style="list-style-type: none"> • Supervision of all electrical work. • Verification of electrical load, material quality, testing etc.
6	Water supply and drainage Engineer- B.E.	5 years	<ul style="list-style-type: none"> • Verification diameter of pipes, material, quality, workmanship, necessity, etc.

7	Management Information System (MIS) / Planning Engg, B.E	5 years	<ul style="list-style-type: none"> • Planning, Daily Progress Report (DPR), Monthly Progress Report (MPR), etc. • Quantity Surveyor(QS), Cash Flow etc.
8	Supervisors, Safety Steward and curing supervisor as per Project requirement or as directed by PMC / Client.	3 years	<ul style="list-style-type: none"> • Survey Related Work • For day to day supervision of works

Notes:

- a. The staff at Sr. no 1, 2, 5 and 6 are already deployed by PDMC. Staffs at Sr. No. 3, 4, 7, 8 have to be deployed by Construction Agency for full time. The services of Architect and Structural Engineer shall be made available as per the Project requirements and shall be available for discussion/ meetings with the Client/ PMC.
- b. Construction Agency shall submit CVs of employees to Client regarding the above specified post or designation.
- c. The Construction Agency shall not change any key person(s) without the prior written consent of the Client. Any violation on this account shall attract penal action as decided by the Client against the Construction Agency.
- d. If staff as mentioned above is not appointed on site of work, the Client has full right to stop the work till appointment of such staff and also recover compensation from the Construction Agency equal to amount of salary of staff as determined by the Client till such staff is appointed. No claim or extension shall be entertained in the event of the same.
- e. Orders given to the Construction Agency's Project Engineer/ representative shall be considered to have the force as if these had been given to the Construction Agency himself. If the Construction Agency fails to appoint Project Engineer/ representative as directed by the Client, the Client shall have full powers to suspend the execution of the work until the Construction Agency appoints such a responsible Project Engineer/ representative. Delay so caused to the works shall not entitle the Construction Agency for any compensation or extension in the due date for completion of the work in this behalf.
- f. The Construction Agency shall inform the PMC/ Client in writing when any portion of the work is ready for inspection giving him sufficient notice in advance to enable him to

inspect the same without affecting the further progress of the work. An approval of materials or workmanship or approval of part of the work during the progress of execution shall not bind the PMC/Client or in any way affect him even to reject the work which is alleged to be completed.

- g. The Construction Agency shall provide at his cost, necessary ladders and such arrangements as to provide necessary facilities and assistance for proper inspection of all parts of the work at his own cost.
- h. If any staff of Construction Agency failed in his duties/ responsibilities at site of works then without any prior notice he shall be removed from site and Construction Agency shall deploy proper responsible technical personnel at site within 7 days. If not deployed by Construction Agency then Client can either deposit the fees or deploy other engineer/ engineers and the cost will be borne by Construction Agency's bill.

2.18 SITE ORDER BOOK:

A site order book shall be maintained on site and it shall be the property of Client and the Construction Agency should promptly sign orders given there in by the Client or his representative and comply with them. The Construction Agency shall report the compliance of the orders within the time specified by the representative of Client in the site order book. The blank site order book shall be maintained for this purpose. The site order books shall have triplicate pages. Original page will be retained at the site and other copies will be with PMC and Client.

2.19 LINE OUT OF THE PROJECT:

- i. The Construction Agency without any additional cost shall provide all labours, instruments and materials required for line out, surveying, inspection and give mark out as decided by the PMC/Client and as considered necessary for the proper execution of the work. The checking or inspection of any setting out of any line or level or work by Engineer or his representative shall not in any way relieve the Construction Agency of his responsibility for correctness thereof. The Construction Agency shall carefully protect and preserve all benchmarks, site rails, pegs and stones etc. used in setting out the work. Construction Agency shall be required to redo/ rectify or adjust the line of master layout and or of individual buildings any number of times till the PMC/Client is convinced about all bench marks in regard to correctness. The construction Agency shall be entirely and

exclusively responsible for the alignment, levels and correctness of every part of work and shall rectify effectually any errors or imperfections at his own expense.

- ii. The Construction Agency shall be permitted to erect sheds at his own risk and cost, if suitable vacant area of Client/ user is available for the purpose of his own structures for stores, offices etc. at places approved by the Client/ user. On completion of the work, the Construction Agency shall remove all the temporary structures erected by him and restore the site to its original condition.
- iii. The Construction Agency shall not use any land in the site either for cultivation or for any other purpose except that required for breaking or stacking or transporting stones, labour sheds, stores, for camping of machinery etc.
- iv. Construction Agency shall use proper survey instruments/ equipment's like Theodolite, Total station, etc. For lineout, layout marking, verticality, centre line, etc. at site of work.
- v. Prior to start of work, Layout, working plan shall be got approved from PMC/Client.
- vi. Layout, working plan shall inclusive indicative all locations of buildings, infrastructure, stacking of material, installation of machineries, cement godown, steel platform, storage of centering materials, labour tents, water supply, sanitary arrangement, site office, laboratory, sample room for materials, PMC's office, Construction Agency's office, Client site office, structures to be dismantled, structures to be retained, water bodies, source of water, drainage, source of electricity, substation, roads,STP, cementary, existing trees to be cut and replant, etc.
- vii. Prior to start the actual work at site, Construction Agency shall be aware of all necessary requisites, i.e. NOC's, permissions, source of water supply, source of electricity, dumping grounds for debris, collection of storm water, drainage, sewerage disposal, location, users requirement regarding shifting of existing facilities HT& LT line, use of materials from dismantled structures or disposal, use of top fertile soil for plantation source of metal/sand/ steel/cement/ bricks/ blocks, facilities for testing, etc.
- viii. Any works at site shall not start without intimation to Client/ PMC and User, works at site shall not be started in haphazard manner without approval to the work manual and layout, working plan from PMC/Client.

2.20 TESTING AND REJECTION OF WORK:

If it is found necessary from safety point of view to test any part of the structure, the test shall be carried out by the Construction Agency at his own cost. Defective work not meeting the specification of the contract is liable to be rejected at any stage by the Client. The Construction Agency on no account can refuse to rectify the defects merely on reasons that further work has been carried out. No payment shall be made for rectifications and additional tests required for this purpose to test the quality of works.

2.21 COMPLETION OF PROJECT:

The Project shall be considered as complete only if

- i. Water supply, drainage/ sanitary disposal and electricity supply, plumbing, fire fighting work, lift, etc. are fully functional and usable without defects and has obtained all necessary license.
- ii. Operational functionality of all the infrastructure in the project to the satisfaction of the Client/User.
- iii. All required NOCs for the completion of project has obtained.
- iv. Obtained full Occupation Certificate (O.C.) from the competent authority.
- v. The user has taken over possession of Project.
- vi. Completion certificate by PMC and Client.
- vii. Handing over the facilities to user and public works Department for maintenance on PRB.

2.22 HANDING OVER OF PROJECT:

It will be the sole responsibility of the Construction Agency to guard, maintain and make good damages if any till above condition are satisfied.

2.23 DISPUTES RESOLUTION IN BIDDING PROCESS:

- i. In the event of any disputes between the Tenderer and the Municipal Engineer/ PDMC regarding bidding process, execution, completion and handover of houses, the dispute shall be referred to the Chief Officer, MMC. The Chief Officer will examine disputes and claims of the Tenderer as are referred to it. The decision of Chief Officer shall be final and binding on the Construction Agency/ Municipal Engineer/ PDMC.
- ii. The bidding process shall be governed by and construed in accordance with the laws of

India and the Courts at Mehkar shall have exclusive jurisdiction over all disputes arising under, pursuant to and / or in connection with the bidding process.

- iii. In case of dispute land possession will be automatically comes under Client i.e. **Chief Officer, Municipal Council, Mehkar.**

CHAPTER NO.3**SCOPE OF CIVIL WORK IN THE PROJECT****3.1 SCOPE OF CIVIL WORK****3.1.1 The scope of work shall mainly comprise of**

- i. Construction of all building as per Tender drawing and Specification.
- ii. Construction of all other infrastructure as per Tender Drawing and all other allied activities to complete the project.

3.1.2 The scope of work shall include

- a. Site preparation such as dismantling of existing structures, cleaning, levelling of entire sites by cutting and filling including conveyance and disposal of any excess/unserviceable excavated, dumped and debris material to disposal field as directed by Engineer In charge. Removing / shifting HT & LT lines, electric lines, telephone lines, plumbing lines, drains, sewer lines, chambers, rain water harvesting, water bodies, etc. as per requirement and reconnecting the same to proposed service lines. Raised ground and ground level shall be taken as per contour on site and shall be filled by contractor approved material.
- b. Execution of all services like water supply, drainage, plumbing, sewerage system, rain water harvesting pit, sump, septic tank, OHT, compound wall, landscaping, levelling, electrification and all connected sub structures and super structures within the premises, as per bye laws and norms of the local bodies including making connections with the peripheral services after getting the services design approved from the local bodies/ Central/Ground Water Board or respective concerned authority. MMC's role shall be limited only to sign the application/ drawings / documents for submission to the local bodies in the capacity of the owner for approval. In case of water supply, drainage, sewerage, electrification, the responsibility of getting the scheme approved from service provider (Municipal Council/ULB/ or other) is included in the scope of work/ tender apart from internal and external water supply, sewerage & drainage lines to be laid to make the system of water supply, sewerage, drainage and electrification work fully functional and complete. The cost of connection of water supply lines, drainage, out fall sewer, sewer lines, electrical supply connection or other necessary supply connection from peripheral connection point shall be borne by Construction Agency. If in any case the required connections are not available then Construction Agency has to lay all connection up to nearest existing main line at its own cost. The cost of getting the services approved from the services provider as aforesaid and the services charges including supervision charges, if any, payable to the service provider shall be borne by Construction Agency. The cost of deficiency charges and rectifications of any defect at the end of the job is also to be borne by the Construction Agency.
- c. Construction of site office furnished about **50 m²** or more each (Construction agency, PMC, MMC) as shown in drawing with necessary infrastructure also includes latest laptop with internet modem for broad band connection facility, A3 color printer with photo copy machine, Steel almirah, executive table and chairs, water purifier including all electrical and plumbing

facilities, toilets for all staff, field laboratory / along with sample room (separate) about 50 m² for testing the materials with stipulated testing equipment as given in Chapter (3.3.3), etc. complete at his own cost. The Construction Agency shall maintain the site office, toilets, laboratory, sample room and other temporary structures erected by him in good and hygienic conditions till the completion of the project and shall dismantle the same after the successful handing over of the project.

- d. Excavation and disposal of all excess excavated material to municipal dumping ground or as directed by MMC/ PMC including loading, unloading and transportation etc., Soling, filling, anti-termite treatment, PCC, RCC, brickwork, plastering, painting, water proofing, flooring, skirting, dado, doors, windows, ventilators, structural works, roofing, elevation work, complete plumbing and electrical work and other miscellaneous works including all infrastructure required for the completion of all buildings as per the Tender drawings and specifications, etc. complete.
- e. Complete internal & external water supply, drainage and plumbing work, septic tank, sump, overhead tank, Sewerage Treatment Plant, RWH pit including fittings and fixtures, necessary pipe connections and chambers, electrical and plumbing fittings, pump set of required capacity, etc. as per tender drawings and specifications etc. complete.
- f. Complete external & internal electrification work to make it fully functional and operational etc. complete as per drawings, specifications, etc. complete.
- g. Construction and completion of all infrastructural and miscellaneous work, compound walls, Roads, pathways, development of landscaping work etc. complete as per detail drawing and specifications etc. complete.

Note:

The said work shall be carried out as per the tender drawings, document, specifications and instructions on site including supplementary and explanatory drawings issued during execution along with obtaining necessary permissions, No Objection Certificates (NOC), Completion Certificates, Licenses, from various competent authorities, including payment of all fees/ Government fees/ deposits/ charges/ penalties/ hardships/ fines, supervision charges/ any other charges etc. if any required to be paid to various local/public statutory authorities (such as Municipal Corporation, Council, MSEDCL etc. on behalf of Chief Officer, Municipal Council, Mehkar as a requirement and up to completion of this project including all contractual obligations/scope etc. within stipulated time period and to the complete satisfaction of Chief Officer, Municipal Council, Mehkar. The Construction Agency shall pay all taxes, royalties, GST, levies payable under the respective statues, building and other construction welfare Cess, RERA charges, administrative and other expenses, Cess, dues, statutory payments, other expenses of any nature at his own cost. All these expenses as mentioned above shall be paid by Construction Agency. The original receipts to be presented to MMC. The MMC may also require submission of the certificate of the PMC, the PMC and the user agency for release of regular payment & for their satisfactory verification, if necessary. No claim for extension in time limit will be considered against the delay in payment in any case. It is duty of Construction Agency to pay the said expenses duly on time.

3.1.3 Photographs & Installation of CCTV Camera:

The Construction Agency shall furnish the photographs in various angles and shall record the date of the work completed on photographs, to the satisfaction of the PMC/MMC, at every stage of Project. The Construction Agency shall install CCTV camera, and video conference facilities, etc. at site of work along with internet connection to observe the live activity of works in conference hall of MMC. The photographs of site shall be uploaded on yammer in first week of every month to verify the progress of work by MMC.

3.1.4 Official Secrecy:

The Construction agency(s) shall take whenever required, all necessary steps to ensure that the persons employed on any work in connection with this contract, are aware that the Indian Official Secrets Act, 1923 (XIX of 1923) applies to them and shall continue so to apply even after execution of such work under the contract.

3.2 WORK SPECIFICATIONS:

- 3.2.1** The whole work shall be carried out strictly in accordance with the Tender drawings (unless otherwise directed by the MMC), description of the items in Schedule-C and the detailed specifications in the Standard Specification Book of the Public Work Department & as per Indian Standard Codes and additional specification in Chapter 13 of this document.
- 3.2.2** The Construction Agency shall not claim for any extra payment for any modification in structural and working drawings and in specifications due to site condition during execution process.
- 3.2.3** The MMC/ PMC shall have power to make any alteration in, or addition to the original specifications, drawings and instructions that may appear to him necessary or advisable during the progress of work and the Construction Agency shall be bound to carry out the work in accordance with the instructions given to him in writing signed by MMC/ PMC without any extra payment and no claim shall be entertained.
- 3.2.4** Detailed specifications given in the Schedule-C are the specifications for items to be executed.
- 3.2.5** All items of work, part of work or work itself shown either on drawings or mentioned in tender document or vice versa are to be executed by the contractor. Non-appearance of any of the item either in the drawings or in the tender or vice versa shall not vitiate the scope of work or contract.
- 3.2.6** The Construction Agency has to obtain electric and water connection as directed by MMC/ PMC at his own cost including obtaining necessary approval and NOCs as required from the concerned authority.
- 3.2.7** During construction of works, the Construction agency(s) shall make all necessary arrangements, at his own cost, for proper drainage of the site by providing pipe, channels, crossings, etc. as may be required according to the directions of the PMC/MMC. The Construction Agency shall submit to the PMC/MMC, proposals for ensuring the drainage of

the site by taking into consideration the final drainage plan proposed in the project and for carrying out the works in the manner approved by the PMC/MMC.

3.2.8 The Construction agency(s) shall keep the site free from any encroachments. He shall be required to take, at his own cost, measures to protect the site from any encroachment and keep the site free from all encumbrances till final completion of work and handing over the site to the MMC and or concerned authorities (i.e. user, PWD).

3.2.5 DISCREPANCIES IN DRAWINGS OR SPECIFICATIONS:

- a) The drawings and specifications are to be considered as mutually explanatory to each other, and mutually supportive of each other, with the detailed drawing being followed in preference to small-scale drawings, and figured dimensions in preference to scale, and the special conditions if any, in preference to general conditions.
- b) In the event any discrepancies appear, as to the materials or the due and proper execution of the work, or as to the measurement or quality and valuations of the work executed under this contract, or as beyond the scope of work, there upon, the same shall be referred to the MMC and the MMC's decision shall be binding upon the Construction Agency and the Construction Agency shall execute the work according to such decision (subject as aforesaid) and without extra charge and shall also perform all such works and things as may be necessary for the proper completion of works as implied by the drawings and specifically shown and described in the said drawings and specifications.
- c) **USE OF ISI (Indian Standards Institute) SPECIFICATIONS:**
In case where no particular specifications are given for any articles to be used under the contract, the relevant specification as per the Indian Standards Institute or National Building Code, U.K., U.S.A. or any other international standards, as may be approved by the MMC, shall apply. In case, IS specifications are not available, the decision of PMC/MMC shall be final.

3.2.6 MISSING ITEM / SPECIFICATION / WORKS:

The Construction Agency shall bring to the notice of the MMC/PMC, any missing item of construction activity or specification which in its view, is absolutely necessary for the completion of work and/or if any material of particular make/brand as mentioned in the approved list of material is not available, then same shall be brought to the notice of the MMC/PMC. After the due notice as above, the MMC/PMC shall give decision and the MMC/PMC's decision shall be binding upon the Construction agency. The Construction Agency shall execute the work as per the direction of MMC/ PMC.

3.2.7 ADDITIONAL/EXTRA WORK DURING DUE COURSE OF CONSTRUCTION:

The Construction Agency shall carry out the additional or Extra work other than those mentioned in the Contract if it is ordered by MMC in writing in due course of construction or even after completion of work as found necessary by the MMC. In case, Construction Agency requests for upgradation of specification and / or change in specification having equivalence;

Chief Officer may allow on request through PDMC provided no change in sale price of units. PMC/ MMC also have the power to upgrade the specifications equivalent to the original specifications provided no change in sale price of units.

3.2.8 DELETED / ADDITIONAL ITEM OF WORK DURING DUE COURSE OF CONSTRUCTION:

The work which are not carried out by Construction Agency as specified in contract and for which the lump sum offer has been quoted by the Construction Agency or if the MMC has informed in writing to the Construction Agency for deletion of particular item of work and directed for new item of work to be performed instead, due to change in scope of work or specification or by any reasons whatsoever, then MMC shall adjust the amount to be paid against the new item, with the amount of the deleted item of work at the current schedule of rate and thereby pay the differential amount for new item of work based on the current SSR of the division in which work lies along with actual rate.

3.3 MATERIALS AND SAMPLES

3.3.1 The samples of each class of material shall be got approved from the Engineer prior to its actual use. All material which cannot be tested in the field laboratory shall be got tested from designated Laboratory such as Govt. Engineering Colleges, National Test House, MHADA Laboratory etc., and at specified codal frequency, as directed, and the Construction Agency shall bear all prescribed charges for the same. Also, material which can be tested in the field laboratory at specified codal frequency, at least 30% samples shall be got tested from designated Laboratory, as directed and Construction Agency shall bear all charges for the same as per prescribed. The MMC/ Engineer is empowered to reject or approve materials based on test report and his decision shall be final and binding on the Construction Agency and no disputes in this regard shall be entertained. Testing Report of authorized laboratory shall be produced prior to actual use of material at site of work, sample material shall be certified by PMC and ensure that the same material shall be allow and use at site of work for all the purpose of items in construction activities. Construction Agency is sole responsible for the material at site of work and to ensure use of such materials for the construction and it should be approved by PMC.

3.3.2 All materials and workmanship shall be as prescribed in the contract and shall be binding subjected from time to time, to such tests as the Engineer may direct at the place of manufacture of fabrication, or on the site or at such other place or places as may be specified in the contract. The Construction agency(s) shall provide required assistance, instruments, machines, labor and materials for examining, measuring and testing of the quality, weight or quantity of any material to be used and shall supply samples of such materials before in Council in the works as may be selected and required any by the Engineer, without any additional cost.

3.3.3 SAMPLES AND TESTING OF MATERIALS:

- i. All materials to be used on work shall be got approved before starting of the work from the PMC/MMC and shall pass the test and/or analysis required by it, which will be,

- a) As specified in the specification for the items concerned and /or
- b) Bureau of Indian Standards specifications (whichever and wherever applicable) or
- c) Such recognized specifications acceptable to the MMC.
- ii. The Construction Agency at his own cost shall establish fully equipped Field laboratory and sample room of about 50m² at site to carry out the routine tests of materials, which are to be used on the work. The tests shall be carried out in the field laboratory. At least 30% tests shall be carried out in nearest quality control laboratory authorized by state or central government or any other laboratory approved by the MMC and shall submit the test reports to the PMC/MMC. The Construction Agency shall supply all materials and install equipment, testing machines as per table below. No bills/ Certificate shall be prepared without approved test report as per frequency of standards and certified by PMC. The Construction Agency shall employ sufficient plant, equipment and labor as may be necessary to maintain the progress schedules. The Construction Agency shall engage a well experienced Lab assistants and Lab In- Charge (resume to be approved by PMC/ MMC) for conducting day to day tests as per BIS specifications. All necessary codes shall be kept in laboratory. The testing charges of all materials shall be borne by Construction Agency.

EQUIPMENT FOR FIELD LABORATORY:

	Slump Cones/ Slump Test apparatus and air meter	2 Nos.
	Cube Moulds	36 Nos.
	Vicat apparatus cement consistency and setting time	1 No.
	Oven including set of pans	1 No.
	Standard measures of 30, 15 and 3 liters	1 No.
	Water Bath	1 No.
	Thermometer	1 No.
	Automatic Compression Testing Machine (CTM)	1 No.
	Digital Weighting Balance	1 No
	Water Testing kit for pH value, Sulphur etc.	1 No
	Spring Balance	1 Nos.
	Set of I.S. Sieves (Coarse & Fine)	1Set each
	Silt Measuring Jar	3 No
	Total Station	1 No
	Auto Level	1 No
	Micro-meter	2 No
	Vernier Caliper	2 No

The Construction Agency shall, at his own risk and cost make, all arrangements and /or shall provide all such facilities as the PMC/MMC shall require for collecting, preparing required number of samples of the material to be used in the works, for test or analysis at such time and to such places as shall be directed by PMC. The Construction Agency shall arrange testing as required by the codes and specifications at his own cost. Testing shall be done in the presence of authorized representative of the MMC/PMC at the nearest approved laboratory. If additional testing other than as required by the specification is ordered by the MMC, the testing charges

shall be borne by the Construction agency.

- iv. The Construction Agency or his authorized representative shall remain present in designated laboratory authorized by the MMC while testing the samples furnished by him. The results of all the tests carried out in such laboratory shall be binding on the Construction agency.
- v. The Construction Agency shall if and when required, submit at his cost the samples of materials to be tested or analyzed and if so directed, shall not make use of or incorporate in the work any materials represented by the samples until the required tests results or analysis have been made available and the materials finally accepted by the PMC / MMC.
- vi. NDT (Non-Destructive Testing): - Minimum of five (5%) of structural elements shall be tested by non-destructive test, such as ultrasonic test, pulse velocity test IS 1331, Part I and rebound hammer test IS 1331 part I and rebound hammer test IS 1331-part II probe penetration and maturity test. (As per clause no. 13.4 of Chapter 13 of this document.)
- vii. The Construction Agency shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measure required to be taken on account of unsatisfactory test results.
- viii. Mix design of concrete shall be obtained from laboratory approved by MMC/ PMC. The cement consumption for controlled concrete shall be as per mix design of concrete as approved by MMC/ PMC.
- ix. If at any stage of the works, it is found necessary from a safety point of view to test any material and / part of the structures constructed by the Construction agency, the test shall be carried out by the Construction Agency when so directed by the Engineer/MMC at its own cost and risk.
- x. Following Test Abstract duly signed shall be submitted by Construction Agency / PMC.

Sr. No.	Item	Quantity (Cum/Nos)	Test required as per standard Specification	Test carried out (Nos)	Test		PMC's Remark
					Passed (Nos)	Failed (Nos)	
Construction Agency Signature				Signature of PMC			

- xi. The payment for the work done shall be subjected to submission of the Quality Control (QC) results compliant to the requirement.

3.3.4 All samples shall be supplied by the Construction agency(s) at his own cost.

3.3.5 The approved samples of materials such as tiles, door window fixtures, water supply and sanitary fixtures etc. shall be duly signed by PMC/MMC and Construction Agency or his Project Engineer and shall be kept in sample room for reference. Up to completion of the

project all samples shall be under the control of PMC for the purpose of execution at site upto the completion of the project.

- 3.3.6 The cost of carrying out any test shall be borne by the Construction agency(s) as and when required so as to ascertain quality of work executed/ to be executed.
- 3.3.7 All sanitary and water fittings and pipes etc. shall be tested and their size and pattern shall confirm to the latest Municipal Bye-laws. This part of the work shall be carried out through a licensed plumber according to latest standard practice and as per the Municipal Bye-laws applicable in the area.
- 3.3.8 The Construction agency(s) shall inform in advance in writing the dates of casting of slab to the PMC / MMC and shall fix the programmed for the same with the approval of the MMC. Any change in programme shall also be intimated, in writing, in time, to the MMC/PMC.
- 3.3.9 The Construction agency(s) shall give hydraulic and smoke tests for all pipes and fittings and glazed stoneware pipes, as directed without any extra cost.
- 3.3.10 The terrace slabs of all buildings, Porch slab, W.Cs., baths, sunk, toilets, top slab of staircase cabins, overhead water tanks, slabs of all floors etc. must be thoroughly leak proof. Ponding Test in this regard shall be certified by PMC and submitted to the MMC prior to submission of bills along with photographs.
- 3.3.11 Proper rain water drainage arrangement shall be ensured and certificate in this regard shall be produced duly signed by the Construction Agency and PMC to the MMC. Proper rainwater protection shall be ensured to avoid leakages, seepages, dampness, etc. Certificate in this regard duly signed by Construction Agency and PMC shall be submit to the MMC.
- 3.3.12 The Construction Agency shall give additional bank guarantee before completion of work, for water proofing and anti-termite treatment equivalent to 1% each of estimated cost of these items valid from the date of completion of the whole project up to end of 5 years. In case of leakage /dampness is observed the Construction Agency shall immediately start and complete the repair work and complete the same to satisfaction of the PMC/MMC within 15 days of notice of any leakages. If the Construction Agency fails to do so then the Bank Guarantee as above shall be encashed by the MMC for rectifying the work. However, no refund shall be payable to the Construction agency, even if the cost incurred on rectification is less than Bank guarantee amount for waterproofing and anti-termite treatment. (Refer clause 9.7 (i) and (ii) of chapter 9 of this document)
- 3.3.13 For residential building project, sample flat of each building should be completed in all respect within two months period after completion of third slab of any one building. If Construction Agency fails to complete sample flat then Rs.1,00,000/- (Rupees One Lakh Only) per month will be recovered from the Construction agency.

3.4 INFRASTRUCTURE AT SITE AND UPTO SITE:

- 3.4.1 Infrastructure to be provided by the Construction Agency (s) at his costs shall include the following works.
- a) To make available potable water and electricity for construction purpose. (Specify sources)

- b) Temporary Access roads, Cross Drainage Works, etc. if required as per by-laws of the local authority for the site.

3.4.2 INFRASTRUCTURE TO BE PROVIDED AS PER CONTRACT

- a) Water supply distribution network within the campus including water meter, valves, meter room, fencing, etc. complete as per approved standards and network designs.
- b) Sewerage system as per approved standard and network design including connecting to main sewer line, septic tanks or Sewerage Treatment Plant, soak pits, Storm Water System etc. as the case may be and as per approved drawings.
- c) Tapping the power supply at source from nearest fiddler panel source as per drawings and as available on site. Street Lighting as per Electrical supply company standards and as approved by the competent authority.
- d) The Construction Agency (s) shall obtain permissions/approval from local Municipal Council and other authorities like PWD, Z.P, MIDC, MMRDA, Director of Town Planning, MIDC, etc., as the case may be, for infrastructure up to the plot under reference and shall ensure timely provision of such infrastructures within the contract period.

3.5 COMPLETION AND HANDING OVER

- 3.5.1 Project shall not be considered as complete, unless all items in schedule “C” are completed along with additional items if instructed and all works as shown on drawings along with additional details issued at the time of execution, modifications in drawings and specification details if any and instructions given on site by the PMC/MMC from time to time and confirmed in writing. Electric and water supply to the building is commissioned i.e. to say that the work complete in all respects to make the building ready for use and occupancy including all infrastructural amenities.
- 3.5.2 Before handing over the buildings and the site to the MMC, the Construction Agency (s) shall obtain certificate (whichever is applicable) for – (a) Completion of buildings; (b) Building occupancy; (c) Malaria Department;(d) Debris material removal(e)Assessment; and (f) Fire safety, from the Government authorities and certificate from other authorities, like M.I.D.C., M.S.E.D. Co. Ltd. & Handing and taking over certificate of P.W.D. Civil & P.W.D. Electrical, etc.

3.6 GREEN BUILDING

Green building refers to both a structure and the application of processes that are environmentally responsible and resource-efficient throughout a building’s life-cycle: from planning to design, construction, operation, maintenance, renovation, and demolition.” This requires close co-operation of the contractor, the architects, the engineers and the MMC at all project stages as such following issues shall be taken care of:

- i. Preserve and Protect Landscape: - If there are existing grown up trees on site then protection and preservation/ replantation of trees.

- ii. Soil Conservation.
- iii. If top soil is fertile then shall be removed and stack separately and later on shall be use for landscaping/plantation work, etc. balance soil if any shall be disposed of as directed by PMC/MMC.
- iv. Provision of drinking water, healthy and clean-living conditions and sanitation facilities shall be provided for workers.
- v. Reduction in air pollution during construction: - Measures to be taken on site to reduce air pollution.
- vi. Efficient water use during construction: - The water used by the Construction Agency shall be fit for construction purpose to the satisfaction of the Engineer In charge.
- vii. Building shall be designed in compliance with NBC code in order to be user and liable friendly.
- viii. Minimize use of ozone depleting substance.
- ix. Waste water treatment.
- x. Waste recycles and reuse.
- xi. Reduction in waste during construction.
- xii. Resource recovery from waste.
- xiii. Maximum use of Natural Resources to minimize the cost of operation and maintenance (i.e., sunlight, wind flow, rain water etc.)

3.7 DEFECTIVE WORK AND DEFECT LIABILITY PERIOD (DLP):

The term “Defect” includes imperfection, inadequacy, lack in supervision, mistakes and errors in work, shortfalls, shortcoming and faults and flaw in execution, use of substandard and non-approved material, imperfect fixing of material, improper fixtures and fittings, unsatisfactory quality and workmanship, dampness and leakages; works not in line and level, interrupted electrical supply, choke-up of drainage, defective water supply line(s), inspection chamber(s), defective storm water drain(s), incorrect camber and gradient of road, etc. and all the work which is not considered to be satisfactory by the PMC / MMC.

The Construction Agency shall be liable to carry out the rectification or replacement of defective work / material within a period of 15 days from the date of notification of such defect by PMC/MMC, falling within the above definition during defect liability period of 10 (Ten) years from the date of virtual completion of work duly certified by PMC and accepted by MMC. After completion of project, if user points out any defect orally or in writing to the MMC, such defect shall be rectified by the Construction Agency within 15 days. If Construction Agency does not rectify or attend such defects then action shall be taken against the Construction agency.

After rectification, appropriate certificate from PMC regarding rectification of defects is essential.

However, after completion of the project, if buildings are not taken over by user in that case the date certified by PMC and accepted by MMC shall be considered as deemed to have been completed.

The deemed date of completion shall be considered as basis for computation of defect liability period.

3.8 EQUIPMENTS / MACHINERIES:

Construction Agency shall provide the following Equipment's / Machineries at project site at the time of construction. The list is as below:

Sr. No.	Equipment / Machine	Nos.
1	Fully Automatic micro processor based PLC with SCADA enabled reversible Drum Type Mixer / Concrete Batch Mix Plant	01
2	JCB	01
3	Transit Mixer	02
4	Bar Cutting Machine	02
5	Dumper or Tractor	02
6	Concrete Boom Pump or Simple pump	01
7	Compactor	02
8	Needle Vibrator 60 mm/40 mm/25 mm	04
9	Water Pump Minimum 5 HP Capacity	02

CHAPTER NO. 4
STRUCTURAL DESIGNS OF BUILDINGS.

General description regarding parameters incorporated in the design shall consider the following requirements:

4.1 GENERAL REQUIREMENTS:

- i The Construction Agency shall construct the buildings on the site and construct all other infrastructure facilities as per the scope given in the contract.
- ii The Construction Agency shall be fully responsible for safety, strength and durability of the structures.
- iii The Construction Agency shall carry out necessary investigations and surveys to develop intimate knowledge of the site condition, availability, approaches to the sites, etc. This shall also include taking of trial pits, trial bores, Plate load test, testing of soils, obtaining test results from approved government laboratory, etc.
- iv All concrete used for structural RCC members shall be Design Mix concrete and minimum grade of such concrete shall be of **M25 Grade**.
- v Post Tensioning work shall be strictly carried out only as per drawings, specifications provided to him during execution, relevant IS Codes and strictly as per the direction and instructions of Structural Engineer.
- vi **If The SBC is less than 15 T/m² then either pile foundation or Raft Foundation shall ordinarily be adopted. If the SBC is in between 15 to 40 T/m² then choice of other suitable foundation shall be adopted only with prior approval of Client & Structural Designer.**
- vii It shall be economical.
- viii It shall ensure soundness of design and strength and durability of the structure, based on designs on requirement of adequate strength and satisfactory serviceability.
- ix It shall ensure speedy and easy construction and lead to appreciable economy.
- x It shall maintain the aesthetics as per the Architect's Plans and Architectural beauty as a whole. Architectural Plans/ drawings shall be consonant with structural soundness based on designs requirement of adequate strength and stability.
- xi The necessary certificate of structural stability shall be given by the Structural

Engineer, before issue of completion certificate by the PMC.

4.2 RESTRICTION ON TYPE OF STRUCTURES:

- i Structures, which require material for which foreign exchange is required.
- ii Structures, which require floating columns to be avoided.
- iii Cantilevers of Span more than 3 meters.
- iv Structural configuration with soft storey/ weak storey.
- v Configuration inducing large torsion in horizontal/ vertical planes.

If any variation in above conditions then prior permission of Client must be taken.

4.3 REQUIREMENTS AND DATA:

- i The designs of building, number of storeys and other details shall be based on Architect's drawings and satisfying prevailing by-laws of Local Municipal Authority.
- ii If there is any vertical expansion in future, the design shall cater for that expansion.
- iii If there is any horizontal expansion planned in future, provision for the same shall be made by way of providing expansion joints, combined footings, etc. or other provisions required for the same. Foundation near such joints also shall be designed accordingly taking this factor into account.
- iv The parameters as mentioned below, which will affect the designs, shall be considered, while carrying out the designs.

a) Location of building (Coastal / Non Coastal).	
b) Exposure to environments as defined in I.S.: 456-2000.	
c) Seismic zones for which the designs are to be prepared (This shall be as per seismic zone given in I.S.:1893-2002.	
d) Seismic co-efficient to be adopted (As applicable in 'C' above) for static Method of analysis as per I.S.: 1893-2002.	
e) Importance factor as defined in IS:1893-2002.	
f) Type of foundation proposed [Depending upon the height of the building and S.B.C. of foundation strata.]	
g) Presence of sulphate, chloride and other harmful chemicals in the sub-soil as per test results and measures proposed to obviate their effects.	
h) Bearing capacity of founding strata (shall be got	

Approved by Field Executive Engineer of concerned work.)	
i) Depth of founding strata below finished ground level.	
j) Values of K1, K2, K3 factors required to calculate design wind speed as per I.S. 875-1987 (Part - 3).	
k) Type of anticorrosive treatment.	(to be approved by Client)

4.4 VERIFICATION OF SURVEY DATA:

The following items shall be included in the scope of work of the project:

- i The Construction Agency shall verify the relevant data from the tender document such as detailed land records and topographical surveys of the site at suitable contour intervals, boundaries of the site. It shall be got re-measured and authenticated by the District Inspector of Land Record (D.I.L.R.). If earlier fixed boundary stones are moved/ missing, and ensure existing public utility service lines, existing streets/accesses in relation to the site, adjoining services, i.e. water supply, sewerage, roads and street lights, cemetery, nallahs etc. with respect to adjoining plots.
- ii The Construction Agency shall carry out layout of buildings and roads in consultation with the PMC before commencement of any work and ensure that the roads and buildings are fitted within the plot and also match properly with existing roads, road levels, drainage invert levels, etc. The entire proposed work of layout and levels shall be got approved in advance from the PMC.
- iii The Construction Agency shall carry out all engineering investigation, i.e. SPT, Plate Load Test according to BIS before the execution of foundation work, for verification of SBC, soil tests and such other tests required for providing essential design data from subsoil conditions before starting foundation work. Foundation shall be designed on the basis of approved SBC on the site of work. Required numbers of trial pits and bore holes shall be taken as per relevant IS codes on soil investigations. The bore holes shall be made up to the required depths as per IS: 1892. Construction Agency shall fully satisfy himself regarding soil testing and soil conditions. Water level in the bore shall be determined in accordance with IS: 6935.

4.5 OBLIGATORY PROVISIONS:

- i The Building shall be of conventional cast in situ RCC structure wherein conventional form work shall be used to monolithically cast the typical floor column/ shear walls/ non-structural walls, beams & columns as per design and drawings. Plywood formwork shall be used for all floors as per design of building which ensures accuracy, speed and quality of work.
- ii Because of the possibility of reversal of shears in beams, due to the earthquake forces shear reinforcement shall be provided in the form of vertical stirrups only as they will be effective both for upward and downward shear. Closely spaced stirrups are preferable.
- iii Design of structural components shall conform to the criteria laid down in the latest editions of the following IS Codes of Practice and Standard specifications published up to the last date of receipt of tender form subject to the departures stipulated.

i	IS:432 (Part I)	Mild steel and medium tensile steel bars and hard drawn steel wire for concrete reinforcement.
ii	IS:456	Indian Standard code of Practice for plain and Reinforced Concrete Fourth Revision.
iii	IS:800	Indian Standard code of Practice for use of structural steel in General Building construction.
iv	IS:875 All parts	Indian Standard code of Practice for structural safety of Building :Loading standards.
v	IS:1080	Indian Standard code of Practice for design and construction of shallow foundation in soils other than raft, ring and shell.
vi	IS:1642	Code of practice for fire safety of buildings General.
vii	IS:1643	Code of practice for fire safety of buildings General :(Exposure Hazards).
viii	IS:1644	Code of practice for fire safety of buildings General :(Exit Requirements and personal Hazards.)
ix	IS:1786	High strength deformed bars and wires for concrete reinforcement.
x	IS:1892	Code of practice for subsurface investigation for foundations.
xi	IS:1893	Criteria for earthquake resistant design of

		structure.
xii	IS:1904	Indian Standard code of Practice for structural safety of Building:Shallow foundation.
xiii	IS:2502	Code of Practice for Bending and Fixing of Bars for Concrete Reinforcement.
xiv	IS:2911 (all parts)	Code of practice for Designs and construction of pile foundation (All parts).
xv	IS:2950	Indian Standard code of Practice for design and construction of Raft foundation.
xvi	IS:3370 All parts	Code of practice for concrete structures for storage of liquids (All parts).
xvii	IS: 1343	Code for prestressed concrete.
xviii	IS:3414	Indian standard for Designs and Installation of joints in buildings.
xix	IS:3792	Guide for heat insulation of non industrial buildings.
xx	IS:3935	Code of practice for composite construction.
xxi	IS:4326	IndianStandard code of Practice for Earthquake resistant design and construction of buildings.
xxii	IS:6935	Method for determination of water level in a bore hole.
xxiii	IS:13620	Fusion bonded epoxy coated reinforcing bars.
xxiv	IS:13920-1993	Code of practice for ductile detailing of reinforced concrete structures subjected to seismic force.
xxv	IS:14893	Non-destructive integrity testing of piles (NDT) – Guidelines.
xxvi	IS:15916	BuildingDesign and Erection Using Prefabricated Concrete - Code of Practice.
xxvii	SP:7	National Building Code of India.
xxviii	SP:16	Designs aids for reinforced concrete to I.S . 456-2000.
xxix	SP:22	Explanatory Handbook on codes for earthquake engineering.
xxx	SP:24	Explanatory Hand-Book on I.S.456-2000 Code of practice for plain and reinforced concrete.
xxxi	SP:26	Explanatory handbook on Masonry code.
xxxii	SP:34 (S&T)	Handbook on concrete reinforcement and detailing.
xxxiii	SP:34 (1978)	Handbook on concrete reinforcement and detailing.

xxxiv	SP:22-1982	Explanatory Handbook on codes for earthquake engineering.
xxxv	IS:2502-1963	Detailing of reinforcement.
xxxvi	IS:1904-1986	Structural safety of building shallow foundation.
xxxvii	IS:1911-1967 IS:875-1964	Unit/Weight/loads.
xxxviii	IS:4326-1993 IS:1893-1984	Code of practice of design and Construction of earthquake resistant construction.
xxxix	SP:26-1984	Explanatory handbook on Masonry code by Bureau of Indian Standards.
xl	IS:456-2000	Code of practice for plain reinforced concrete.
xli	IS:1904-1968 IS:2911-1979	Element design.
xlii	IS:3370 (Part-I, II and III)	Water retaining structure. (Part I, II, III)
Note: The above list given is representative only and not exhaustive.		

- iv For special provisions, like shells, folded plates, prestressed concrete, pre-cast elements etc., relevant I.S. Codes shall be followed. For aspects which are not covered by these codes or any other I.S. Codes available, relevant A.C.I./British Standard Codes may be referred too. As for the stipulations which are not dealt with in any of these codes, the decision of the Client concerned shall be final and binding.
- v The diameter of steel, no. of bars, spacing of steel and stirrups, development length of steel, curtailment of steel, ductile detailing of steel etc. shall be strictly according to I.S. codes if it is mentioned wrongly in drawings.

4.6 EXPANSION JOINTS:

Expansion joints shall be design strictly as per relevant IS codes and drawings shall be got approved from Client.

4.7 REINFORCEMENT STEEL:

Steel shall be obtained from original steel manufactures company only such as SAIL, TATA, JSW, RINL, Rashtriya ISPAT Nigam Ltd., Essar, Arcelor Mittal original manufacturer company as approved by Client.

4.8 CERTIFICATION REGARDING CENTERING AND STEEL CHECKING :

- i. Certificate of centering shall be given by Structural Design Engineer/ Project Management Consultant.
- ii. Certificate of steel checking shall be given by Structural Design Engineer/ Project Management Consultant.No concrete work shall be started without submission of such certificates.

4.9 NON DESTRUCTIVE TESTING:

In case of building if **future expansion** is proposed, structural safety of existing structures shall be verified by condition survey with all possible tests, including NDT (Non Destructive Testing) and the results shall be got approved from the approving authorities and then shall be used for design purpose.

4.10 STRUCTURAL STABILITY CERTIFICATE:

shall be submitted duly signed by Structural Consultant & Project Management Consultant after verifying all structural item after completion of building project.

CHAPTER NO.5
SCOPE OF ELECTRICAL WORK

5.1 BRIEF SCOPE OF ELECTRICAL WORK

- i All electrical work shall be done through Licensed Electrical Construction Agency (JV or Sub Construction Agency) including preparing documents for submission to Electricity Supply Company and for obtaining necessary Electric Load. Also shifting of the existing LT/HT line in the premises, if any, before the starting of the civil work, inspection and approval on completion from Electricity Supply Company/PWD and obtaining completion certificate from Electricity Supply Company. Installing and commissioning of the energy meters.
- ii The MOU shall be signed between Civil Construction Agency and Electrical Sub Construction Agency before the start of electrification work. Copies of MOU shall be submitted to Client/PMC. Appointment of Licence holder Electrical Sub-Construction Agency shall be got approved from Client.
- iii Supplying, Erecting, Testing and Commissioning various items as per drawings and specifications, conditions and detailed scope of the works, categorized under electrical portion and also carrying out allied works so as to complete work in all respect and put it into desired beneficial use.
- iv The electrical works includes complete internal and external electrifications in all respect. The internal electrification works include point wiring, erection of mains, erection of sandwich busbars, wires/cables, plugs, sockets, ceiling roses, holders, distribution switch boards and accessories, five star ceiling fans, LED tube light fittings, distribution board with MCB, RCBO, MCCB all types of LED tube lights, wall LED lights and lamps, etc. The internal electrification works shall be carried out taking into consideration safety aspects and aesthetics of the interiors of the buildings.

5.2 GENERAL CONDITIONS:

5.2.1 Statutory Provisions

Statutory provisions from following acts, rules, and regulations relate to electrical portion of works. Execution of work shall comply with related provisions from act, rules,

and regulations respective to the work. Observance of same will be binding and will be sole responsibility of the Construction Agency.

- Electricity Act 2003 Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010 as amended up to date.
- Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations 2010 as amended up to date.
- Central Electricity Authority (Safety requirements for construction, operation and maintenance of electric plants and electric lines) Regulations 2011 as amended up to date.
- Energy Conservation Act.
- Energy Conservation Building Code (ECBC).
- ECBC Rules.
- Maharashtra Fire Prevention and Life Safety Measures Act 2006.
- Maharashtra Fire Prevention and Life Safety Measures Rules 2009.
- The Maharashtra Lifts Act, 1939.
- Bombay Lift Rules 1958.

5.2.2 Standards/ Norms

Execution and maintenance related matters shall follow related provisions from following standards, norms, approved method of construction and specifications. (Latest amended version shall be adopted)

- Bureau of Indian Standards (BIS),
- International Electro-Technical Commission (IEC),
- National Electrical Code (NEC 2011),
- National Building Code (NBC 2016)
- ISHRAE / ASHRAE (.....)
- Maharashtra Pollution Control Board (MPCB)

5.3 SCOPE OF ELECTRICAL WORK:

Internal Works :

Internal & external electrification work shall be done as per detailed drawing & specifications.

- Meter panels, main cables, panels, main cable, pumps and panel.
- LT work, cables & panels.
- Distribution boards and accessories.
- Internal and common internal electrification including point wiring, switch, sockets, fixtures and fans etc. complete.
- Earthing and Lightning protection.
- PV solar cells etc.

External Works:

- LV cables, network and panels.
- Capacitors, Switchgears, Feeder panel.
- DG work and panels.
- STP panel, water pumps and panel.
- Street Light & Bollards.
- Lightning Protection Arrangement.
- Lift installation work.
- Main cables.
- Main panels (after Transformer).
- Solar power generation plantwork.
- Transformer, RMU.
- HT work and incoming line, BAY.

5.4 EXECUTION:

- i Work must be executed by an agency having license in respective category.
- ii Prior to commencement of work, a bar chart shall be prepared by Construction Agency showing all activities in detail. Each activity shall be correlated with the activity from civil work wherever its progress is dependent on such civil work activity e.g. concealing of pipes in ceiling depend on slab casting, concealing of pipes in wall (drops) depend on brickwork.
- iii Attention is called towards Section 126 and 135 of Electricity Act 2003. It will be sole responsibility of Construction Agency to get electrical supply for construction purpose.
- iv Work shall be executed as per the drawings provided by respective consultant and approved by PMC/ Client. Construction Agency shall submit actual detailed working

drawing to PMC/ Client before commencing the work. Prior approval will be necessary. In case of any discrepancy in design with respect to Statutory Provisions, Standards, Norms same shall be brought to notice at the time of pre-bid meeting so that there shall not be any extra item. In case matter crops up during execution it shall be communicated well in advance and got resolved so that there shall not any delay in targeted completion date.

- v Construction Agency shall prepare mockup if so desired by PMC/ Client. It is the sole responsibility of Construction Agency to make all electrification work functional as per the required load capacity.
- vi Observing and complying safety norms during execution shall have high priority. Workers on site shall be provided with Personal Protective Equipment (PPE). Use of PPE during work shall be strictly observed.
- vii Material shall be from the approved list only and as directed by PMC/ Client. Manufacturer's Data Sheets shall be submitted and got approved from PMC/ Client before procurement. Non-ISI material shall not be used.
- viii Work must be compliant with related standards, norms, method of construction, guidelines and PWD specifications in respect of various CSR items. Construction Agency and his supervisory staff must be well conversant with the said provisions.
- ix Portion of work going to be hidden shall be got checked from PMC/ Client prior to concealing. Wherever required, photographs, video clips shall be submitted. Record drawings of such work must be prepared and got countersigned from PMC/ Client.
- x The switch boards in any condition shall not come out of the wall or should not be very deep in the wall. The earth resistance readings shall be within the prescribed limits. Continuous 2 runs of earthing shall run up to the top floor from the earthing pit, all the Dbs. & panels shall be connected to the earthing strips/wire as specified.
- xi Laying of LT underground cables with proper termination shall be done, dismantling of existing LT overhead lines also dismantling of the existing street light poles shall be carried out, installation of LT switchgears and control gears and feeder pillars etc. shall be done.
- xii The panel shall be prepared considering all the safety norms. The load is divided as per the SLD, the panel is to be manufactured according to the SLD only. All the wires and cables are to be connected by lugs and glands as per the sizes required at the point of termination to any equipment.

- xiii All the street light poles are to be erected in plum. All the LT cable laid underground are to be covered by the half round cement pipe for overall length. The additional run of the cable should be properly kept so that there is no damage caused.
- xiv The danger boards, rubber matting, fire extinguishers are to be provided at the substations, floor power ducts, pump room.
- xv Supervision charges, meter charges and deposits or any other deposits, refundable or non-refundable etc. to the supply company shall be borne by the Construction Agency. However the Construction Agency will have to obtain demand note and deposit the cheque in an advance etc., and no extension may be granted in this regard for delay. The amount deposited will be only reimbursed on submission of the original challans/receipts.
- xvi The work of internal and external electrical work shall be completed by Construction Agency strictly according to tender drawings, the details as required will be furnished during the execution of work if any. (Without prior approval of the Client no extra item shall be entertained to the Construction Agency).

5.5 COMPLETION AND HANDING OVER :

- i After physical completion, all required inspections, trials, tests shall be jointly done by Construction Agency and PMC/ Client.
- ii Wherever necessary Construction Agency shall take at his own cost Completion Certificate/ NOC from respective statutory authority. The documents of test results, Completion Certificates, NOCs shall be submitted to PMC/ Client.
- iii Construction Agency shall provide documentation related to guarantees, warranties, manuals, trouble shooting charts, training to maintenance staff.
- iv Construction Agency shall also provide Record/ As-Built Drawings and Inventory.
- v The Construction Agency shall hand over fully functional electrical installation.

5.6 WORK SPECIFICATIONS:

- i The whole work shall be carried out in accordance with the approved detailed drawings (unless otherwise directed by the Client), description of the items in Schedule-C and the detailed specifications in the Standard Specification Book of the Public Work Department,(Electrical) Government of Maharashtra.

- ii Detailed specifications given in the Schedule-C are the specifications for items to be executed.
- iii Number of points, fans, fixtures, boards, DBs, panels, equipment etc. shall not be less than that shown in the drawings.
- iv Wire shall of appropriate size as per standards and FRLS insulation and in no case be less than 1.5mm² copper in cross section. In case of concealed wiring conduit sizes and layouts must be compliant with IS 732/ IEC 60364. Casing/ trunking will not be allowed above false ceiling. Space factor for casing/ trunking shall not exceed 50%. Wire colour coding must be observed.
- v Height and location of switch boards shall be as per standard norms and may be ascertained before erection. All switchboard accessories shall be modular type.
- vi For each circuit there shall be separate neutral from DB. Size of neutral shall be as per the IEC standards. Limit of wattage and number of points must be observed in respect of each circuit. Each circuit shall be marked on DB as well as switch board.
- vii All DBs shall be in accessible position. Use of RCCB/RCBO is mandatory.
- viii Electrical panel shall have at least 1m clear space in front of it. GA drawings of Electrical panels shall be got approved prior to fabrication.
- ix All wiring to be connected to emergency/ standby supply shall be distinct. UPS/ invertors batteries shall be installed in segregated and well ventilated area/ space.
- x Earthing must follow IS 3043. Number of earth pits will depend on earth resistance to be kept within limit of 1 ohm. Distance between two earth pits shall not be less than 3m. Size of earth wire shall not be less than 1.5mm² copper. Adequate watering arrangement shall be provided for pits. Each electrode shall have test terminal in accessible position.
- xi There shall be proper alignment of lighting poles. Depending on strata additional concrete/ improved grade shall be used for foundations. Each pole shall be earthed and each circuit shall be provided with RCCB. LED lighting fixture must be earthed. Underground cabling shall be as per IS 1255 and mechanically protected.

5.7 PERMANENT ELECTRICAL SUPPLY ARRANGEMENT AND INFRASTRUCTURE:

- i Overhead/ underground lines obstructing construction shall be removed/ shifted in consultation with Supplier and Electrical Inspector prior to construction. Provisions from CEA regulations must be observed in respect of building clearances.

- ii Drawings of sub stations/ Gen. Stations shall be got approved from respective statutory authority/ supplier prior to actual commencement. Record drawings of all OH/UG distribution network shall be prepared showing all details including details of cross section of underground cable.
- iii Electrical supply application and all related documentation shall be done by the Construction Agency. No liaisoning fee will be payable. The process shall be taken up in hand in appropriate time so that commissioning will not be delayed due to want of supply. The estimate received from Supplier of electricity shall be got checked from PMC/ Client prior to making payment. Work executed on behalf of Supplier shall be as per specifications/ norms recommended by Supplier. All related compliance getting WCR and release of supply will be in the scope of Construction Agency.
- iv All norms/ specifications applicable under Energy Conservation Building Code (ECBC), shall be observed.
- v Equipment like transformer, generator must be factory tested in front of PMC/ Client before dispatch.
- vi Stack height of D.G. set shall be compliant with MPCB norms.
- vii Number of earth electrodes/ grid shall be decided based on keeping minimum earth resistance not above 1 ohm in any season. Earth test terminals shall be accessible.
- viii For distribution system multiple neutral earthing may be adopted in consultation with PMC/ Client. Work shall be compliant with related regulations.

5.8 MATERIALS AND SAMPLES :

- i The samples of each class of material shall be tested got approved from the PMC/Client prior to its actual use. The material shall be got tested from designated laboratory, as directed by PMC/Client and the Construction Agency shall bear all prescribed charges for the same. The Client/ PMC is empowered to reject or approve materials based on test report and his decision shall be final and binding on the Construction Agency and no disputes in this regard shall be entertained. PMC shall certify such appeared material and kept in sample room. No bill shall be forwarded without test report and certified.
- ii All materials and workmanship shall be as prescribed in the contract and shall be binding subjected from time to time, to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the site or at such other place or places as may be specified in the contract. The Construction Agency(s) shall provide required

assistance, instruments, machines, labour and materials for examining, measuring and testing of the quality, weight or quantity of any material to be used and shall supply samples of such materials before in Council in the works as may be selected and required any by the Engineer, without any additional cost.

- iii All samples shall be supplied by the Construction Agency(s) at his own cost.
- iv Samples approved by PMC/Client duly signed by the Electrical Engineer and Construction Agency. Fans, fittings, switchgears, wires, cables, switch and sockets, etc. shall be kept in sample room.
- v The cost of carrying out any test shall be borne by the Construction Agency(s) as and when required so as to ascertain quality of work executed/ to be executed.
- vi All Electrical wires, cables, fixtures, switch sockets, conduits, etc. shall be tested as per relevant IS standard.

5.9 ANNEXURE

Five Years Free Fully Comprehensive Annual Maintenance for following items shall be carried out by Construction Agency:

- a. Elevators/Lifts.
- b. Transformer/HTbreakers/HT cable and termination and other accessories in substation/street lightning.
- c. LT line/ LT cable.
- d. D.G Sets.
- e. Telephone systems and LAN cable in common area.
- f. Water and other pumping system.
- g. Solar power generation system.
- h. Fire fighting work and fire alarm systems.

CHAPTER NO. 6
SCHEDULE - B

NOTE 1: These specifications shall be followed to understand further technical scope in addition to detail scope of work or technical brief Civil/ Electrical Specifications. In case of Contradictions, particular specification of material and work as given in detail scope of work shall be followed either in lieu or otherwise as per instructions of **PMC/Client**.

NOTE 2: Description of item with Specification No., Page No. as per Standard specification book of P.W. Dept. of Govt. of Maharashtra Vol I (1979) & Vol. II (1981) edition & P.W.D. Civil/ P.W.D. Electrical/ M.J.P./ C.S.R Item No./ Page No. e-SSR 2022-23 of Maharashtra (Civil), (Electrical)/ 2023-24 (MJP). The specifications given below are for both buildings 01 and 02 and for entire infrastructure of site.

Name of Work:

**Construction of 216 EWS Houses with all Infrastructural Services under (AHP) PMAY (U)- 2.0 Vertical-3 at Mehkar, Dist- Buldhana
City: MEHKAR, District: Buldhana.**

ITEM RATE BOQ

Tender Inviting Authority :

NAME OF WORK :

Contract No. :

Name of the Bidder/ Bidding firm/ company :

Sr. No.	Item No.	Specification No.	Item Description	Quantity	Unit	Estimated Rate	Basic rate in figures to be en

Signature of Construction Agency

75
No. of Corrections

Signature of MMC

								tered by the bidder Rs .
BUILDINGS								
1	21.02	Bd.A.1 Page One Number 259	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Mechanical Means	2,118.88	One Cubic Meter	215.30		
2	21.06	Bd.A.2 Page One Number 259	Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.50 m) By Mechanical Means	2,533.18	One Cubic Meter	236.10		

3	21.10	Bd.A.3 Page One Number 259	Excavation for foundation in hard murum and boulders including removing the excavated material up to a distance 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5m.) By Mechanical Means	689.80	One Cubic Meter	262.10		
4	21.12	Bd.A.3 Page One Number 259	Excavation for foundation in Hard murum and boulders including removing the excavated material upto a distance of 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 m to 3.0 m.) By Mechanical Means	2,225.03	One Cubic Meter	324.50		
5	21.36	Bd.A.10 Page One Number 262	Filling in plinth and floors with approved excavated material in 15cm. to 20cm. Layers including watering and compacting etc. complete.	4,070.46	One Cubic Meter	124.80		
6	21.37	Bd.A.11 Page One Number 263	Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete.	1,715.18	One Cubic Meter	826.30		

7	21.40	As directed by Engineer in charge.	Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete.	0.00	One Cubic Meter	1850.75		
8	21.23	As directed by Engineer in charge.	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) treatment by treating the backfill in immediate contact with foundation at the rate of 5 litres of emulsion concentrate of 1.0 percent of clorophyrifos per One Square Metre of vertical surface area covering 10 years guarantee on bond paper.	0.00	One Square Meter			
9	21.24	As directed by Engineer in charge.	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) by treating the top surface of plinth filling at the rate of 5 litres of emulsion concentrate at 1.0 percent of clorophyrifos per One Square Metre of surface area covering ten years guarantee on bond paper.	0.00	One Square Meter			
10	24.01	Bd. E. 1 Page One Number 287	Providing and laying Cast in situ / Ready Mix cement concrete in M-10 of trap / granite / quartzite / gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying / pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor	398.83	One Cubic Meter	6433.80		

			based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)				
11	25.13	Bd.F.3 Page One Number 298 and B.7, Page One Number38	Providing and laying in situ / Ready Mix cement concrete M-25 of trap / granite / quartzite / gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering formwork, laying / pumping cover blocks, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	1,951.13	One Cubic Meter	7932.00	

12	25.33	Bd.F.5 Page One Number 300 and B-7,Page No 38.	Providing and laying Cast in situ / Ready Mix cement concrete M-25 of trap / granite / quartzite / gneiss metal for R.C.C. columns as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying / pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete, (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)		One Cubic Meter	0.00		
			Ground Floor	418.28		14879.20		
			First Floor	240.43		15018.85		
			Second Floor	240.43		15158.55		
			Third Floor	240.43		15298.20		
			Fourth Floor	240.43		15437.90		
			Terrace Floor	88.43		15437.90		
13	25.52	Bd.F.6 Page One Number 300 and B.7, Page One Number38	Providing and laying Cast in situ / Ready Mix cement concrete in M-25 of trap / granite / quartzite / gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying / pumping, compaction and roughening the surface if		One Cubic Meter	0.00		

			special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)				
			Ground Floor	498.54		13303.60	
			First Floor	335.48		13428.10	
			Second Floor	335.48		13552.65	
			Third Floor	335.48		13677.15	
			Fourth Floor	351.76		13801.70	
			Terrace Floor	27.11		13801.70	
14	25.72	Bd.F.8 Page One Number 302 and B.7, Page One Number38	Providing and laying Cast in situ / Ready Mix cement concrete M-25 of trap / granite / quartzite / gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying / pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete, (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)			One Cubic Meter	

			Ground Floor	632.66		15034.15		
			First Floor	323.42		15175.30		
			Second Floor	323.42		15316.45		
			Third Floor	323.42		15457.65		
			Fourth/ Terrace Floor	176.32		15598.80		
15	26.07	Bd.F.9 Page One Number 303 and B.7, Page One Number38	Providing and laying Cast in situ / Ready Mixcement concrete M-25 of trap / granite / quartzite / gneiss metal for R.C.C. chajja as per detailed design and drawings including steel centering, formwork, cover blocks, laying / pumping, compacting and roughening the surface if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)			One Cubic Meter		
			Ground Floor	0.00		15034.15		
			First Floor	13.95		15175.30		
			Second Floor	13.95		15316.45		
			Third Floor	13.95		15457.65		
			Fourth/ Terrace Floor	13.95		15598.80		

16	26.26	Bd. F. 13 Page One Number 305 /I.S. 456 (2000)	Providing and laying Cast in situ / Ready Mix cement concrete in M-25 of trap / quartzite / granite / gneiss metal for R.C.C. Waist slab, and steps of staircases as per detailed design and drawings or as directed including steel centering, formwork, steel props, laying / pumping, compaction, finishing uneven and honeycombed surface with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding einforcement, including cover block). (Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc.) with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	One Cubic Meter							
			Ground Floor				13.37		13087.25		
			First Floor				13.37		13209.70		
			Second Floor				13.37		13332.15		
			Third Floor				13.37		13454.55		
			Fourth/ Terrace Floor				16.79		13577.00		

17	26.19	Bd.F.11 Page One Number 304 and B.7, Page One Number 38	Providing and laying Cast in situ / Ready Mix cement concrete in M-25 of trap / granite / quartzite / gneiss metal for R.C.C. pardi of required thickness including steel centering, formwork, cover blocks, laying / pumping, compacting, curing, finishing and roughening them if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	One Cubic Meter					
			Ground Floor					370.28	16733.50
			First Floor					16.56	16891.00
			Second Floor					16.56	17048.50
			Third Floor					16.56	17206.00
			Fourth Floor					16.56	17363.50
			Terrace Floor					54.62	17363.50
18	26.23	Bd. F. 12 Page One Number 304 and B-7, Pg 38	Providing and laying Cast in situ / Ready Mix cement concrete in M-20 of trap / granite / quartzite / gneiss metal for R.C.C. coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering, formwork, cover blocks, laying / pumping, compacting, curing, finishing and roughening them if special finish is to be provided and curing	One Cubic Meter					

			complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)				
			Ground Floor	30.41		7828.50	
			First Floor	36.41		7900.40	
			Second Floor	36.41		7972.30	
			Third Floor	36.41		8044.20	
			Fourth Floor	36.41		8116.10	
			Terrace Floor	19.53		8116.10	
19	26.33	Bd.F.17, Page One Number 306	Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.			M.T.	
			Ground Floor	260.91		93395.50	
			First Floor	110.79		94292.55	
			Second Floor	110.79		95189.55	
			Third Floor	110.79		96086.60	
			Fourth Floor	100.66		96983.60	
			Terrace Floor	24.46		96983.60	

20	27.12	As director by engineer in charge and BDG- 2 and 5	Providing fly ash brick masonry with conventional / I.S. type fly ash bricks in C.M. 1:6 in foundation and plinth including bailing out water manually striking joints, racking out joints watering and scaffolding etc. complete.	83.10	One Cubic Meter	7473.25		
21	27.13	As director by engineer incharge and BDG- 2 and 5	Providing fly ash brick masonry with conventional / I.S. type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete		One Cubic Meter			
			Ground Floor	195.24		7704.15		
			First Floor	567.05		7775.20		
			Second Floor	567.05		7846.25		
			Third Floor	567.05		7917.35		
			Fourth Floor	567.05		7988.40		
22	27.14	Bd. G. 7 Page 316	Providing Second class fly ash brick masonry with conventional / I.S. type bricks in cement mortar 1:4 in half brick thick wall including mild steel longitudinal reinforcement of two bars of 6 mm diameter / two hoop iron strips 25 mm x 1.60 mm at every third course, properly bent and bounded at ends scaffolding raking out joints and watering etc. complete.		One Square Meter			
			Ground Floor	0.00		1088.50		
			First Floor	1,327.53		1098.60		
			Second Floor	1,327.53		1108.75		
			Third Floor	1,327.53		1118.85		
			Fourth Floor	1,327.53		1129.00		

23	31.04	As directed by Engineer in charge.	<p>Providing cement based water proofing treatment to terraces (Indian water proofing or alike) with brick bats laid in required slope to drain the water for any span after cleaning the base surface. Applying a coat of cement slurry admixed with approved water proofing compound and laying the brick bats on bottom layer in C.M.1:5 admixed with approved water proofing compound filling up to half depth of brick bats, curing this layer for 3 days, applying cement slurry over this layer joints of brick bats with C.M.1:3 admixed with approved water proofing compound and finally top finishing with average 20 mm. thick layers of same mortar added with jute fiber at 1 Kilogram per bag including finishing the surface smooth with cement slurry admixed with approved water proofing compound. Marking finished surface with false squares of 300 mm x 300 mm. making the junctions at the parapet rounded and tapered top for required height, with drip mould at the junction of plaster and parapet and curing and covering 10 years Guarantee against leakproofness on Court fee stamp paper of Rs. 500/- including ponding test etc. complete.</p>		One Square Meter		
Terrace Floor			3,268.16		1344.15		

26	32.11	Bd.L.7 Page One Number 369	Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1 Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc. complete.		One Square Meter			
			Ground Floor	4,338.32		680.90		
			First Floor	3,296.01		687.30		
			Second Floor	3,296.01		693.70		
			Third Floor	3,296.01		700.05		
			Fourth Floor	3,296.01		706.45		
			Terrace Floor	3,500.29		706.45		
27	32.34	As directed by Engineer in charge.	Providing and applying Two coats of wall care Putty on plastered surface and Ceiling and Walls to prepare surface even and smooth of approved make, etc complete.		One Square Meter			
			Ground Floor	3,830.43		93.60		
			First Floor	13,060.80		94.50		
			Second Floor	13,060.80		95.40		
			Third Floor	13,060.80		96.30		
			Fourth Floor	13,060.80		97.20		
			Terrace Floor	346.03		97.20		

30	33.42	Bd.M.12 Page One Number 385	Providing and laying vitrified matt finish tiles having size 590 mm to 605 mm x to 605 mm of 8 to 10 mm thickness and confirming IS 15622 - 2006 (Group Bla) of approved make, shade and pattern for flooring in required position laid on a bed of 1:4 cement mortar including neat cement float, filling joints, curing and cleaning etc. complete.		One Square Meter			
			Ground Floor	0.00		1674.15		
			First Floor	251.34		1690.15		
			Second Floor	251.34		1706.15		
			Third Floor	251.34		1722.15		
			Fourth Floor	251.34		1738.15		
31	33.06	Bd.M.3 Page One Number 380	Providing and laying machine cut machine Polished Kota stone flooring 25 mm to 30 mm thick and required width in plain / diamond pattern on bed of 1:6 C.M. including cement float, filling joints with neat cement slurry, curing, polishing and cleaning etc. complete.		One Square Meter			
			Ground Floor	102.65		1307.05		
			First Floor	369.63		1319.50		
			Second Floor	369.63		1332.00		
			Third Floor	369.63		1344.45		
			Fourth Floor	369.63		1356.95		
32	33.18	Bd.M.22 Page One Number 390	Providing and laying machine cut machine polished machine cut Kota stone slabs 20 to 25 mm thick for treads and risers of steps and staircases, with rounded nosing for the treads on a bed of 1:4 cement mortar including cement float, filling joints with neat cement slurry, curing,		One Square Meter			

			polishing and cleaning etc. complete.					
			Ground Floor	82.80		1645.05		
			First Floor	82.80		1660.75		
			Second Floor	82.80		1676.50		
			Third Floor	82.80		1692.20		
			Fourth Floor	118.80		1707.95		
33	33.81	As directed by Engineer in Charge	Providing and fixing in required position skirting or dado of polished Kota Stone slab 25 mm to 30 mm thick fixed on base on plaster of cement mortar 1:4 including cement float, filling joints with cement slurry, curing rubbing, polishing and cleaning complete.			One Square Meter		
			Ground Floor	12.39		1407.95		
			First Floor	22.83		1421.40		
			Second Floor	22.83		1434.85		
			Third Floor	22.83		1448.25		
			Fourth Floor	22.83		1461.70		
			Terrace Floor	3.36		1461.70		
34	41.78	As directed by Engineer in charge.	Providing and constructing granite kitchen platform with fixing of stainless steel sink 600 mm x 450 mm size as per detailed drawing including vertical both side polished kadappa stone 25 to 30 mm thick supports with kadappa top 35 to 40 mm thick and polished granite 16 to 20 mm top with side strips of granite at front and both sides of platform raised with two vertical granite supports 15 cm height and top granite of 75 x 40 cm including cutting, opening			One Square Meter		

			for sink of required size in kadappah as well as granite etc. complete. (Platform top size 5.00 m x 0.60 m and height is 0.75 m)					
			Ground Floor	0.00		10215.35		
			First Floor	108.18		10313.60		
			Second Floor	108.18		10411.90		
			Third Floor	108.18		10510.15		
			Fourth Floor	108.18		10608.45		
35	33.48	Bd. M. 12	Providing and fixing green marble of 18 to 20 mm thick for door frame / dado / window boxing etc. On C.M. 1:6 including filling joints with polymer base filler nosing / moulding the sharp edges wherever necessary, curing, etc. complete.			One Square Meter		
			Ground Floor	4.02		2471.85		
			First Floor	402.64		2495.50		
			Second Floor	402.64		2519.20		
			Third Floor	402.64		2542.85		
			Fourth Floor	402.64		2566.55		
36	35.21	As directed by Engineer in charge.	Providing and applying priming coat on concrete / masonry / Asbestos Cement plastered surfaces including scaffolding if necessary, preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter and sand papering as required etc. complete.			One Square Meter		
			Ground Floor	5,588.90		37.45		
			First Floor	16,356.81		37.80		
			Second Floor	16,356.81		38.15		

			Third Floor	16,356.81		38.55		
			Fourth Floor	16,356.81		38.90		
			Terrace Floor	3,846.32		38.90		
37	36.11	Bd. P.5 Page One Number 413	Providing and applying washable oil - bound distemper of approved colour and shade to old and new surfaces in two coats including scaffolding, preparing the surfaces. (excluding the primer coat.) etc. complete.			One Square Meter		
			Ground Floor	3,830.43		49.90		
			First Floor	13,060.80		50.40		
			Second Floor	13,060.80		50.85		
			Third Floor	13,060.80		51.35		
			Fourth Floor	13,060.80		51.80		
			Terrace Floor	346.03		51.80		
38	35.24	As directed by Engineer in charge.	Providing and applying two coats of textured synthetic paint of approved shade and quality and one coat of primer before applying textured paint including scaffolding if necessary preparing surface by thoroughly cleaning oil, grease, dirt and other materials as required, etc. complete.			One Square Meter		
			Ground Floor	3,414.48		169.50		
			First Floor	3,296.01		171.15		
			Second Floor	3,296.01		172.75		
			Third Floor	3,296.01		174.40		
			Fourth Floor	3,296.01		176.00		
			Terrace Floor	3,500.29		176.00		

39	39.41	As directed by Engineer in charge.	<p>Providing and fixing in position (as per 1868 / 1982) Alluminium sliding window of three tracks with rectangular pipe 95 x 38.10 x 0.90 mm at weight 0.637 Kilogram / One Running Metre. with window frame bottom track section 92 x 31.75 x 1.30 mm at weight 1.070 Kilogram / One Running Metre.. Top and side track section 92 x 31.75 x 1.30 mm at weight 0.933 Kilogram / Running metre. The shutter should be of bearing bottom 40 x 18 x 1.25 mm at weight 0.417 Kilogram / One Running Metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram/Running metre. and handle and top section 40 x 18 x 1.25 mm at weight 0.417 Kilogram / Running metre. As per detailed drawings and as directed by Engineer incharge with all necessary Aluminium sections fixtures and fastenings such as roller bearing in nylon casting and self locking catch fitted in vertical section of shutter including 5 mm thick plain glass and aluminium mosquito net shutter with stainless steel jail with all required screws and nuts etc, complete. With colour Anodising with box</p>		One Square Meter		
			Ground Floor	0.00		5722.10	
			First Floor	381.06		5777.10	
			Second Floor	381.06		5832.15	
			Third Floor	381.06		5887.15	
			Fourth Floor	381.06		5942.20	

40	39.45		a) Supplying and fixing in position Aluminium four track sliding windows with outer frame made from section of over all size 122 mm x 45 mm, bottom section with drain section track weighing 1.83 Kilogram per metre and top and side section of size 122 x 31.75 mm weighing 1.15 Kilogram per One Running Metre with shutter sections made of 18 mm x 40 mm size having average weight of 0.6 Kilogram per One Running Metre (or as required size) with change in proportionate weight, with 6 mm float glass in three equal panels and aluminium coated stainless steel mosquito net in one (2/3 of opening) panel fixed with new neoprene gasket, shutters to be provided with nylon encased stainless steel rollers, necessary locks and handles complete.	One Square Meter					
			Ground Floor					14.14	6741.30
			First Floor					14.14	6806.10
			Second Floor					14.14	6870.95
			Third Floor					14.14	6935.75
			Fourth Floor	14.14	7000.60				
41	39.68	As directed by Engineer in charge.	Providing and fixing in position powder coated aluminium louvered windows / ventilator of various sizes with powder coating as per detailed drawing and specifications including aluminium frames 80 x 38 mm x 1.22 mm box type, 5 mm thick sheet glass louvers, of approved	One Square Meter					

			quality etc. complete.					
			Ground Floor	0.00		3605.70		
			First Floor	50.49		3640.35		
			Second Floor	50.49		3675.05		
			Third Floor	50.49		3709.70		
			Fourth Floor	50.49		3744.40		
42	39.56	As directed by Engineer in charge.	Providing and fixing M40 grade thick vibrated pull cast or similar type concrete frame with chamfer conforming to I.S. 65241983 having 6 mm dia. bars 3 Nos. And stirrups @ 250 mm c/c and fixing in wall with 6 Nos of hold fast of 12 mm dia bars 500 mm long including primer and oil painting etc, complete) frame size 60 mm x 100 mm.		RMT			
			Ground Floor	30.00		1108.65		
			First Floor	712.20		1119.30		
			Second Floor	712.20		1129.95		
			Third Floor	727.50		1140.65		
			Fourth Floor	737.70		1151.30		
43	39.09	BD-T-34 Page One Number 499	Providing and fixing solid core flush door shutter in single leaf 32 mm thick decorative type of exterior grade as per detailed drawings approved face veneers 3 mm thick on both faces or as directed, all necessary beads, mouldings and lipping, wrought iron hold fasts, chromium plated fixtures and fastenings, with brass mortise lock, chromium plated handles on both sides, and finishing with French Polish etc.		One Square Meter			

			complete.					
			Ground Floor	8.71		3202.15		
			First Floor	257.70		3232.95		
			Second Floor	257.70		3263.75		
			Third Floor	257.70		3294.50		
			Fourth Floor	257.70		3325.30		
44	39.58	As directed by Engineer in charge.	Providing and fixing fiber glass reinforced polyster door shutter 30 mm thick as per IS 14856 (2000) (Reaffirmed 2006) without ventilator including chromium plated fixtures and fastening with chromium plated handles on both sides, etc complete		One Square Meter			
			Ground Floor	0.00		3404.95		
			First Floor	154.98		3437.70		
			Second Floor	154.98		3470.45		
			Third Floor	154.98		3503.15		
			Fourth Floor	160.83		3535.90		
45	40.02	Bd.U.1 Page One Number 537	Providing and fixing mild steel grill work for windows, ventilators, etc. 15 Kilogram / Sq.M as per drawing including fixtures necessary welding and painting with one coat of anticorrosive paint and two coats of oil painting complete.		One Square Meter			
			Ground Floor	23.31		1775.30		
			First Floor	428.04		1792.35		
			Second Floor	428.04		1809.45		
			Third Floor	428.04		1826.50		
			Fourth Floor	428.04		1843.60		

46	40.11	As directed by Engineer Incharge	Providing and fixing mild steel grill railing weighing 20 Kilogram / One Square Metre. with PVC handrail cover and newel post for staircases, including fabricating, fixtures, drilling holes in concrete / other surface, erecting the grill work, necessary welding, fixing by nuts and bolts, fixing PVC handrail cover, with one coat of anticorrosive paint and two coats of oil painting with approved colour and shade, remaking the damaged surface, cleaning, etc. complete. Spec. One Number: As directed by Engineer in charge.		One Square Meter			
			Ground Floor	23.31		3475.70		
			First Floor	428.04		3509.10		
			Second Floor	428.04		3542.55		
			Third Floor	428.04		3575.95		
			Fourth Floor	428.04		3609.40		
47	44.10	Bd.W.6 Page One Number585	Providing and fixing mild steel grill gate with angle iron frame 65 mm x 65 mm x 10 mm with iron bars at 150 mm C/C and diagonal flats as per the detailed drawing including hinges, pivot block locking arrangement, welding riveting and oil painting of three coats of approved shade Weight of gate 35 Kilogram/Smt.	36.06	One Square Meter	3317.60		
48	41.56	Bd. V. 19 Page One Number 559	Providing and fixing 45 cm wide mild steel ladder of 40 mm x 6 mm mild steel flat stringers and steps of 18 mm dia. mild steel bar for water tank including fixing it in (1:2:4) M-15 cement	25.00	RMT	1173.10		

			concrete block 60 cm x 30 cm x 30 cm and painting the ladder complete. (Anti-Corossive Paint)					
49	50.30	As directed by Engineer-in-charge	Providing and fixing Ductile iron manhole cover of light / medium / heavy duty with frame of any size over inspection chamber etc. complete (Prior permission of S.E. is to be obtained before inclusion of this item in the estimate)	500.00	KG	78.00		
			INTERNAL PLUMBING					
50	42.33	As directed by Engineer in charge.	Providing and fixing 1st class white glazed earthenware Orissa Type W.C. Pan 580 mm dia including P or S trap cast iron soil and vent pipe upto the outside face of the wall (1:5:10) cement concrete bedding 15 mm thick, 10 liter P.V.C. flushing cistern with all necessary pipe connection etc. complete.	120.00	Nos.	7388.00		
50A	42.86	As directed by Engineer Incharge	Providing and fixing European type wall-hung white water closet of approved make with push valve concealed type with cover plate 32 mm size of approved make including soil pipe, vent pipe up to outside face of wall, 100 mm dia. G.I. plug bend inlet pipe all fittings, cutting and making good walls, floors etc. complete.	96.00	Nos.	15026.00		

51	42.80	As directed by Engineer in charge	Providing and fixing C.P. Two way BIB cock of approved make continental including necessary sockets/union nut etc. complete.	312.00	Nos.	1459.00		
52	42.81	As directed by Engineer in charge	Providing and fixing C.P. wall mixer with provision for overhead shower with 115 mm long bend pipe and wall flange of approved make including necessary sockets / union nut etc. complete.	216.00	Nos.	4738.00		
53	42.31	As directed by Engineer in charge.	Providing and fixing chromium plated towel rod 16 mm dia and 75 cm. in length including all accessories complete.	216.00	Nos.	299.00		
54	41.51	Bd.V. 12 Page One Number 556	Providing and fixing 100 mm dia. chromium plated brass showers rose to 15 mm dia. supply pipe including necessary bend and socket complete.	216.00	Nos.	528.00		
55	41.69	BDV.-30 Page One Number616	Providing and fixing White glazed with bottle trap earthen ware Wash Hand Basin of 55 x 40 cm size including cold water pillar taps, brackets, rubber plugs and brass chain, stop tap, chromium plate bottle trap and necessary pipe connections including UPAC waste pipe and trap upto the outside face of the wall, making good the damaged surface, testing etc. complete.	216.00	Nos.	6473.00		
56	42.79	As directed by Engineer in charge	Providing and fixing C.P. Angular stop clock with wall flange of approved make continental including necessary sockets/union nut etc. complete.	336.00	Nos.	2687.00		

57	43.26	Specifications	Providing and fixing Glass self 125 mm wide and 600 mm long with necessary chromium plated brackets providing T.W. gutties etc. complete	216.00	Nos.	423.00		
58	42.20	As directed by Engineer in charge.	Providing and fixing 450 mm x 550 mm size superior type Belgium mirror with 16 mm dia. nickel plated towel rod etc. complete.	216.00	Nos.	861.00		
59	42.83	As directed by Engineer in charge	Providing and fixing C.P. BIB cock with wall flange of approved make including necessary sockets/ union nut etc. complete.	216.00	Nos.	1108.00		
60	42.67	BD.V 32 A page 551 and as directed by Engineer in charge	Providing and fixing 10 cm PVC nahani trap with grating etc. complete.	672.00	Nos.	539.00		
61	41.75	Bd.V.31 Page One Number566	Providing and fixing white glazed earthenware sink 600 mm x 200 mm x 450 mm including all connection of the G.I. supply and P.V.C. waste pipes up to the outside face of the wall, cold water chromium plated screw down bib tap, rolled steel or C.I. brackets, rubber plug with chain and stop tap complete.	120.00	Nos.	5675.00		
62	42.84	As directed by Engineer in charge	Providing and fixing C.P. sink cock with raised J" shaped swinging casted spout of approved make including necessary sockets/ union nut etc. complete."	216.00	Nos.	2145.00		

63	43.39	As Directed By Engineer Incharge	Providing and fixing 15 mm diameter PVC Aqua kraft type of approved make super jet spray with flange 2 in 1 faucet 1.50 metre long including all accessories etc complete	432.00	Nos.	770.00		
64	42.51	As directed by Engineer in charge.	Providing and fixing 75 mm dia stabiliser pipe / P.V.C. soil vent / waste pipe and with necessary fixtures and fitting such as bends, tees, single junctions, slotted vent, clamps etc. complete	2370.00	RMT	607.00		
65	42.52	As directed by Engineer in charge.	Providing and fixing 100 mm dia stabiliser pipe / P.V.C. soil vent / waste pipe and with necessary fixtures and fitting such as bends, tees, single junctions, slotted vent, clamps etc. complete.	1440.00	RMT	788.00		
66	42.25	As directed by Engineer in charge.	Providing, laying and fixing P.V.C. pipe of 40 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	920.00	RMT	301.00		
67	43.25	Specifications	Providing and fixing in position UPVC ultra violet stabilized 110 mm outer diameter cowl dome confirming to I.S.-4985 including making joints with solvent cement etc. complete	174.00	Nos.	169.00		

68	42.55	BD.V 5 page 551 and as directed by Engineer in charge	Providing and fixing on walls / ceiling / floor 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	366.00	RMT	266.00		
69	42.56	BD.V 5 page 551 and as directed by Engineer in charge	Providing and fixing on walls / ceiling / floor 20 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	1926.00	RMT	310.00		
70	42.57	BD.V 5 page 551 and as directed by Engineer in charge	Providing and fixing on walls / ceiling / floor 25 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	726.00	RMT	375.00		
71	42.58	BD.V 5 page 551 and as directed by Engineer in charge	Providing and fixing on walls / ceiling / floor 32 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky	1482.00	RMT	431.00		

			or as directed etc. complete.				
72	42.59	BD.V 5 page 551 and as directed by Engineer in charge	Providing and fixing on walls / ceiling / floor 40 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	658.70	RMT	539.00	
73	42.60	BD.V 5 page 551 and as directed by Engineer in charge	Providing and fixing on walls / ceiling / floor 50 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete.	136.00	RMT	741.00	
74	43.07	Bd.V.5 Page One Number 551	Providing and laying in walls / ceilings / floors 80 mm dia. medium grade having embossed as ISI Mark galvanised iron pipes of 8.57 Kilogram/metre necessary fitting remaking good the demolished portion with filling trenches and with primer of anti-corrosive oil paint , 2 coats complete. Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc.	220.00	RMT	1260.00	

			complete.					
75	2.16.1	Section - I (XII) P.PR.- C (Pipes) MJP SSR 2023-24	Providing, Supplying and Fixing of 20 mm Ball Valve Plastic (Heavy Body) as per IS 15801 approved by CBRI and Comatible to PPR C Pipes (Poly Propylene Random CoPolymor) Rates including transportation, Internal testing, loading, unloading, excluding GST Levied by GOI and GOM in all aspect	0.00	Nos.	194.50		
75A	42.36	As directed by Engineer in charge.	Providing and fixing 40 mm. dia Ball cock medium type with PVC float including sockets and necessary fittings and tested as per municipal requirements etc. complete.	48.00		1210.00		
75B	42.37	As directed by Engineer in charge.	Providing and fixing 15 mm. dia Ball cock medium type with PVC float including sockets and necessary fittings and tested as per municipal requirement etc. complete.	60.00		487.00		
76	2.16.2	Section - I (XII) P.PR.- C (Pipes) MJP SSR 2023-24	Providing, Supplying and Fixing of 25 mm Ball Valve Plastic (Heavy Body) as per IS 15801 approved by CBRI and Comatible to PPR C Pipes (Poly Propylene Random CoPolymor) Rates including transportation, Internal testing, loading, unloading, excluding GST Levied by GOI and GOM	120.00	Nos.	275.50		

			in all aspect					
77	2.16.3	Section - I (XII) P.PR.- C (Pipes) MJP SSR 2023-24	Providing, Supplying and Fixing of 32 mm Ball Valve Plastic (Heavy Body) as per IS 15801 approved by CBRI and Comatible to PPR C Pipes (Poly Propylene Random CoPolymor) Rates including transportation, Internal testing, loading, unloading, excluding GST Levied by GOI and GOM in all aspect	60.00	Nos.	458.50		
78	2.16.4	Section - I (XII) P.PR.- C (Pipes) MJP SSR 2023-24	Providing, Supplying and Fixing of 40 mm Ball Valve Plastic (Heavy Body) as per IS 15801 approved by CBRI and Comatible to PPR C Pipes (Poly Propylene Random CoPolymor) Rates including transportation, Internal testing, loading, unloading, excluding GST Levied by GOI and GOM in all aspect	6.00	Nos.	627.00		
79	2.16.5	Section - I (XII) P.PR.- C (Pipes) MJP SSR 2023-24	Providing, Supplying and Fixing of 50 mm Ball Valve Plastic (Heavy Body) as per IS 15801 approved by CBRI and Comatible to PPR C Pipes (Poly Propylene Random CoPolymor) Rates including transportation, Internal testing, loading, unloading, excluding GST Levied by GOI and GOM in all aspect	0.00	Nos.	851.50		
80	41.30	Bd.V.7 Page One Number 554	Providing and fixing 50 mm diameter water meter with non-return valve including strainer, sockets	6.00	Nos.	15551.00		

			/ union nut including water meter box making locking arrangement and lock. (without chamber).				
81	13-7-5	Electrical SSR 2023-24	Supplying and erecting 75/80 mm dia Cast Iron end line strainer of Y-type flanged end pattern, PN16 pressure rating, SS screen, end connection with Flanged / Screwed / Socket Weld / Butt Weld End etc with standard OAR (open area Ratio) for positive suction complete as per specification no. FF-VL/ELS	126.00	Nos.	4595.00	
82	42.85	As directed by Engineer Incharge	Providing and fixing P.V.C. Rain water pipes of 160 mm outer diameter and having wall thickness of 2.2 to 2.7 mm confirming to I.S. 13592-1992 including proper rainwater receiving recess with P.V.C. plug, bend, necessary fittings, such as, offsets, shoes, including fixing the pipe on wall using approved wooden cleats projecting 25 mm to 40 mm from face of wall a fixing with clips of approved quality and One Number, filing the joint using rubber gasket with solvent cement and properly resting the shoe of pipes on C.C. or masonry blocks, including necessary scaffolding and maintenance for 3 yrs for any leakages or dislocations of pipes. All the P.V.C. fittings and additional 2 piece socket clips shall be got approved from engineer in charge etc. complete.	792.00	RMT	1481.00	

83	42.02	Bd.V.38, Page One Number 572	Providing and fixing 15 cm x 10 cm salt glazed stoneware gully trap in cement concrete 1:4:8 outside the building including cast iron grating in the sink, connecting glazed stoneware pipe, brick masonry chamber with cast iron lid and cast iron grating for the gully trap.	156.00	Nos.	1600.00		
84	3-1-1	Electrical SSR 2023-24	Supplying and erecting storage type water heater 15 litres capacity having standing loss < 0.381 kWh/24hour/45°C ,high impact resistance engineering plastic body with anti corrosive high grade steel inner tank heating element having hard water& corrosion protection, with minimum 3 safety protections (i.e. thermostat &thermal cutout,multi function valve) complete with 3 core PVC flexible wire leads complete & total pressure 8 bar withstanding capacity duly tested and marking sr. no. and date of erection complete as per specification no. AP-WH/STWH	96.00	Nos.	9447.00		
A	MATERIAL TESTING							
			ROAD					
85	2.11	MORTH 301	Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading	2,825.25	Cu.M	123.75		

			for embankment or stacking as directed.				
86	2.26	MORTH 305	Conveying materials obtained from road cutting including all lifts, laying in layers of 20cm. to 30cm. breaking clods, dressing to the required lines, curves, grades and section, watering and compacting to not less than 97% of standard proctor density for a lead of 300m. to 500m. inclusive, from the site of excavation to the site of deposition as directed.	2,818.50	Cu.M	408.70	
87	2.29a		Supplying hard murum/ kankar at the road site, including conveying and stacking complete.	1,309.66	Cu.M	655.70	
88	3.18	MORTH 404	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with Vibratory roller. to the required density. By Mechanical Means -	714.75	Cu.M	2306.70	

			Grading I (Using Screening Type A (13.2) mm Aggregate)					
89	3.20	MORTH 404	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting with vibratory roller to the required density. By Mechanical Means - Grading II (Using Screening Type B (11.2 mm) Aggregate)	1,344.38	Cu.M	2267.20		
90	2.29b		Supplying soft murum at the road site, including conveying and stacking complete.	572.25	Cu.M	652.60		
91	2.30		Spreading hard murum/ soft murrum/ gravel or kankar for side width complete	1,716.75	Cu.M	82.15		
92	3.14		Brooming the W.B.M. surface by wire Brushes, coir brushes, dusting, cleaning etc. for receiving the bituminous treatment complete. Brooming the water Bound	5,722.50	Sq.M	18.70		

			Macadam surface by wire.				
93	2.31		Compacting the hard murum side widths including laying in layers on each side with vibratory roller including artificial watering etc. complete.	5,722.50	Sq.M	21.85	
94	3.35b	IRC-SP-20, 2002 Clause No. 8.7.3	Providing and constructing 75 mm. thick Modified Penetration Macadam (MPM) road surface including all materials, preparing the existing road surface, spreading 40 mm. stone metal layers 100% crusher broken metal with conical crusher plant heating and spraying the bitumen of specified grade @ 2 Kg/sqm, spreading 12 mm. size chips compacting with three wheel static roller having weight 8 to 10 MT. to achieve the desired degree of compaction as per Technical Specification Clause 506 etc. complete. Including picking of existing WBM surface. (VG-30 bulk bitumen rates are considered to arrive at rates)	5,722.50	Sq.M	302.65	

95	4.12	MORTH 510	Open Graded Premix Surfacing- Providing and Laying OGC 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates premixed with bituminous binder transported to site with VTS, laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired compaction but excluding prime / tack and Seal coat. For Bitumen of specified grade--USING drum mix type hot mix plant with SCADA, Paver and Vibratory roller (Over MPM Surface) (VG-30 bulk bitumen rates are considered to arrive at rates)	5,722.50	Sq.M	200.70	
96	4.13	MORTH 511	9 MM SEAL COAT: Providing and laying of Type A 9 mm premix seal coat with HMP of appropriate capacity crushed stone chipping 6.7 mm size and penetration bitumen of specified grade @ 1.2 kg / Sq.m, preparing existing road surface by mechanical means, spreading chips and rolling, by static roller having weight 8 to 10 MT. etc. complete. (VG- 30 bulk bitumen rates are considered to arrive at rates)	5,722.50	Sq.M	120.65	

96A	7.04	MORTH 408	Providing and casting in situ or precast tapering R.C.C. M-20 Barrier type Kerb with gutter (as per IRC 86:1983) embedded 125 mm below ground level over M-10 PCC finished neatly with C.M. 1:2, setting the same in C.M. 1:2, including the required excavation in any strata and removing the excavated stuff any where in city and redoing the surface as specified and directed by Engineering In-charge. Using Concrete Batching and Mixing Plant	0.00	RMT	1010.90		
			OPEN SPACE CW					
97	32.25	As directed by Engineer in charge.	Providing patti / band 150 mm wide on plastered surface 12 mm to 15 mm thick in C.M. 1:3 line and level including neat finishing scaffolding curing etc. complete.	490.16	RMT	84.95		
			EXTERNAL WATER SUPPLY					
98	42.65	BD.V 5 page 551 and as directed by Engineer in charge	Providing and laying in trenches 40 mm dia. CPVC pipe including necessary excavation, fittings. Refilling trenches etc. complete Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	600.00	RMT	587.00		

99	42.66	BD.V 5 page 551 and as directed by Engineer in charge	Providing and laying in trenches 50 mm dia. CPVC pipe including necessary excavation, fittings. Refilling trenches etc. complete Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	500.00	RMT	783.00		
100	41.29	Bd.V.7 Page One Number 554	Providing and fixing 40 mm diameter water meter with non-return valve including strainer, sockets / union nut including water meter box making locking arrangement and lock. (without chamber).	5.00	Nos.	11831.00		
101	12-3-2	Electrical SSR 2023-24	Supplying, erecting, testing and commissioning of minimum three & above star rated submersible pump set for open well of 3.75 kW/5 HP with 415 V, three phase, 50 Hz, A.C. supply having delivery head from 43 to 21 m and discharge from 120 to 840 lpm & 65 mm suction/50 mm delivery dia. as per specification no. WP-OSP.	2.00	Nos.	28285.00		
102	12-4-17	Electrical SSR 2023-24	Supplying, erecting, testing and commissioning of automatic control panel for three phase , 415 V, A.C. supply, submersible/centrifugal pump set upto 7.5 HP consisting of D.O.L. starter having relay	1.00	Nos.	6673.00		

			range 9-14 A, S.P.P., combined ammeter/voltmeter, phase indicating lamp enclosed in CRCA powder coated vibration proof enclosure with IP54 protection with single phasing, phase reversal, phase imbalance, etc.					
103	42.12	Bd.V.43, Page One Number 574	Providing and constructing Brick Masonry Inspection Chamber 60 cm x 45 cm x 90 cm including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W. pipes, Brick Masonry, plastering from inside and with frame fixed in cement concrete with R.C.C. Cover medium duty 140 Kilogram with frame etc complete.	44.00	Nos.	9526.40		
			RWH PIT					

104	48.47	As directed by Engineer in charge	<p>RWH - Recharge Pit Providing and constructing recharge pit of 2.0 m deep and 1.0 m dia of pre-cast RCC rings with 6.5" dia x 25m deep borewell at the floor of recharge pit including installation of combination of solid / perforated PVC casing pipe wrapped around with netlon mesh including 300 mm thick sidefilling around outside of RCC rings (annular space) with 40 mm size boulders including filling of recharge pit up to 0.5 m depth with 25-75 mm clean washed gravels from bottom up followed by 0.5 m depth of 10-25 mm of clean washed stones followed by 0.5 m of washed river fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) including netlon mesh between each gravel/fine aggregate (natural sand/crushed sand VSI grade finely washed etc.) media layer including covering with RCC slab, manhole frame & cover, PVC rungs, PVC end-caps, fittings etc. including arrangement for inlet & outlet pipe excavation & backfilling as shown in the drawing. The rate shall be inclusive of all labour, material,</p>	6.00	Nos.	94952.00
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			wastage, scaffolding, transportation, taxes, including all leads, lifts at all levels. All material should be of approved make. All works complete as per the drawing, technical specification and direction of the Engineer in charge.					
			SEWERAGE TREATMENT PLANT					

105		<p>Designing, providing, constructing, hydraulic testing, commissioning and giving satisfactory trials of Integrated Wetland Technology (IWT) based Sewage Treatment Plant (STP) consisting of Screen chamber, Oil & Grease trap, RCC Primary treatment tanks (including manholes, vent pipes and graded gravel media) and RCC Secondary treatment tanks (SBBR) (including gravel media, PVC sheets, wetland plants, plastic mesh, etc. as required.) tank, RCC intermediate and treated water tank, sludge recirculation pump and pipe network, room for tertiary treatment unit, E&M works for tertiary treatment including associated piping work, internal pathways, wire fencing, etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of following items, units as per detailed specifications for civil, electrical and mechanical components with all duties and taxes, etc. complete as directed by Engineer-In-charge. Allied structure shall be constructed as per the provision in appropriate and</p>			
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			relevant standards and design guidelines of respective authorities. RCC and civil works will be as directed by Engineer-in-charge. Sewage Treatment Plant (STP) to be designed to treat the raw water sewage with the characteristics in table number "A" to produce the treated sewage with characteristics as mentioned in table number "B"					
		A	Raw Sewage Characteristics Temperature - Ambient pH - 5.5-9.0 BOD5 - 300 mg/L COD - 600 mg/L					
			TSS -500 mg/L Total N : 50 mg/L Total P : 15 mg/L Faecal Coliform (MPN) : 10^6 - 10^7					
		B	Treated Water Characteristics					
			Temperature - Ambient					
			pH - 6.5-8.0 BOD5 < 10 mg/L COD - 40 mg/L TSS < 20 mg/L					

			Total N < 5 mg/L Total P <1 mg/L Faecal Coliform (MPN) < 10 mg/l Note: If raw sewage characteristics observed as per test are more critical than the mentioned in description (Table A) same shall be used for the design of Sewage Treatment Plant (STP), otherwise raw sewage characteristics mentioned (Table A)shall be used.					
		II	FOLLOWING COMPONENTS ARE INCLUDED					
		1	SCREEN CHAMBER					
			Screening is a unit operation that separates large floating materials in and/or on water found in different and/or on water (found in different sizes) from water and from entering wastewater treatment facilities and mains. The unit known as a screen chamber	1 Nos				
		2	Oil and Grease Trap Designing					
			Providing and constructing manual type Oil &Grease removal mechanism in RCC (M-300) capable of removing grease, oil and scum including providing and making necessary arrangements. Removal will be done manually and stored in a tank for defined period after which it will be disposed to appropriate	1 Nos				

			disposal facility. Inlet and outlet channels of required sizes as make be required to connect the flow to connecting unit, etc. complete including hydraulic testing for water tightness of structure having adequate Free Board, and platform. All arrangements shall be as detailed specifications and as directed by Engineering in Charge.					
		3	Primary Treatment Tank Designing					
			Providing, constructing and hydraulic testing in RCC (M-300) watertight underground primary treatment tanks (including PSRT, SABR, BSF). Designs as per the drawings given by IWT technology provider. Design will consider the average flow, the 2 DWF and the peak flow. Tank will be covered and PVC vent pipes having sand and activated carbon (as per details and design provided by technology provider) will be installed to prevent odour. 0.5% of horizontal slope is provided in the tank for the collection of sludge. Minimum free board of 0.3m is provided. It includes providing all necessary items such as gravel media, piping, valves, joints, launder,	1 Nos				

			baffling, etc. as shown in drawings & additional items will be as directed by Engineering in Charge.				
		4	Static Bed Biofilm Reactor (SBBR) Designing				
			<p>providing, constructing and hydraulic testing in RCC (M-300) watertight underground secondary treatment tanks (SBBR). 0.5% of horizontal slope is provided in the tank for the collection and recirculation of sludge. Designs as per the drawings given by IWT technology provider. Design will consider the average flow, the 2 DWF and the peak flow. Wetland plants will be planted on gravel media (as per designed by IWT technology provider). In the open recirculation sections a combination of Bottom screen, MS mesh, PVC sheet, plastic mesh will be provided to support Wetland plants. Minimum free board of 0.3m is provided. It</p>	1 Nos			

			includes providing all necessary items such as gravel media, piping, valves, joints, launder, baffling, structural steel work, bottom screens, grill work, pvc sheet, plastic mesh, wetland plants etc. as shown in drawings and additional items will be as directed by Engineering in Charge.					
		5	Intermediate and Treated Water Tank Designing					
			Providing, constructing and hydraulic testing in RCC (M-300) watertight underground tank acting as a feed tank for tertiary treatment avoiding backflows. Designs as per the drawings given by IWT technology provider. Design will consider the average flow, the 2 DWF and the peak flow. Tank will be covered. It includes providing all necessary items such as piping, valves, joints etc. as shown in drawings & additional	1 Nos				
		6	Tertiary Treatment Unit Designing					

			<p>Providing, installing and hydraulic testing of feed pump, activated carbon filter vessel with required sand and required activated carbon quantities, hypo dosing tank, dosing pump, necessary piping, pumps, joints, electrical cables, connections etc. complete. It also includes trail and run of tertiary treatment unit. After dosing contact time of 30 min allows 99.99% reduction of outstanding fecal coliform. Chlorine dosage will be as per standard requirement of 5 10ppm. to match effluent quality as mentioned in table number "B" . The Unit as per designed and approved by technology provider.</p>	1 Nos				
		7	Treated Water Outfalls Designing					
			<p>Providing, constructing appropriate outfall sewer of RCC NP Class -III pipe to discharge treated effluent, untreated effluent from bypass chambers to the local Nallah at the point shown on the drawing including necessary chambers for inspection and cleaning including excavation, dewatering, refilling, concrete, encasing / bedding concrete to the local Nallah at the</p>	1 Nos				

			point shown on the drawing including necessary chambers for inspection and cleaning including excavation, dewatering, refilling, concrete, encasing / bedding concrete					
		8	Primary and secondary treatment-with digesters, sludge drying beds etc. complete.					
			Section-I-(XVIII)- TREATMENT PLANT (W.T.P. S.T.P.) (Page No. 182) MJP CSR 2021-22					
			0.25 MLD Capacity	1		9542049		
			SEWERAGE SYSTEM					
106	11.02	CD.-3 Page.No. 160	Providing and laying in situ / ready mix cement concrete of M-10 proportion with trap/ granite/ quartzite/ gneiss metal in foundation including necessary form work, compacting and curing etc. complete. (with reversible drum type mixer with SCADA with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc)	48.03	Cu.M	6666.75		
107	42.07	Bd.V.41, Page One Number 573	Providing and laying concrete pipes of I.S.NP. class of 150 mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement	150.00	RMT	551.20		

			mortar 1:1 and refilling the trench complete.				
108	42.08	Bd.V.41, Page One Number 573	Providing and laying concrete pipes of I.S.NP. class of 225 mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	200.00	RMT	583.45	
109	42.09	Bd.V.41, Page One Number 573	Providing and laying concrete pipes of I.S.NP. class of 300 mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	240.00	RMT	773.75	
110	42.13		Providing and constructing Brick Masonry Inspection Chamber 90 cm x 45 cm x 90 cm including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W.pipes, Brick Masonry, plastering from inside and with frame fixed in cement concrete with R.C.C. Cover medium duty 140 Kilogram with frame etc complete.	30.00	Nos.	11208.10	

111	43.31		Providing, laying and fixing, jointing Eco-drain 160 mm SN 4 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete.	40.00	RMT	528.30		
112	50.31	As directed by Engineer-in-charge	Providing and constructing Ductile Iron circular manhole 45 cm dia. At top 90 cm at bottom up to 1.80 meter to 2.70 meter depth including excavation, laying 1:4:8 cement concrete bedding 15 cm thick burnt brick mansonry with 1:1 cement mortar plaster 25 mm thick inside and outside 20 mm (1:3) ductile iron heavy type cover with ring 125 Kilogramin weight. High strength. More life and Durability, Good Antiskid Grip, Suitable to heavy theatric loading, Light weight casting after cost benefits for Transportation Refilling etc. as per requirement. with prior approval of concerned Superitending Engineer.	14.00	Nos.	12480.00		
			STORM WATER LINE					

113	11.29	CD 8 Page 163	Providing cast in situ / ready mix M20 grade cement concrete for head walls of CD work / retaining walls etc. including necessary form work, compaction, finishing and curing etc. complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA	57.38	Cu.M	10487.75		
114	11.25	CD.15 Page.No. 168 and B.7. Page No. 38	Providing and laying in situ / ready mix M-20 cement concrete of trap /granite /quartzite /gneiss metal for approach slab / Rigid pavement including compacting, finishing, curing etc. complete. (excluding reinforcement) (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA with fine aggregates of required specifications (Natural sand / VSI sand finely washed etc), cement 6.40 bags/cumt)	64.55	Cu.M	7861.75		
UGT								
115	31.09	As directed by Engineer in charge	Providing and applying water proofing treatment using acrylic polymer modified cement based water proofing coating with fibre glass mesh mixing at the rate of powder to liquid (2:1) by weight covering 9 to 10 Square Metre / Kilogram with two coat using approved chemicals for masonry and concrete surface	206.00	Sq.M	653.80		

			by brush covering 7 years guarantee on Stamp Papers etc. complete.					
B	LANDSCAPE							
C	MATERIAL TESTING							
			INTERNAL ELECTRIFICATION					
EARTHING								
1	9-1-5		Supplying, installation and testing of maintenance free earthing comprising of Electrode of 17.2 mm diameter Low Carbon Steel with 250 micron molecular copper bonded earthing rod of Length 3m along with 25 kg Carbon based environment friendly back fill ground enhancing compound required to fill up the excavated earth with required quantity complete, and recording the results Specification no. EA-MOBI	20	each	12357		
2	9-2-3		Supplying and erecting GI strip of high purity required size used for earthing on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint with joints required. As per specification no EA-EP.	353.25	kg	236		
PANEL								

3	5-5-3	Providing & erecting 3 Pole MCCB 415V, 250A, rated short-circuit breaking capacity 36 kA (Ics=100% of Icu) adjustable thermal (overload) setting and adjustable magnetic setting with provided leads, provision for installation of shunt/UV/trip alarm contact and MCCB should have phase barriers both sides, with insulation withstand capacity 800V, no line-load bias in provided enclosure/panel as per specification no. SW-WR / MCCB -FOR 4 POLE 20% ON RATE OF 3 POLE	5	Each	16991	
4	05-03-07	Supplying, erecting & marking DPMCB 6 A to 32 A, B-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	216	Each	510	
5	05-03-12	Supplying, erecting & marking FPMCB 6A to 32A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	15	Each	1059	

6	06-02-11		Supplying and erecting of any size electrolyte aluminium patti or bar in bus bar chamber / in panel or any other purpose, 500 V with require capacity 99.9% aluminium purity with E91E Grade as per IS 5082 & Current Density 0.8 A per sq. mm. with fixing arrangement (like lug or bottle type lug) to both the end with high grade polyolefin insulation sleeve complete as per specification no. BCP BB	20.25	KG	691
7	06-01-01		Supplying and erecting metal work in CRCA sheet including Iron work for supports with fabrication of boxes, panel boards, etc. including cutting, bending, drilling, welding, riveting, treated with anti-rust treatment and duly powder coated or painted with one coat of red lead paint and 2 coats of enamel paint complete.	635.85	KG	249
8	06-03-07		Supplying and erecting panel mounting type digital ammeter having three and half digit LED display, external CT operated, calibrated for suitable to operate on 500V, 0 to 1000A having accuracy class of 0.5, AC supply with necessary PVC wire leads and lugs and mounting hardware on provided panel	10	Each	2034

			complete with calibration certificate from manufacturer.					
9	06-03-08		Supplying and erecting panel mounting type digital voltmeter having three and half digit LED display, calibrated for 0 to 750V AC suitable to operate on 500V having accuracy class of 0.5 ,AC supply with necessary PVC wire leads and lugs and mounting hardware on provided panel complete with calibration certificate from manufacturer.	5	Each	1672		
10	06-05-05		Supplying & erecting LED type indicating pilot lamp with LED colours red / yellow / green, 230 / 250V on provided box / panel with necessary material, wiring & connections etc.	5	Each	248		
11	06-05-06		Supplying & erecting LED type indicating pilot lamp with LED colours red / yellow / green, 230 / 250V on provided box / panel with necessary material, wiring & connections etc.	5	Each	354		
DB COMMON AREA								

12	05-04-04		Supplying & erecting triple pole and neutral distribution board (TPNDB), SP/TP MCBs total 4 ways /12 Poles, with door, 1.2mm thickness surface/flush mounted, IP 43 Protection on iron/GI frame (vertical busbar type) as per specification no. SW-SWR/MCBDB	5	Each	4650		
13	05-03-13		Supplying, erecting & marking FPMCB 40A to 63A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	5	Each	1329		
14	05-01-03		Supplying & erecting four pole ON LOAD change over switch, 415V, 63A, open execution having staggered termination, phase barrier, shroud termination and terminal cover along with auxiliary contacts and ready to upgrade with fuse protection kit, rotary handle, operational current category AC23A complying to IS/IEC 60947-3 Part-1/3.	5	Each	4334		
15	05-03-03		Supplying, erecting & marking SPMCB 6A to 32A, B-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	10	Each	173		

16	05-03-12		Supplying, erecting & marking FPMCB 6A to 32A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	10	Each	1059		
DB COMMON LIGHT								
17	05-04-09		Supplying and erecting single pole and neutral distribution board (SPNDB), with 2 ways for incoming and 10 ways (10 poles) for outgoing SP MCBs, with door, 1.2mm thickness surface / flush mounted, IP 43 Protection on iron / GI frame as per specification no. SW-SWR/MCBDB	5	Each	1459		
18	05-03-03		Supplying, erecting & marking SPMCB 6A to 32A, B-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	35	Each	173		
19	05-06-02		Supplying, erecting & commissioning 2 pole RCCB 40A, electromagnetic type with 30/100/300 mA sensitivity with earth leakage trip indication complete as per specification no. SW-RCCB/RCCB	5	Each	2207		
DB FLAT								

20	05-04-09		Supplying and erecting single pole and neutral distribution board (SPNDB), with 2 ways for incoming and 10 ways (10 poles) for outgoing SP MCBs, with door, 1.2mm thickness surface / flush mounted, IP 43 Protection on iron / GI frame as per specification no. SW-SWR/MCBDB	216	Each	1495		
21	05-03-03		Supplying, erecting & marking SPMCB 6A to 32A, B-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW- WR/MCB	1512	Each	173		
MAIN CONDUIT AND CABLE/WIRE								
22	1-1-11		Supplying and erecting HMS PVC conduit FRLS grade 25 mm dia. With necessary accessories in wall/floor with chiselling appropriately as per specification No: WG-MA/CC.	5562	m	117		
23	7-1-27		Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 6 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	71.15	m	135		

24	7-1-26		Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 4 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL (WATER PUMP)	75	m	135		
25	1-3-5		Supplying and erecting mains with 2x10 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW (UPTO FLAT)	50	m	232		
26	1-3-5		Supplying and erecting mains with 2x10 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW (UPTO FLAT)	6180	m	232		
27	1-3-2		Supplying and erecting mains with 2x2.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	6048	m	62		

28	1-3-3		Supplying and erecting mains with 2x4 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	1944	m	89		
29	1-3-1		Supplying and erecting mains with 2x1.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG-MA/BW	10800	m	40		
TV POINT								
30	1-8-18		Supplying & erecting co-axial copper cable low voltage grade tri-shielded RG 11 as per specification No. WG	125	m	70		
31	1-8-19		Supplying & erecting co-axial copper cable low voltage grade tri-shielded RG 6 as per specification No. WG-TW	7476	m	47		
32	1-6-14		Supplying and erecting modular type T.V. socket single outlet, duly erected on provided plate and box with wiring connections complete.	216	Each	95		
POINT WIRING								
33	1-7-12		Point wiring for light/bell/exhaust fan in 20 mm FRLS grade HMS PVC conduit with 1.5 sq.mm (2+1E) FRLSH grade copper wire, modular type switch, earthing and required accessories as per specification No:	2662	point	776		

			WG PW/SW.				
34	1-7-13		Point wiring for ceiling fan in 20 mm FRLS grade HMS PVC conduit with 1.5 sq.mm (2+1E) FRLSH grade copper wire, modular type switch, earthing and required accessories as per specification No: WG-PW/SW	648	point	859	
35	1-7-14		Point wiring for independent plug in 20 mm FRLS grade HMS PVC conduit with 1.5 sq.mm (2+1E) FRLSH grade copper wire, modular type switch, earthing and required accessories as per specification No: WG-PW/SW	1296	point	1001	
36	1-7-26		Wiring for plug on board with Switch socket surface/concealed type, copper wiring and earthing and with modular accessories as per specification No: WGPW/ CW	1080	point	386	
37	1-7-12 (NOTE - 3)		Point wiring for light/bell/exhaust fan in 20 mm FRLS grade HMS PVC conduit with 1.5 sq.mm (2+1E) FRLSH grade copper wire, modular type switch, earthing and required accessories as per specification No: WG PW/SW.	40	point	1164	
16AMP POINT							

38	1-6-36		Supplying and erecting unbreakable concealed type modular switch box with double mounting plate for 3 module duly erected flush to wall with required chiselling and finishing with cement mortar / POP as per required to match the background..	864	Each	250		
39	1-6-2		Supplying and erecting modular type switch 16A duly erected on provided plate and box with wiring connections complete.	864	Each	106		
40	1-6-11		Supplying and erecting modular type 3 pin 6 / 16A multi socket with safety shutter, duly erected on provided plate and box with wiring connections complete.	729	Each	160		
41	1-6-6		Supplying and erecting modular type switch 16 / 20 A with indicator, duly erected on provided plate and box with wiring connections complete.	216	Each	137		
FAN HOOK								
42	2-11-2		Supplying & fixing anchor type fastener fan hook, with 2 nos. of 10 mm dia x 75 mm long with necessary materials for ceiling fan.	648	Each	103		
DUMMEY PLATE								
43	1-6-24		Supplying and erecting modular type blanking plate one module, duly erected on provided plate & box.	864	Each	21		

PLY FOR METER BOX_LOCK_HINGS							
44	6-1-18		Supplying and erecting cupboard for enclosing switchgears or for any other purpose made from selected marine plywood planks 19 mm thick duly varnished/ painted from inside and from outside with brass hinges and locking arrangement with suitable lock with keys in duplicate. Cupboard shall be duly grouted with suitable size of iron work in wall at the bottom. (Size of cupboard shall be specified in the estimate	194.4	SQMT	2522	
OFF GRID SOALR							
45	4-4-3		Supplying, installing, testing and commissioning of 5 kWp OFF-GRID solar power pack with interconnecting wires / cables up to 24V pure sine wave solar power inverter (THD<3%), SPV Modules (335 WP X 15 Nos.), C-10 rated lead acid battery bank 24V, 300Ah x 4 nos. (12V, 300 Ah x 8 nos) suitable for 4 Hours backup with suitable MS powder coated stand to hold battery bank and keeping sufficient space for filling distilled water, canopy box to house inverter and other electronics, wiring up to solar inverter in	5	Each	373337	

			casing and capping, display board, sign board, two distinct earthing, spike type lightning arrester, necessary accessories complete with 5 years ON-SITE warranty and fully comprehensive maintenance contract as per specification no. ESD-RT-OFG				
			LIFT				
1	1-7-5		Point wiring for light/bell concealed type in min 20 mm FRLS grade HMS PVC conduit with 1.5 sq.mm. (2+1E) FRLSH grade copper wires, modular type switch, earthing and required accessories as per specification No: WGPW/ CW	5	Nos.	781	
2	7-1-28		Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 10 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL (LIFT)	20	Mt.	183	

3	2-8-10		Supplying & erecting 5W-7W, 230V integral type LED Lamp suitable for B-22 / E-27 base.	5	Nos.	147		
4	5-6-14		Supplying, fixing and commissioning 4 pole RCBO 63A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30/100/300 mA sensitivity and short circuit and earth leakage trip indication as per specification no SW-RCCB/RCBO	1	Nos.	4760		
5	17-1-3		SITC of Electric Traction Passenger Lift with <ul style="list-style-type: none"> • Rated capacity :- 8 Passenger/544Kg • Floors :- G+1 floor (2Stops/2 Landings) • Travel :- 3 to 4.2 mtrs • Location of Lift Machine:- MR/MRL • Rated speed :- 1.0mps VS • Car/Landing door clear opening of 800 mm wide x 2000 mm high • Clear Car size ofmm wide xmm deep x 2250mm high • Lift shaft available having clear size ofmm wide xmm deep,mm Pit depth,mm Overhead. 	1	Nos.	1098078		

		<p>·Doors type :- COPO/TOPO Doors with frame made from SS 304grade solid(non-claded) sheet of 1.5mm thick in hairline finish for car and all landing doors with SS door architraves/frames The lift doors shall have minimum 1 hour fire rating (with submission of necessary valid Test Certificate issued by NABL accredited or Independent Test laboratory)</p> <p>· Lift car enclosure made from SS 304 grade solid(non-claded) sheet of 1.5mm, thick with hairline finish with frame made from MS girders, bracing of adequate size with minimum safety factor of 5, with Toe Guard Apron, with necessary false ceiling with LED lights having light intensity of at least 100 lux in car, blower/fan for ventilation & SS chequered plate flooring, handrails, mirror, emergency light etc. The lift car interior design shall be done as per the directions of engineer incharge.</p>			
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		<p>· COP with SS face plate having metallic push buttons with Braille code & luminous indicator around button with FPI, scrolling UP/DN LED indicator & with / without attendant key switch, OWD with audio-visual alarm, VAS in Marathi, Hindi & English with intercom system with telephone instrument in Lift car, LMR & FCC/ground floor.</p> <p>· LOP with SS face plate having recess/surface push button box for all landings with scrolling UP/DN LED indicator having metallic push buttons with Braille code & luminous indicator around button with CPI, Lift car arrival & next travel direction audio-visual indication at all landings.</p>			
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		<p>· Lift controller based on microprocessor/ PLC with VVVF Drivehaving closed loop control system, with IBMS compatible having necessary port, The Controller shall have necessary Protections such as overcurrent, overvoltage, over speed, overheat for all devices including lift motor and travel direction protection, protection for phase loss at input or output, Ascending Car Overspeed Protection etc. various operation modes such as maintenance, change direction by attendant, full load bypass, VIP call operation, self leveling operation, call cancel facility, auto return to home landing, fireman evacuation operation, door open/close operation from COP etc. The system can record information for minimum 30 latest faults, with Real-time clock management and Handheld keypad with LCD screen for view and setting of parameters, The control panel duly wired with proper size & strength, copper wire for power & control circuit, with provision for addition of floor/control card & allied accessories</p>			
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			control panel having enclosure of 1.5mm CRCA sheet with powder coating with IP54 Protection class					
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		<p>·ARD complete with necessary SMF VRLA batteries shall be such that minimum three consecutive rescue operations can be performed without recharging for the maximum travel distance between two consecutive served stops. ARD have a suitable audio alarm with visual indication or voice annunciation in the lift car or lift controller to indicate “Low battery”. · Fireman controller having fireman switch at fire Landing. · CCTV surveillance system comprises of 2nos minimum 2.0MP FHD IP based vandal proof Dome camera in lift car & in LMR/inside lift shaft top aimed on Lift machinery & controller with NVR kept in LMR/FCC with HDR data backup for 90 days with 20” FHD TV monitor, to be kept in FCC/LMR as directed by Engineer In Charge. · Lift Machine of Gearless PMSM of suitable kW with duty cycle of minimum 120 starts/hr (with submission of necessary valid Test Certificate issued by NABL accredited or Independent Test laboratory), with Traction pulley, OSG, electromagnetic brakes,</p>			
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			<p>entire assembly mounted on adequate size girders duly fixed on LMR floor/ shaft walls complete with main/diverter traction sheaves, suspension wire ropes/belts of adequate size & strength</p>				
			<p>·Other mechanical parts such as 'T' section adequate size guide rails for car & counter weight with brackets fasteners, counter weight frame with necessary blocks, buffers with necessary support arrangement, MS pit ladder etc. erected with necessary steel work · Minor civil work such as alteration work if any necessary for erection of landing door frames and it's accessories e.g. sill, header, hole pass etc complete with plaster finish, civil work for erection buffers, erection of lift</p>				

			<p>machinery, adequate size core cuts if required & scaffolding for erecting guide rails, providing and fixing steel girders/RCC work having adequate strength for mounting and hoisting lift machine etc. complete as</p> <p>per specification no. LFT. ·General: - Job includes entire procedure of obtaining all necessary erection permissions & "License to Work the Lift" from Electrical Inspector(Lifts) with submission to the Engineer In Charge. · The above rate includes Fully Comprehensive AMC for one year from the date of commissioning</p>				
6	ADD ON						
	2 (P.No.262)		<p>For Lift having 800mm wide x 2000mm high clear entrance in 1.5mm thick SS 304 grade solid(non-claded) landing door [Two panel], this includes all necessary accessories like LOP's with UP/DN buttons-arrowsindicators, extension of guide rails, shaft wiring with trunking, traveling cables, main hoisting ropes/belts, & OSG rope landing doors with all accessories etc. necessary for the normal safe functioning of lift installation complete</p>	3	Floors	137335	

			Total Estimated Amount				
			NO. OF LIFTS	5			
			EXTERNAL ELECTRIFICATION				
HT RMU							
1	5-9-2		Supplying, installation, testing and commissioning extendable/non-extendable indoor type 22 kV, 630A, load break switch, compliant to IEC 62271 -100, 200 and 102, on provided MS channels/trench foundation as per specification no SW HTS / LBS	1	Nos.	244064	
HT CABLE							
2	7-3-16		Supplying , erecting & terminating XLPE insulated galvanised steel formed wire armoured (strip) cable 22 kV(E), 3 x 95 sq. mm. aluminium conductor laid in provided trench / pipe as per specification no. CB-HT	300	Mt.	1778	
TRANSFORMER							

3	10-2-15	<p>Supplying, installing, testing & commissioning 3 phase, 22/0.433 kV, 50 Hz., 160 kVA, Mineral oil immersed and naturally cooled outdoor type, aluminium wound Non-sealed transformer delta/star connected with additional neutral brought out on load side, temperature rise should not exceed 40°C by thermometer in oil and 45°C by the resistance method in winding at full load rating, using type A winding insulation (kraft paper) with HV tapping (with off load tap changer) off load +2.5 to -5 in steps of 2.5%, having 4 number of tap positions, with standard accessories complete with test certificate with losses below 704 Watts at 50% load, 2048 Watts at 100% load as per IS:1180 (part 1) : 2014 with necessary permissions of Electrical Inspector, as per specification no SS- TR-NSL.</p>	5	Nos.	388460
LT CABLE					

4	7-1-22	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 3½ core 185 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	45	Mt.	1102
5	7-1-20	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 3½ core 120 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	255	Mt.	761
6	7-1-16	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 3½ core 35 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	90	Mt.	297
EARTHING					

7	9-1-5	Supply, Installation, Testing and commissioning of maintenance free earthing comprising of Electrode of 17.2 mm diameter Low Carbon Steel with 250 micron molecular copper bonded earthing rod of Length 3m along with 25 kg Carbon based environment friendly back fill ground enhancing compound required to fill up the excavated earth with required quantity complete. Specification no. EA-MOBI	20	Nos.	12357		
8	9-2-2	Supplying and erecting copper strip of required size used for earthing on wall and/or any other purpose with necessary copper clamps fixed on wall painted with bituminous paint in an approved manner with joints required. As per specification no. EA-EP. (25 x 3 mm)	26.7	Kg.	932		
9	9-2-3	Supplying and erecting GI strip of required size used for earthing on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint in an approved manner with joints required. As per specification no EA-EP.	34.15	Kg.	2236		
DG SET & AMF PANEL							

10	11-1-5	<p>Supplying, erecting, testing and commissioning of diesel generating set with alternator of 20 kVA output continuous rating, 3 Phase, 415 V, 50c/s 0.8 p. f. A.C supply, a totally enclosed air cooled / liquid cooled multi-cylinder diesel engine developing suitable BHP at 1500 rpm with 10% overload for 1 hour in 12 hours, along with standard accessories, self-excited, self-regulated, screen protected alternator with static excitation system running at 1500 RPM as per IS 4722-2001 with voltage regulation +/- 5 %, with performance class G2 and maximum fuel consumption of 3.8 Ltr/hr @75% loading. Both the engine and alternator direct coupled on a common fabricated steel base frame and mounted on anti-vibrating pads with standard control panel comprising meters, switchgears, indicators connected with suitable wires/cables, the complete set enclosed in composite Acoustic enclosure as fully assembled integral unit made of 16 SWG CRCA Sheet,</p>	5	Nos.	397542
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			sound absorbing material to restrict sound level up to 75 dB at 1.0 m, provided with first filling of oil, diesel not less than 50 Ltr etc. on provided M20 Grade CC Foundation as per specification no. GEN-DG					
11	11-2-4		Supplying, erecting, testing and commissioning of microprocessor based AMFpanel suitable for diesel generating set of above 20 kVA up to 25 kVA capacity Three phase, 415 Volts, 50Hz A.C. with all standard features, safeties etc as per specification no. GEN-AMF.	5	Nos.	46060		
DG PANEL								

12	6-1-1		Supplying and erecting metal work in CRCA sheet including Iron work for supports with fabrication of boxes, panel boards, etc. including cutting, bending, drilling, welding, riveting, treated with anti-rust treatment and duly powder coated or painted with one coat of red lead paint and 2 coats of enamel paint complete. (3 mm thick)	306.15	KG	261		
13	5-3-13		Supplying, erecting & marking FPMCB 40A to 63A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	15	Each	1329		
14	5-3-12		Supplying, erecting & marking FPMCB 6A to 32A, with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	20	Each	1059		
15	5-3-3		upplying, erecting & marking SPMCB 6A to 32A, B-series with rated short -circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB	10	Each	173		

16	5-1-1	Supplying & erecting four pole ON LOAD change over switch, 415V, 63A, open execution having staggered termination, phase barrier, shroud termination and terminal cover along with auxiliary contacts and ready to upgrade with fuse protection kit, rotary handle, operational current category AC23A complying to IS/IEC 60947-3 Part-1/3.	15	Each	2966		
STREET LIGHT							
17	8-2-12	Providing & erecting 6 m high (clear height) galvanised octagonal pole with foundation bolts having bottom of 130 mm A/F, top 70 mm A/F on provided foundation as per specification no. OH-PL/OPL	30	Each	15193		
18	16-3-10	Making M- 20 grade reinforced cement concrete foundation by considering the safe soil bearing capacity at site as 10 T/sq.m at 1.5 m depth including supply of steel, concrete, excavation and fixing provided nut bolts with the help of template, duly plastered as per design complete (for 9m & 10m high octagonal /conical GI pole).	30	Each	6437		

19	2-4-5		Supplying and erecting integrated LED street light fitting 60W IP65 & IK08 class having single piece pressure die-cast aluminium housing, having system lumens output of Min. 6600 Lumens, min. efficacy of 110 lumen/W, CRI>70, CCT upto 6500K, THD<10%, p.f. >0.95, operating range of 140-270V, inbuilt surge protection of 10 kV, Life class of 50,000 Hrs. at L70B50, including driver complete with 3 Years warranty as per specification No FG-ODF/FLS2.	30	Each	4970		
20	8-2-19		Providing and erecting galvanised 1000mm single arm sword type bracket with FRP dome and ball as per specification no. OH-PL/PBKT	30	Each	2710		
21	5-3-3		Supplying, erecting & marking SPMCB 6A to 32A, B-series with rated short - circuit breaking capacity (Icn) 10kA in provided distribution board as per specification no. SW-SWR/MCB (Street Light Pole)	30	Each	173		
22	7-2-10		Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 2 core 6 sq. mm. copper conductor complete erected with glands & lugs, on wall/trusses/pole or laid in	630	Mt.	248		

			provided trench/ pipe as per specification no. CB-LT/CU				
23	7-2-31		Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 4 sq. mm. copper conductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU (Street Light Pole and bollards)	20	Mt.	299	
24	1-3-2		Supplying and erecting mains with 2x2.5 sq.mm FRLSH copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW	180	Mt.	71	
25	5-10-17		Supplying & erecting 415V, 16A porcelain base neutral link complete erected in provided M.S. box..	30	Each	82	
26	9-1-4		Providing pipe type earthing with 40mm. dia. G.I. pipe or 20 mm dia. G.I. Rod complete with all materials testing and recording the results as per specification no. EA-EP.(for road side light)(LIGHT POLE-11+1 PANEL)	30	Each	1537	

27	9-2-5	Supplying and erecting GI wire of high purity of required sizes used for earthing or any other purposes on wall with necessary G. I. Clamps fixed on wall/cable/ conduit with screws complete. (1 kg per pole)	30	kg	168		
28	5-2-8	Supplying & erecting street light control panel outdoor type, for three phase 4 wire system having in built astronomical adjustable programmable timer with minimum 5 years battery back up, having IP54,IK10 protection, 4 pole contactor up to 60A, with maintenance mode to switch ON street lights during time of repairs with energy consumption data recording for analysis and LCD display for energy monitoring with numeric key pad in provided box.	1	Each	36410		
CABLE DETAILS							
29	7-1-29	Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 16 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	1290	Mt.	215		

30	7-1-27		Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 4 core 6 sq. mm. aluminium conductor complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	100	Mt.	154		
31	7-4-11		Providing & erecting epoxy outdoor / indoor end termination kit for LT XLPE armoured cable 150 to 185 sq mm., with necessary material as per specification No. CB-JT/LT	15	Each	3075		
32	7-4-10		Providing & erecting epoxy outdoor / indoor end termination kit for LT XLPE armoured cable 70 to 120 sq mm., with necessary material as per specification No. CB-JT/LT	20	Each	2583		
33	7-4-9		Providing & erecting epoxy outdoor / indoor end termination kit for LT XLPE armoured cable 25 to 50 sq mm., with necessary material as per specification No. CB-JT/LT	25	Each	2,295.00		
34	7-4-8		Providing & erecting epoxy outdoor / indoor end termination kit for LT XLPE armoured cable 2.5 to 16 sq mm., with necessary material as per specification No. CB-JT/LT	25	Each	1627		
HUME PIPE								

35	7-6-6		Supplying & laying (including excavation) half round reinforced cement concrete pipe of IS 458:2003 NP-2 class of 150 mm internal diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	540	Mt.	545		
FIRE SAFETY & PROTECTION								
36	13-14-1		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 routed in wall complete.	4	Each	9,943.00		
37	10-5-18		Supplying and erecting fencing of section having size 2450 mm in height from ground level and 1200 mm width with angle iron frame work erected in CC foundation and painted complete as per specification no SS-AS/FSG	27	Each	6973		
38	10-5-19		Supplying and erecting 50 x 50 x 6 mm angle iron as corner support 2m long fixed at the middle of the fencing frame and the other side inclined at 30 degree angle, in cement concrete foundation of 15 x 15 x 40 cm complete duly painted with one coat of red oxide and two coats aluminium paint	8	Each	1417		

			complete.					
39	10-5-20		Supplying and erecting double leaf hinged door each 1500 mm in width x 1850 mm in height using B class, GI pipe with angle iron supports, chain link wire mesh (jali) complete supported on channel iron, erected in foundation, and painted complete as per specification no SS-AS/DLD	1	Each	20,350.00		
WATER METER CONNECTION								

NOTE :

- 1) All above work shall be carried out as per wording of the item and as directed by the PMC/Client.
- 2) Client's decision regarding specification of item shall be final and binding.
- 3) Being a Lump sum tender, leads, lifts and mode of measurement not applicable.
- 4) Detail measurement shall not apply.
- 5) Items are inclusive of all leads and lifts.

CHAPTER NO. 7
LIST OF APPROVED MATERIAL FOR CIVIL AND INTERIOR WORKS

(A)LIST OF CIVIL AND INFRASTRUCTURAL MATERIAL:

Sr. No.	Name of material	Few Names of companies or as approved by MMC
1.	Cement	
	a) Ordinary Portland cement (O.P.C.) (For R.C.C work)	Ultra Tech / ACC / Birla A1 / Birla Gold / Ambuja/ Birla A1 / Chettinad / Coromandel king
	b) Portland pozzolana cement / slag cement (PPC)/ PSC (For plaster / masonry / flooring work)	Ultra Tech / ACC / Birla A1 / Birla Gold / Ambuja / Birla A1 / Chettinad / Coromandel king
2.	Steel	
	Steel	Tiscon / Vizac / Jindal / Sail / Tata/ Essar / Arcelor Mittal or Equivalent make
	Corrosion Resistance Steel (CRS)	Tiscon / Vizac / Jindal / Sail / Tata/ Essar / Arcelor Mittal
	Epoxy coated	Electrothermal India Ltd., Hari Om
3.	Ready mix concrete (RMC)	Godrej /ACC / Ultra Tech / Lafarge
4.	Polycarbonate Sheet 8mm thick	Lexan
5.	Artificial sand	Artificial Sand prepared through vertical shaft impactor machine shall be used
6.	Natural sand	Use river sand having silt content not more than 6%
7.	Aggregate 10 mm and 20 mm	N.A.- As using of ready-mix concrete. Or
8.	Clay Burnt Bricks	Local and approved as approved by PMC and MMC
9.	Fly Ash Bricks or second class burnt brick masonry	Local and approved as approved by PMC and MMC
10.	AAC blocks	Kota Manufacturer/ Siporex/ Ultra-Tech, Magicrete/ Ecolite/ Aerocon / Flyocrete / Powerlite /De-lite
11.	Adhesive to AAC Block/tile	K-2 Joy chemicals, Gobain weber, Ultratech, ,blockol by Ambuja cement, NSA Gold, NSA Silver, saint gobain, blockbond.
12.	Concrete cover block	Disha/Astra
13.	Mechanical splice	Splicetek
14.	Waterproof solid core flush door	Anchor / Century / Green /Kit Ply
15.	FRP doors	House of door / Perma finish / Syntax / Everest / Fibroplast

16.	Lamination sheets' (1.50 mm thick)	Royal touch / Green Lam / Merino / Century / Formica/ Sundeck/ Signature
17.	Door Fixtures and Fastenings I Main internal door a) Stainless steel	Shalimar/ Vinus (NVII)/Union/ EBCO/CNR
18.	Cold and Hot water mixer	Cera/Hindware/ Ess-Ess/ Parryware/ Esco /Kohler/ Kajaria/ Kajaria – Kenvit, HindwareSanitary and American standard, Plumbing fixtures &Cera,
19.	Con. Stop cock	
20.	Bib cock	
21.	Two-way Bib cock	
22.	Long neck Bib cock (Kitchen)	
23.	Pillar cock for WHB	
24.	Angle cock for Geyser WHB and wall hung unit etc.	
25.	Flush valve open etc.	
26.	Waste coupling	
27.	Bottle trap of WHB	
28.	Hand Shower (Health faucet)	
29.	Towel rod (600 mm long)	
30.	Towel ring	
31.	S.S. Hook	
32.	Health Faucet	
33.	Shower Rose	
34.	Mirror supported on stud	Modi/ Saint gobain
35.	PVC Water Tank	Syntex/ Plasto / Supreme
36.	Conventional Section 18 guage heavy	Jindal / Hindalco / Superfine.
37.	Vitrified tiles (600mm x 600mm), Vitrified Antiskid tiles Vitrified Dado tiles. Ceramic Tiles	Kajaria/Johnson/Asian/ Somani/ RAK
38.	a)Primer (External and Internal)	Asian / Nerolac
39.	b)Oil bound Distemper to internal walls	
40.	c)Synthetic Enamel Paint to M.S. grill	
41.	d) External paint	Apex from Asian Paints / Excel from Nerolac Paints
42.	CPVC Pipe	Finolex / Supreme /Jain/Astral /Ashirwad
43.	U.P.V.C. Pipes	Finolex / Supreme /Jain/Astral / Ashirwad
44.	G.I. Pipes	Astral Pipes/Tata/ Jindal
45.	Pump	Kirloskar / CRI/Tillu/Crompton greeves

46.	Water resistant white cement-based wall care putty	J K White/ Birla White/ Ultra Tech / Wall plast
47.	Gypsum Plaster	India Gypsum/ Magicrete/ Mega shine/ Saint Gobain/ Shera
48.	Glass	Modi / Hindustan / Saint Gobain
49.	Paver Blocks	Gubbi / Shirke/Disha / Concreteshow
50.	APP/ SBS membrane water proofing	Tikidan / APEX / IWL/Asian/Pidilite
51.	Restroom Cubicle system for Toilets of Amenity block	Merino
52.	Urinal partitions for Amenity block	Merino
53.	Expansion Joint treatment – a) Vertical b) Horizontal	Sanfield make a) SNPG-600 b) SRFL -600/ Kantaflex / Kanta / maruti techno / MYK Schomburg
54.	Membrane Water Proofing	Tikidan / APEX / IWL / STP Ltd. / Asian
55.	Window	Jindal / Hindalco / Superfine.

Notes:

1. The names of companies / manufacturer are given for guidance. The MMC and PMC have the authority to choose the company and material and the Construction Agency has to follow as directed by MMC/ PMC. The materials shall be used after obtaining approval from MMC. Approved samples shall preserve in sample room at site of work to ensure the quality / make for actual execution at site of work. No deviation from approved sample is allowed unless approved by MMC.
2. No extension of time shall be granted because of delay in getting approval from MMC.
3. The PMC/MMC reserves right to ask for invoices and other details, if found necessary.
4. PMC/MMC reserves the right to reject material if the same is not approved or substandard material used by Construction Agency at any stage (i.e., even during Defect Liability Period).
5. The Construction Agency shall provide test certificates from the designated laboratories.
6. All the material used in the project should be of well quality confirming to IS Standards (with ISI mark) and should satisfy NBC/ BIS Code.
7. Certification of PMC regarding presence during testing and sample approved is mandatory.
8. All requisite certificate shall be enclosed along with Construction agency's bill.
9. PMC certification of all materials, centring materials, etc. is mandatory.
10. No deviation from approved sample is permissible without prior approval of MMC.

CHAPTER NO. 8
LIST OF APPROVED MATERIAL FOR ELECTRICAL WORKS

8.1 LIST OF ELECTRICAL MATERIAL:

Sr. No.	Name of material	Company name
1	2	3
1.	Fluorescent tube/LED	Philips / Wipro / GE/Polycab/HPL/Crompton / Luker/ Surya / Kent / Jaguar/Holonix
2.	CFL Lamps	Philips / Wipro / GE/Polycab/HPL / Crompton / Luker / Surya/ Kent/RR Electric/ Jaguar/ Halonix
3.	Ceiling Fans	Cromptons / Orient / Havells /Polycab/ Panasonic/ Usha/ RR Electric
4.	Exhaust Fans	Cromptons / Havells / Orient/ Polycab/ Panasonic/ usha
5.	Modular Switches, Accerracies	Anchor /Havells/RR Electrical/Vinay/ Modular/ Cromptons/ wipro/ Polycab/ legrand/HPL/Precision/ Panasonic/ ABB/ L&T
6.	MCB's - 10 KA. D,B	Legrand / Siemens /Kent/RR Electrical/ Wipro/ L&T/ C & S/Polycab/ Hager/HPL/ Anchor/In-do-asian Honeywell/ Kent/Havells
7.	ELCB/RCCB - 10.0KA. D,B, ACB	Legrand / Wipro/Siemens/L&T/ C&S/polycab /HPL/Panasonic/Indo-Asian/ Honeywell/RR Electrical/ Kent/ABB
8.	HRC Switch Fuse Units	L&T / GE / C&S/HPL/Indo-Asian
9.	CFL Holder	Anchor /Havells/Bajaj/ wipro/ Polycab/ HPL/Precision/ Panasonic/ L&T/Modular
10.	Wires: 1100V/660V Grade FRLS	Finolex /Polycab/ Anchor/L&T/ KEI /RR cable/Episilon/ Rotoplast/Kent
11.	PVC Conduits and Accessories	Precision /polycab/Anchor/Pressfit/ AKG/Kent
12.	Distribution Boards	Legrand / Siemens /L&T/ C&S/ Polycab/Wipro/ HPL/ Panasonic/ Hager/ Honeywell
13.	Load break switch	Legrand / Siemens /L&T/Hager/HPL
14.	RG6 Outlets	Philips / Legrand/polycab/HPL/Panasonic
15.	RG6/11 Coaxial Cable	Finolex / Polycab/Panasonic /RR cable/Kent
16.	CAT 6 Cable	Finolex / L&T/ Dlink /Polycab/HPL/RR Cable/ Panasonic/ Kent
17.	CAT 6 I/O Socket	Dlink / Lucent / Molex.

Sr. No.	Name of material	Company name
1	2	3
18.	Cables Glands and Lugs	Finolex/polycab
19.	LED StreetLight Fittings	Wipro / Philips /Havels/ C&S/ Polycab/ Panasonic/HPL/Wipro/Crompton/Jaquaar/ Kent/Surya/RR Electric/ Halonix
20.	LED Flood Light	Wipro / Philips / Havells/ C&S/ Polycab/Panasonic/HPL/Wipro/Crompton/J aquaar /Kent/Surya/ RR Electrical/Halonix
21.	LED Pathway Light	Wipro / Philips / Havells/ C&S/ Polycab/Panasonic/HPL/Wipro/Crompton/J aquaar /Kent/Surya/ RR Electrical/Halonix
22.	CFL Gate Light	Wipro / Philips / Havells/Panasonic/Polycab/Crompton
23.	XLPE Cables and Accessories	Polycab / Havell's / Finolex/ KEI /Anchor/HP/RR cable/Rotoplast/Kent
24.	Telephone Wires	Finolex /RR cable/Anchor/Polycab/ Epsilon/HPL
25.	Aluminum Raceways	Jindal / Bentec/Honewell
26.	Industrial Sockets	Legrand / L&T/HPL
27.	Changeover Switch	L&T/ HPL / Havells / C&S/Siemens/Wipro
28.	Capacitors	L&T / BENTEK
29.	Lightning Arrestor	Siemens / Crompton.
30.	BUSBAR	L&T/HPL/BENTEK
31.	Main LT Panel / APFC Panel	Siemens/ L&T /Indian Electrical /Indo- Asian/HPL/AKG/Samcon
32.	L.T. Feeder Pillar	Siemens/ L&T /Indian Electrical /AKG /SAMCON
33.	Metering Cubicle	Siemens/ L&T /Indian Electrical
34.	11KV isolator and D.O. fuse.	Topaz / Siemens
35.	Distribution Transformer	Crompton, ABB,L&T, Siemens, MSEDCL/ Approved
36.	Diesel Generator Set	Kirloskar /Cummins / Cromptons/Sterling Wilson/Powerica/Greaves Cotton
37.	Lift	Schindler / OTIS / Thyssenkrupp
38.	Water Pumps	Kirloskar / Crompton
39.	Solar Water Heating Systems	Tata Solar / Jain Solar / Surya/polycab/bosch/Havells/Panasonic/W arae
40.	Video Door phone	Zicom /Legrand/Panasonic/Hikvision
41.	VDP/Panic Switch/ Intercom 3in 1 system	Legrand/Panasonic/Digital Dreams

Sr. No.	Name of material	Company name
1	2	3
42.	Audio System	Bose/Senneheiser
43.	Water Heater	Bajaj/Recold/Crompton
44.	MCB,MCB,DB,MCCB,ACB	Leagrand/Seimens/L&T/ABB/C&S/ESCO,Indoasian/Benlo/HPL.
45.	Floor Mounting MCCB Panels	ABB/Snider/Seimens/L&T/ C&S/Indoasian/HPL
46.	Pumps	Kirloskar/Crompton/KSB/ CRI
47.	Octagonal/Conical/Highmast Pole	Bajaj/Transrail/Surya/Volmont/Utkarsh
48.	Decorative Poles	Wipro/Suncity/ K-Lite
49.	Decorative Fitting	Wipro/Suncity/ K-Lite/Philips
50.	Solar Power Generator	Havells/Panasonic/Waze
51.	Street Light Poles	Havells/Panasonic/Waze/

APPROVED MAKES FOR FIRE FF and FAS,FA SYSTEM

Sr. No.	Item Description	Approved Makes
1	Main & Jockey Fire Pumps	Kirloskar/Armstrong/Xylem/Wilo(Mather+Platt)
2	Electric Lt Motors	ABB /WEG/ Siemens/ Kirloskar/Crompton
3	Standby Diesel Engine Driven Pumps	Kirloskar/Mather & Platt/Armstrong/Patterson/Pentair/Clarke
4	GI Pipes	Jindal / Tata Steel /Maharashtra Seamless
5	Fire Brigade Connections	Newage /HD Fire/Shah Bhogilal
6	Di Body Gate Valves	Viking/Victaulic/Tyco/Fivalco/Kirloskar/Hd Fire
7	Pressure Gauges	Waree, Wika, Ashcroft, Baumer/Dwyer
8	Water Flow Meters	Gerand / Siemens/Krohne Marshall / Dwyer/Any Ul Listed/Any Fm Approved Pumps
9	Fire Hose Boxes	Newage/Venus
10	Check Valves/ Nrv	Kirloskar/Audco/Tyco/C &R
11	Y Type/Pot /Bucket Strainers	Appollo Valves/Alfa Valves/Bombay Chemical Equipment Co.
12	Branch Pipes	Newage/Shah Bhogilal
13	CI Body Gate Valves	Viking/Victaulic/Tyco/Fivalco/Kirloskar/Hd Fire /Audco
14	Globe Valves	Viking/Victaulic/Tyco/Fivalco/Kirloskar/Hd

		Fire /Audco/Leader
15	Ball Valves	Claval/Tyco/Fivalco/Kirloskar/Hd Fire /Audco/Leader
16	Hose Reels	Newage/Minimax/Jyoti Fire
17	Alarm Valves	Hd Fire/ Tyco/Viking/Reliable
18	Sprinkler Gong	Hd Fire/ Tyco/Viking/Reliable
19	Flow Switches	System Sensor/Indfoss/Danfoss/Potter/Dwyer
20	Fire, Smoke Detectors, Manual Call Point, Monitor & Control Modules	Honeywell / Symplex /Notifier USA (Present System At Actrec)
21	Sprinkler Heads	Tyco / Reliable/Viking/HD Fire
22	Pressure & Level Transmitter	Honeywell/Siemens/Emerson/Yokogawa
23	Pressure Switches	System Sensor/Indfoss/Danfoss/Potter/Dwyer
24	Electrical & Control Cables	Polycab/Cci/RR Cables/Metaplast/Associated
25	Auto Transfer Switch	Siemens/L&T/Schneider/Asco/Emerson
26	MCCB & MCB	Siemens/L&T/Schneider/Asco/Emerson
27	Fire Pumps Mcc Electrical Panel	Elecmec/ Siemens/L&T/Indcon
28	Push Button Switches	Siemens/L&T/Schneider/Connectwell/Technik
29	Cable Terminations	Connectwell/Wago/Elmex
30	Voltmeter, Ammeter	Kaycee/Rishabh/Meco/Me
31	Load Manager	Siemens/L&T/Schneider/Asco/Emerson/Select/Conzerve
32	GI Perforated Cable Trays	Elcon/Aditya Steel/Indal/Sai Cable Trays
33	Copper Earthing Electrodes	Spa Infrastructure/Isg Global/Galaxy
34	Fire Extinguishers	Safex/ Kanex/ Bharati Fire/ Minimax/ Intime
35	Chain Pulley System Motorized	Hercules/Crane /Titan Make Or Eqvt.
36	Led Light & Electrical Fittings	Philips/Bajaj/Crompton/Anchor/
37	Indicating Lamps On Mcc Panel	Teknic Or Eqvt.
38	Dc Relay	Oen/Pla
39	Current Transformers	Automatic Electric/Me
40	Light Fittings	Philips/Bajaj/Crompton/Anchor/
41	Electric Fittings	Anchor/Roma/Havells/Hager/Schneider
42	Cable Glands	Baliga/ Flameproof Equipment/ Fcg/ Ex Protecta
43	Pressure Relief Valve On Network	Frenger Lesser/Tyco/ Claval
44	Pressure Relief Valve In Pump House	Tyco/ Claval

LIST OF APPROVED MAKES for HVAC

Sr. No.	Item	Manufacturer/ Brand Name
1.	AC UNITS (VRF/NON VRF)	Daikin/Toshiba/Mitsubishi/Blue Star
2.	Refrigerant Pipes & Fittings	Maxflow/Mandev/Heling
3.	Centrifugal fans	Kruger/Nicrota/Systemair
4.	Cabinet/Circular Fan	Kruger/Nicrota/Systemair/VTS
5.	Anchor Fasteners	Hilti/ 3M/Canon
6.	GI Sheets	Jindal/TATA/SAIL/ Universal/ ISPAT
7.	Factory Fabricated Ducts	Roltastar/ZECO/Asawa
8.	Damper	Dynacraft/Cosmos/Ravistar/Carryaire
9.	Fire Dampers	Dynacraft/George & Rao/Carryaire/ Cosmos
10.	Aluminium Grilles/Diffuser	Dyanacraft /Cosmos/ Ravistar/Carryaire
11.	Acoustic Insulation	Armasound
12.	Disc Valve	Dyanacraft /Cosmos/ Ravistar/Carryaire
13.	Nitrile Rubber Insulation	Aeroflex/Armaflex/Kflex
14.	Under-deck Insulation	Supreme/Owens Corning
15.	UPVC Pipe	Supreme/Prince/Airtech
16.	DrainPipe/Refrigerant Pipe/Insulation	Aeroflex/Armaflex/Kflex
17.	Switchgear, Push Buttons & Indicating Lamps	L&T/ABB/SIEMENS
18.	Motors	L&T/ABB/SIEMENS
19.	AC Controllers	Belimo/ABB/SEIMENS/Honeywell/Schiendler
20.	Actuators (Motorized)	Belimo/ABB/SEIMENS/Honeywell/Schiendler
21.	VFD	L&T/ABB/SIEMENS
22.	Anchor Fasteners	Hilti/3M/Canon

LIST OF IS - CODE :

Sr. No.	Item	Manufacturer/ Brand Name
1.	IS : 277-1977	Galvanised steel sheet (plain & corrugated) (Amendment - 01)
2.	IS : 655-1963	Metal Air Duct (Amendment - 02)
3.	IS : 659-1964	Safety Code for Airconditioning (Amendment - 01)
4.	IS : 660-1963	Safety Code for Mechanical refrigeration
5.	IS : 900-1992	Code of practice for Installation & Maintenance if Induction Motors

6.	IS : 2441-1984	Code of practice & measurement procedure for testing refrigerant compressors (Amendment - 01)
7.	IS : 4894-1987	Test code for Centrifugal Fans (Amendment - 01)
8.	IS : 5111-1993	Code of practice & measurement procedure for testing refrigerant compressors (Amendment - 01)
9.	IS : 7613-1975	Method of Testing panel type air filter for Air conditioning & ventilation purpose
10.	IS : 3588-1987	Specificatcion for electrical axial flow fans
11.	SMACNA - 1995	Sheet metal - Ducting, Manufacturing & Installing (low & high pressure ducting)
12.	BS.EN 779 : 1998	Air Filters.

Notes:

1. The names of companies / manufacturer are given for guidance. The MMC and PMC have the authority to choose the company and material and the Construction Agency has to follow as directed by MMC/ PMC. The materials shall be used after obtaining approval from MMC. Approved samples shall preserve in sample room at site of work to ensure the quality / make for actual execution at site of work. No deviation from approved sample is allowed unless approved by MMC.
2. No extension of time shall be granted because of delay in getting approval from MMC.
3. The PMC/MMC reserves right to ask for invoices and other details, if found necessary.
4. PMC/MMC reserves the right to reject material if the same is not approved or substandard material used by Construction Agency at any stage (i.e., even during Defect Liability Period).
5. The Construction Agency shall provide test certificates from the approved laboratories.
6. All the material shall be of first quality and ISI marked.
7. Certification of PMC regarding presence during testing and sample approved is mandatory.
8. PMC certification of all materials, centring materials, etc. is mandatory.
9. All requisite certificate shall be enclosed along with Construction agency's bill.
10. No deviation from approved sample is permissible without prior approval of MMC.

CHAPTER NO. 9
PAYMENT SCHEDULE

9.1 PREAMBLE:

The Construction Agency shall make himself aware of the MMC's procedure regarding measurements and payment of interim bills and the final bill for the Project /Work.

9.2 INITIAL MEASUREMENT OF WORK:

The PMC shall measure the initial ground levels and all hidden measurements in the presence of the Construction agency's representative if he chooses to remain present. The said initial levels and measurements shall be recorded, in the authorized field book or measurement book of the MMC, by the authorized Engineer of PMC. The record of such levels and measurements shall be jointly signed by the PMC and the Construction agency. The Construction Agency shall be entitled to have a true copy of the same at his cost. Any failure on the part of the Construction Agency to remain present at time of taking such levels and hidden measurements, etc. and have the same recorded by PMC before the commencement of the work, shall render him liable to accept the same. Likewise, the Construction Agency shall not execute / commence any item of work which shall render its subsequent measurements difficult or impossible without first getting the same jointly measured by himself and the authorized representative of the PMC/MMC. If such item of works is executed by the Construction Agency without measurements by the PMC, then the measurements recorded by the PMC shall be deemed to be final and binding on the Construction agency. For such items/components the payment shall be based on these measurements taken and recorded by the PMC. To verify the progress of work at site Construction Agency shall submit monthly bill to PMC with intimation to the MMC. PMC shall clearly mention the targeted milestone as per tender and achieved milestone.

9.3 PAYMENTS:

Council will release payment for EWS Dwelling units. GoI & GoM grant, advanced deposited by beneficiary, and loan amount disbursed by bank.

- i. Interim payments shall be made as per payment schedule given in the contract for the corresponding completed stage of work, as per the certification by the PMC. All payments shall be made in Indian Rupees (INR), after adjustment for deductions of advance payments, security deposit, other recoveries in terms of the Contract and taxes at source, as applicable under the law.
- ii This being a lump sum contract the payment shall be stage wise. In case of any ambiguity or doubts in respect of stages of work, the decision of the MMC shall be final.
- iii PMC shall measure initial ground levels and final levels in presence of Construction agency's

representative, for measuring the quantity of work done. The Construction Agency shall supply required labor and equipment, etc. for taking joint measurements. Such measurements shall be signed by the Construction Agency or his authorized representative and the PMC.

- iv The Construction Agency shall obtain copies of the said measurements and copies of the bills paid to him at his own cost and responsibility. Construction Agency/ PMC shall create digitized copy of measurements for onward submission to the MMC. PMC shall submit hard and soft copy to the MMC.
- v The Construction Agency has to pay the charges towards Land Cost and A&OE charges considered in this contract. The expenditure on miscellaneous charges considered in “Other Cost” of project shall be strictly as per the permission of MMC and PMC.
- ii The PMC shall record the hidden measurement/ stages of work in the measurement book supplied by the MMC with certification about quality and quantity of work executed. The Construction Agency and PMC shall sign in M.B. at appropriate place in standard format of the MMC as a token of acceptance of the quality and quantity of the work done.
- iii Project Engineer of the MMC shall exercise 50% check and Municipal Engineer of MMC shall exercise 10% check of work executed on site. The payment of Construction agency’s bill is subjected to above checking.
- iv Generally, such bill shall not exceed one / two in the month for which the qualitative and quantitative assessment of work is done. The Construction Agency shall submit running account bills to the PMC with intimation to the MMC in an appropriate form along with all necessary statements/ documents i.e., test reports, certificate, abstract of tests, progress charts, basic calculations of % of work claimed for payment. No interest shall be payable against delay in payment by the MMC. The Construction Agency shall submit the parawise compliance of previous inspection notes, instructions issued by the MMC/PMC. The MMC shall not release the payment of bill without satisfactory parawise compliance of earlier inspection notes/instructions.
Payment shall not be release unless all the instructions given by PMC/ MMC during execution of work is carried out by Construction Agency in all respect up to the complete satisfaction of PMC/ MMC.
Receipt of deposits of amount against mention in tender document of Labor Cess, Development Charge, PDMC fees for DPR & PMC and other as mention in tender document, if any relevant to be submitted along with Monthly Progress Report.
- v Payment of the Construction agency(s) shall be made by RTGS only. For RTGS mode of payment the relevant details of bank account shall be provided by the Construction Agency to the PMC/MMC. In the event of wrong details by the Construction agency, the MMC shall not be liable for any loss caused due to such incorrect RTGS transaction.
- vi For the purpose of handover of facilities to the Beneficiary and Beneficiary Housing Society, joint visit of representative of MMC / PMC / Construction Agency / beneficiary / Beneficiary Co-operation Housing Society shall be mandatory prior to final completion of works to cure the defects if any observed at site of work.

- vii Prior to final bill just after completion of second joint visit and observation shall be prepared by PMC and submit to MMC. Construction Agency shall cure all the defects within stipulated period as informed by the PMC / MMC and hand over the facilities to the user and PWD.

9.4 FINAL BILL:

- i. The Construction Agency shall submit final bill within one month after completion/ handing over of the entire work and the same shall be paid within 3 months, from the date of certification by the PMC if it is in order. Disputed items and claims, if any, shall be excluded from the final bill and settled separately later on, as per the decision obtained in the dispute resolution procedure specified herein. Final bill shall be submitted with documents as specified in the Check list of Final bill.
The MMC shall not pay the final bill of the Construction Agency without the required documents mentioned in checklist.
- ii. The Construction Agency shall submit five sets of as built drawings with soft copies along with final bill to the PMC. The PMC shall verify the same, and submit it to the MMC with his certification, without which the final bill shall not be considered for payment.
- iii. The recoveries if any, which remains as dues from the Construction Agency after payment of bills, shall be recovered from the Security deposit or by encashing Bank guaranties and if any balance recoveries still remain the same shall be collected as arrears of land revenue through the Collector of the District.
- iv. Disposal of dismantled material or excess quantity of excavated materials shall be entirely the responsibility of Construction agency. No claim or extra item shall be sanctioned or paid to Construction Agency against these works. The final bill shall not be processed unless the dismantled or excess excavated materials is disposed of by the Construction agency.
- v. Prior to payment of final bill, site / structures / buildings / infrastructure shall be handed over to Beneficiary and Beneficiary Housing Society for maintenance on Property Tax Register. For the purpose of handing over authorized representative of Construction Agency / PMC / MMC / Beneficiary / Beneficiary Housing Society shall visit the site and ensure the completion in all respect as per agreed terms and condition of contract. Unless and until note of such handing over received to the MMC, final bill will not be paid. Construction Agency shall be responsible to cure such defect within stipulated period.

9.5 PAYMENT FOR ADDITIONAL WORK:

Proposals for additional work as per instructions of the MMC shall be submitted by PMC within 30 days along with all supporting documents. Bills for extra items/additional quantities executed, approved by the MMC shall be submitted by PMC within 10 days of completion of additional works along with supporting documents, photos, etc. Bills for any other claim if accepted by the MMC shall be paid separately in the form of addition in sale price. The

payment of bills for the original work shall not be withheld for want of decision on the execution of additional quantities/extra items or any other claim.

9.6 MANDATORY DEPOSITION OF AMOUNT:

In case of failure from Construction Agency to deposit mandatory amount mention in tender document in defined period. (Development charges, Labor Cess, PDMC charges for DPR preparation charges, PMC/Supervision charges) Council will issued one month notice to deposit. In case of continuous failure to deposit mandatory amount and produce receipt to Council Chief Officer, MEHKAR will discontinue work "as on day stage" will with penalty and forfeit all earlier deposits and work done by Construction Agency. To complete housing Chief Officer will be free to call fresh tender.

9.7 PAYMENT SCHEDULE

Construction of EWS DUs Under PMAY - AHP , Survey. No. 19 (Part), MEHKAR, Dist-Buldhana.

City : MEHKAR.

District : Buldhana.

Note : Payment will be made on the cost as derived by following form and respective Percentage. It will be finalized after the financial Bid.
Below given format is only for the reference.

9.8 Notes:

- I. Construction Agency shall deposit along with final bill, the bank guarantees.
 - a. Equivalent to 1% of cost for waterproofing and including the cost of urinals, W.C. units, flooring tiles, dado, etc. or Minimum Rs.2.00 Lakhs.
 - b. Equivalent to 1% of cost for anti-termite treatment work or Minimum Rs.2.00 Lakhs.
 - c. Bank guarantees shall be for 5 years to the MMC. (Note: Refer clause no. 3.3.12)
- II. If the defects are not rectified the bank guarantee will be encashed and MMC will carry out the rectification of defects. Construction Agency shall submit guarantee bond on Rs.1000/- stamp paper for work i.e., waterproofing and anti-termite treatment.
- III. For those items with warranty given by the manufacturer, the warranty received by the Construction Agency being purchaser of those items shall be transferred back-to-back in the name of the MMC so as to be able to take benefit of warranty.
 - a. Five years paint guarantee on bond shall be submitted by the Construction Agency from manufacturing company.
 - b. Five years guarantee bond for sanitary fittings shall be submitted by the Construction Agency from manufacturing company.
 - c. Five years fully comprehensive free AMC for following items.
 - All pumps
 - Meters and Panels
 - Street Lights
 - DG set
 - Transformer
 - H.T and L.T Work
- IV. The payment schedule percentage as stipulated in the above table is based on tender cost. Further the final tender payment schedule percentage based on accepted tender cost shall be prepared by PMC and approved by the MMC.
- V. The bills shall be submitted by the Construction Agency to the PMC and with intimation to the MMC. The percentage of payment schedule as per work done by the Construction Agency along with all prescribed documents, duly certified by the PMC.
- VI. No advance shall be paid against material brought on site of work or in any condition.
- VII. No Payment shall be made for substandard quality/ workmanship of the work and for non-submission of test result and other documents, etc.
- VIII. The Construction Agency shall establish site office and field laboratory as per approved drawing within one months from date of work order. Further delay shall attract compensation as decided by the PMC/MMC and the payment from Sr. No. 3 (of payment schedule) onwards shall not be made.

CHAPTER NO. 10
FORM OF OFFER

10.1 MEMORANDUM OF UNDERSTANDING:

(a)	Name of Work	Construction of 216 EWS Houses with all Infrastructural Services under (AHP) PMAY (U)-2.0 Vertical-3 at survey no 19, Mehkar, Dist- Buldhana City: Mehkar District: Buldhana.
(b)	The amount of Earnest Money to be Deposited.	Tender form fee including GST Rs. 3540/- and Earnest Money Deposit (EMD) amounting to Rs. 42,10,520/- of cost of work through Payment Gateway system to Chief Officer, Municipal Council, MEHKAR.
(c)	Amount of Security Deposit to be deposited.	Security Deposit– (SD) 10 % of the Tendered Cost or Contract Sum i.e. Accepted Tendered Amount, whichever is Higher for Project Period plus Ten Year Defect Liability Period. Out of which, 1% of Total Security Deposit which is equivalent to EMD is converted to Security Deposit. 2% of on Total amount of tender FDR of Nationalized Bank shall be deposited to Municipal Council MEHKAR before Work Order. 7% of Total amount of tender will be deducted from every R.A. bill as a Security Deposit
(d)	Period of Contract	Period allowed for the completion of whole work from the date of written work order to commence the work including monsoon period.

10.1.2 I/We agree that the offer of the Construction Agency shall remain open for acceptance for a minimum period of 120 days and an extendable period as per request of the MMC from the date fixed for opening of the Bid and thereafter, until it is withdrawn by me/us by notice in writing duly addressed to the authority opening the tenders and sent by registered post A.D. otherwise delivered at the office of such authority.

Earnest Money Deposit (EMD) amounting to Rs. 42,10,520/- of Project Cost plus, Tender Form Fee of Rs. 3540/- through Payment Gateway system to Chief Officer, Municipal Council, Mehkar.

10.1.3 The amount of EMD shall not bear interest and shall be liable to be forfeited by the MMC, should I/we fail to abide by the Tender conditions including the stipulation to maintain the validity of the bids for the period mentioned hereinabove, sign and complete the contract

documents as specified in the time limit laid down in Clause No. 12.05 of Conditions of Contract.

10.1.4 If this tender is accepted, I/We hereby agree to abide by and fulfill all the terms and provisions of the Conditions of Contract annexed hereto so far as applicable and in default thereof to forfeit and pay to the **MMC** the sums of money mentioned in the said Conditions.

10.1.5 Tender form fee including GST amounting to Rs. 3540/- and Earnest Money Deposit (EMD) amounting to Rs. _____/- through Payment Gateway system to **Chief Officer, Municipal Council, Mehkar** on date _____ vide UTR Number _____. The said EMD is to be absolutely forfeited by the **MMC** should I/We do not deposit the full amount of Security Deposit specified in the above memorandum, in accordance with Clause No. 10.1.1(b) and (c) of the said conditions, otherwise the said sum of Rs. -----/-----/- shall be refunded.

Signature of Bidder (Before submission of Tender)

Address: _____

Date the _____ day of _____ 20__

Signature _____

Designation _____

Address _____

(Signature of Witness to Bidder's signature)

Chief Officer,
Municipal Council, MEHKAR.

10.2 PROFORMA OF AGREEMENT

(ON STAMP PAPER OF RS.1000/-)

Article of Agreement (hereinafter referred to as the “**Contract**”) made at this

Day			Month		Year		Between
-----	--	--	-------	--	------	--	---------

Chief Officer, Municipal Council, Mehkar (hereinafter called “**the MMC**”) of the ONE PART. And

M/s. _____

_____ (Hereinafter called the “**Construction Agency**”) of the OTHER PART. **As the context may require, the MMC and the Construction Agency, are hereinafter collectively called the "Parties" and individually as a "Party"**)

WHEREAS:

The PMC/MMC being desirous of having provided and executed certain works mentioned, enumerated or referred to in the Tender Notice, Instructions to Tenderer’s General Conditions of Contract, Special Conditions of Contract, specifications, technical report, schedule of quantities, for works drawings and other documents constituting the “**TENDER**” and acceptance thereof Copies thereto are annexed, all of which are designed to form part of this Contract and are included in the term “**CONTRACT**” wherever herein used.

AND WHEREAS:

The MMC accepted the Tender of the Construction Agency for the provision and the execution of the said work at the Lump sum cost of Rs. _____/-

(Rupees _____ only)

NOW THIS AGREEMENT WITNESSES AND IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES AND DECLARED AS FOLLOWS:

1. The documents which form the part of the Contract will be the Tender Notice. Detail Tender Notice include Corrigendum to Tender Notice, instruction to tenderers, General Conditions of Contract, Specifications, Drawings, items of work, Special Conditions of Contract and Common Set of Deviation and other documents including acceptance of Tender and Construction agency's letter for acceptance thereof and work order. Guidelines of GoI, GoM, GR/ Circular or any relevant Documents for 'Housing For All' Pradhan Mantri Awas Yojana up to date and release from time to time are/ will be the part of contract document.
2. In consideration of the payments to be made to the Construction Agency for the work to be executed by him, the Construction Agency shall and will duly provide, execute and complete the said work on or before the dates mentioned in the time schedule of completion of work attached to the Tender documents and shall maintain the same at his own cost for the defect liability period thereafter and perform all such acts and things in the Contract mentioned or described or which are to be implied there from or may be reasonably necessary for the completion of the said works at the times and the manner subject to the terms and conditions or stipulations mentioned in the contract.
3. In consideration of the due provision, execution and completion of the said work, the MMC does hereby agree with the Construction Agency that the MMC will pay to him at the quoted cost and such other sums as may become payable to the Construction Agency under the provisions of the contract, such payment to be made at such time and in such manner as provided in this Contract.
4. In consideration of the due provision, execution and completion of the said work, the Construction Agency does hereby agree to pay to the MMC the amount as may be due to the MMC and such other sum may become payable to the MMC towards loss, if any as set forth in the said Conditions of Contract, such payments to be made at such time and in such manner as provided in the Contract.

IN WITNESS WHEREOF THE PARTIES HERETO HAVE SET AND SUBSCRIBED THEIR HANDS AND SEALS TO THESE PRESENTS IN DUPLICATE ON THE

**SIGNED AND DELIVERED FOR AND ON BEHALF OF CHIEF OFFICER, MUNICIPAL COUNCIL, MEHKAR.
DAY AND YEAR FIRST MENTIONED ABOVE.**

SIGNED AND DELIVERED FOR AND ON BEHALF OF CONSTRUCTION AGENCY

In the presence of witness

1. _____

Signature _____

Designation _____

Address _____

2. _____

Signature _____

Designation _____

Address _____

CHAPTER NO. 11
PRICE ESCALATION CLAUSE

11.1 No price escalation shall be admissible. The prices shall remain firm for the entire tenure of the Contract.

CHAPTER NO. 12
CONDITIONS OF CONTRACT

12.01 DEFINITION OF WORK/PROJECT:

The expression "Work" or "Works" or 'Project' were used in these conditions, shall unless there be something in the subject or context repugnant to such constructions, be construct to mean the work or works contracted to be executed under or in virtue of the contract, whether temporary or permanent and whether original, altered, substitute to additional.

12.02 ACCEPTANCE OF CONDITIONS COMPULSORY BEFORE TENDERING FOR WORK & CONDITIONAL TENDERS LIABLE FOR REJECTION:

All the conditions mentioned in the contract shall be binding on the Construction agency(s). Any conditional offer will be liable for rejection. The Construction agency(s) who does not accept the conditions shall not be allowed to tender for further works and his name shall be removed from the list of Construction agency(s).

12.03 CONSTRUCTION AGENCY'S INVALID CONDITIONS

If subsequently, it is found that the Construction Agency has quoted his offer with some conditions, which is not in conformity with the bid document, then such conditions shall be treated as invalid and the contract conditions only shall be binding.

12.04 SECURITY DEPOSIT

The successful tenderer whose tenders may be accepted (here in after called "the Construction agency(s)" which expressions shall unless excluded by or repugnant to the context include his / heirs, executors, administrators and assigns) shall

Security Deposit – (SD) 10 % of the Tendered Cost or Contract Sum i.e. Accepted Tendered Amount, whichever is Higher for Project Period plus Ten Year Defect Liability Period. Out of which,

1% of Total Security Deposit which is equivalent to EMD is converted to Security Deposit.

4% of FDR shall be deposited before Work Order in the form of Bank Guarantee.

5% of Total Security Deposit shall be deducted from the R.A. bills till full Security Deposit is recovered. Provided always that, in the event of the Construction agency(s) deducting a sufficient sum from every such payment as last aforesaid until the full amount of the Security Deposit is made up.

All compensation or other sums of money payable by the Construction agency(s) to the MMC under the terms of this contract may be deducted from part of his Security Deposit or from any sums which may be due or may become due to the Construction agency(s) on any account whatsoever, and in the event of his Security Deposit being reduced by reason of any such deduction as aforesaid, the Construction agency(s) shall within ten (10) days thereafter, make good in cash as aforesaid any sum or sums which may have been deducted

from his Security Deposit or any part thereof.

The Security Deposit referred to shall not be converted into interest-bearing securities. If the amount of the Security Deposit to be paid in a lump sum within the period specified at (a) above is not paid, the tender /contract already accepted shall be considered as cancelled and Earnest Money Deposit shall be forfeited. The Security Deposit lodged by a Construction Agency (s) shall be refunded after the expiry of defect liability period of Ten (10) years.

The Security Deposit lodged by the Construction agency(s) shall be returned to him on the expiry of the period of guarantee mentioned in clause 12.10A after deducting there from the amount of expenses, if any, due to the MMC under this Agreement.

12.05 TERMINATION OF CONTRACT

i.e., ACTION WHEN TOTAL SECURITY DEPOSIT IS FORFEITED

In any case in which under any clause of this contract, the Construction Agency shall have rendered himself liable to pay compensation amounting to the whole of this security deposit (whether paid in one sum or deducted in installment) or in the case of abandonment of the work owing to serious illness or death of the Construction agency, or breach of the Contract or insolvency, or the Construction Agency fails to maintain the required rate of progress of work, or inordinate delay, or dissolution of the Construction agency's firm, or any other cause, the MMC shall have the power to adopt any of the courses stated herein-below, as the MMC may deem best suited to the interest of the MMC.

- a) To terminate the contract (for which 30 days termination notice in writing to the Construction Agency shall be conclusive evidence of the termination) and in that case the Security Deposit of the Construction Agency shall stand forfeited and be absolutely at the disposal of the MMC;

Note: - On such termination, a joint measurement shall be carried out by the PMC/MMC or its representative and the Construction Agency or its representative. If Construction Agency fails to participate in such joint measurement despite written communication by the MMC, the measurement taken by PMC/MMC or its representative shall be binding on the Construction agency. Payment calculations for the work done by the Construction Agency shall be done on quantum merit basis.

- b) To carry out the work or any part of the work by the MMC debiting the Construction Agency with the cost of completion of the balance work, expenditure incurred on tools and plant, and charges on additional supervisory staff including the fees payable to Project Management Consultant and Architect and other agencies employed for getting the un-executed part of the work completed and crediting him with the value of the work done by the MMC in all respects in the same manner and balance work not to be higher than contract rates, as if it had been carried out by the Construction Agency under the terms of this contract. The certificate of the MMC as to the costs and other allied expenses so incurred and as to the value of the work so done by the MMC shall be final, conclusive and binding on the Construction agency; and

- c) To order that the work of the Construction Agency be measured up and to take such part thereof as shall be un-executed out of his hands, and to give it to another Construction agency(s) to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work charge establishment and the cost of the work executed by the new Agency will be debited to the Construction Agency and at the value of the work done or Executed through the new Construction Agency shall be credited to the Construction Agency in all respects and in the same manner and at the same rates as if it had been carried out by the Construction Agency under the term of his contract. The certificate of the PMC/MMC as to the total cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work done by the new Construction Agency and as to the value of the work so done shall be final, conclusive binding on the Construction agency.

12.06 ACTION WHEN THE PROGRESS OF ANY PARTICULAR PORTION OF THE WORK IS UNSATISFACTORY

In case the contract is terminated in accordance with Clause (a) above, the Construction Agency shall not be entitled to recover or be paid any sum for any work there to actually performed by him under this contract unless and until the MMC shall have certified in writing the performance of the such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in clause (b) or (c) being adopted and the cost of the work executed by the MMC or through a new Construction Agency and other allied expenses exceeding the value of such work credited to the Construction agencies, the amount of excess shall be deducted from any money due to the Construction agency, by the MMC under the contract or otherwise howsoever from his Security Deposit or the sale proceeds of his assets movable or immovable as may be applicable thereof. Provided, however the Construction Agency shall have no claim against the MMC even if the certified value of the work done by the MMC or through a new Construction Agency exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in Clauses (a), (b), (c) here in above is adopted by the MMC, the Construction Agency shall have no claim to compensation for any loss sustained by him by reason of having purchased or procured any materials/machines, or entered into any engagements or made any advance on account of or with a view to the execution of the work in the performance of the contract.

12.07 CONSTRUCTION AGENCY REMAINS LIABLE TO PAY COMPENSATION IF ACTION NOT TAKEN UNDER CLAUSE 12.05 AND 12.06.

If the progress of any particular portion of the work is unsatisfactory, the PMC / MMC shall notwithstanding that the general progress of the work is in accordance with the conditions mentioned in clause 12.12, be entitled to take action under clause 12.05(b) after giving the Construction agency 10 days' notice in writing. The Construction Agency will have no claim for compensation, for any loss sustained by him owing to such action.

12.08 POWER TO TAKE POSSESSION OF OR REQUIRED REMOVAL OF OR SELL CONSTRUCTION AGENCY'S PLANT

In any case in which any of the powers conferred upon the MMC by clause 12.05 and 12.06 here of shall have become exercisable and the same shall not have been exercised, the non-exercise thereof shall not constitute a waiving of any of the conditions here of and such powers shall notwithstanding be exercisable in the event of any future case of default by the Construction Agency for which under any clause here of he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the Construction Agency for past and future compensation shall remain unaffected. In the event of the MMC taking action under sub-clause (a) or (c) of clause 12.03, he may, if he so desires, take possession of all or any tools, plant, materials and stores, in or upon the works or the site there of or belonging to the Construction agency, or procured by him 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 contract rates not being applicable at current market rates, to be certified by the MMC whose certificate there of shall be final. In the alternative, the MMC may, after giving notice in writing to the Construction Agency or his clerk of the work, foreman or other authorized agent require him to remove such tools and plants, materials, or stores from the premises within a time to be specified in such notice, and in the event of the Construction Agency failing to comply with any such requisition, the MMC may remove them at the Construction agency's expenses or sell them by auction or private sale on account of the Construction Agency and at his risk in all respects, and the certificate of the MMC as to the expenses of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the Construction agency.

12.09 COMPENSATION UNDER WORKMEN'S COMPENSATION ACT.

The Construction Agency shall be responsible for and shall pay any compensation to his workmen payable under the Workmen's Compensation act, 1923 (VIII of 1923), (hereinafter called the said Act) for injuries caused to the workmen, if such compensation is payable / paid by the Government as principal under sub-section (1) of Section 12 of the said act on behalf of the Construction agency, it shall be recoverable by the MMC from the Construction Agency under sub-section (2) of the said section. Such compensation shall be recovered in the manner laid down in Clause 1 above.

Work compensation insurance policy shall be in force till the expiry of defect liability period of work i.e., 10 years w.e.f. date of completion of project.

12.10 COMPENSATION UNDER MEDICAL AID, SAFETY & APPRENTICES ACT.

(A): The Construction Agency shall be responsible for and shall pay the expenses of providing medical aid to any workman who may suffer a bodily injury as a result of an accident **whether such accident takes place on a holiday or on a working day**. If such expenses are incurred by MMC the same shall be recoverable from the Construction Agency forthwith and be deducted without prejudice to any other remedy of the MMC

from any amount due or that may become due to the Construction agency. **Certificate of the medical practitioner and authenticated Architect cum PMC about amount of expenses actually incurred on providing such medical aid shall be final, binding and conclusive against the Construction agency(s).**

(B):The Construction Agency shall provide all necessary personal safety equipment and first aid apparatus available for the use of the persons employed on the site and shall maintain the same in condition suitable for immediate use at any time shall comply with the following regulations in connection therewith.

- a) The workers shall be required to use the equipment's so provided by the Construction Agency and the Construction Agency shall take adequate steps to ensure proper use of the equipment by those concerned.
- b) When work is carried on in proximity to any place where there is a risk of drowning all necessary equipment shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of any person in danger.
- c) Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

(C):THE APPRENTICES ACT The Construction Agency shall duly comply with all the provision of "The Apprentices Act, 1961" (III of 1961) the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so he shall be subjected to all the liabilities and penalties provided by the said Act and said Rules. (Government Circular No. CAT-6076/3336/(400)/ Bldg.2 dt. 16-8-1985) CST-1086/CR-243 Ka-Building-2/ Mantralaya, Bombay 400 032, dated 11 Sept. 1987)

12.11 INSURANCE COVER FOR THE WORK - CONSTRUCTION AGENCY ALL RISK (CAR) POLICY TILL EXPIRY OF DEFECT LIABILITY PERIOD (i.e., 10 YEARS W.E.F. DATE OF COMPLETION OF PROJECT)

Without limiting his obligations and responsibilities under any other clause above, the Construction agency(s) shall prior to commencement of work(s), insure in the joint names of the MMC and the Construction agency(s) against all loss or damage from whatever cause arising, other than the excepted risks for which he is responsible under the terms of the contract and in such manner that the MMC and Construction Agency are covered for the period of contract including extension of time limit or after completion of work & further Ten (10) year defect liability period as stipulated in contract hereof and for any loss or damage occasioned by the Construction agency(s) in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses as below :

- a) The works for the time being executed to the value as shown on the last issued payment certificate plusten(10) percent thereon (to allow for any additional costs and professional fees resulting from the loss or damage together with the materials on site for the MMC in the works at their replacement cost.
- b) The Constructional Plant and other things brought on to the site by the Construction

agency(s) to the replacement value of such constructional Plant and other things.

- c) It shall be the responsibility of the Construction agency(s) to notify the insurance company of any change in the nature and extent of the works and to ensure the adequacy of the insurance cover at all times during the duration of the contract.
- d) If the Construction agency(s) receives instructions from the MMC to insure against War Risk such insurance, shall be at the cost of the MMC and shall be into the joint names of the Construction Agency and the MMC.
- e) In these conditions the expression “Period of Maintenance” shall mean the period of maintenance named in the tender calculated from the date of completion of the Works certified by the MMC in accordance with Clause 12.08-A certificate issue by the MMC under the said Clause from the respective dates so certified and in relation to the Period of Maintenance the expression “the works” shall be construed accordingly.
- f) The Works shall at, or as soon as practicable, after the expiry of period of maintenance, be delivered to the MMC in the condition required by the contract, normal wear and tear excepted, which shall be to the satisfaction of the MMC. At the date of completion of the Works (as certified under Clause 12.14 here of), the Construction Agency shall finish the outstanding Works, if any, as soon as practicable and make good any and all defects, imperfections, shrinkages, faults as may be required by the MMC in writing during the Period of maintenance or within thirty (30) days after its expiration as a result of an inspection made by or on behalf of the MMC prior to its expiration.
- g) All such work shall be carried out by the Construction Agency (s) at his expense if the necessity thereof shall, in the opinion of the MMC, be due to the use of materials or workmanship not in accordance with the contract or neglect or failure on the part of the Construction agency(s) to comply with any obligation expressed or implied on the Construction agency(s)’ part under the contract.
If in the opinion of the MMC, such necessity shall be due to any other cause the value of such work shall be ascertained and paid for as if it were additional work.
- h) If the Construction agency(s) fails to do any such required work as aforesaid , the MMC shall be entitled to employ and pay any other person(s) to carry out the same and if such work which in the opinion of the MMC, the Construction agency(s) was liable to do at his own expense under the contract, then all expenses consequent thereon or incidental thereto shall be recoverable from the Construction agency(s) by the MMC or may be deducted by the MMC from any amounts payable or due or which may become due to the Construction agency(s).The Construction agency(s) shall, if required by the MMC in writing, search under the directions of the PMC/MMC for the cause of any defects imperfections or faults appearing during the progress of the Works or in the Period of maintenance. Unless such defects, imperfections or faults shall be the ones for which the Construction agency(s) is liable under the contract, the cost of the Works carried out by the Construction agency(s) in searching as aforesaid shall be borne by the Construction agency(s) and he shall in such case repair, rectify and make good such defect, imperfection or fault at his own expenses in accordance with the provision of (f) to (h) herein-above.

12.12 COMPENSATION FOR DELAY OF WORK AND PERCENTAGE OF WORK NOT EXECUTED WITHIN THE STIPULATED TIME:

The date stipulated for carrying out the work as mentioned in the tender shall be strictly observed by the Construction agency(s) and shall be reckoned from the date on which the order to commence work is given to the Construction agency(s). The work shall throughout the stipulated period of the contract be proceeded with all due diligence (time being deemed to be the essence of the contract on the part of the Construction agency(s), and if the Construction agency(s) makes/make default therein, it shall pay as compensation the sum which may be determined by the MMC and further to ensure good progress of the Work during the execution.

The quantity of work to be done within the specified time would be as follows:

1. $\frac{1}{4}$ (25%) of the work (in financial terms) within $\frac{3}{8}$ time (37%).
2. $\frac{1}{2}$ (40%) of the work (in financial terms) within $\frac{1}{2}$ time (50%).
3. $\frac{3}{4}$ (75%) of the work (in financial terms) within $\frac{3}{4}$ time (75%).
4. 100% work (in financial terms) within stipulated time period.

All the Work including buildings and infrastructural amenities shall be complete in all respects within the **specified period of the contract**, including monsoon.

In the event of the Construction agency(s) failing to comply with the aforesaid schedule, it shall be liable to pay as compensation an amount equal to one (1) percent of the said lump sum tendered amount, or such amount as the MMC may decide, as but not less than Rs.500/- (Rs. **Five Hundred**) per day or more amount up to which the quantity of work shall remain incomplete, provided **the amount to be recovered under this clause and clause no. 12.13, shall not exceed ten (10) percent of the lump sum tendered amount of the whole work. This amount is in addition to the amount of liquidated damages mentioned in clause 12.13.**

12.13 ACTION TO RECOVER LIQUIDATED DAMAGES WHEN TOTAL / WHOLE PROJECT IS NOT DULY COMPLETED WITHIN THE STIPULATED CONTRACT PERIOD OR EXTENDED PERIOD.

The work comprised in the tender shall be commenced immediately upon the issue of work order or its acceptance and as soon as possession of the site is handed over. The whole work including all **additions, variations and alteration** as aforesaid subject to relevant clause of the contract agreement (but excluding such, if any, as may have been postponed by an order from the Chief Officer, Mehkar Municipal Council) shall be completed in every respect by the Construction Agency (s) within the stipulated time, and if for any reason whatsoever (other than willful obstruction or default on the part of the Chief Officer, Mehkar Municipal Council or its staff) and except as hereinafter provided the whole of such work could not be finished to the satisfaction of the Chief Officer, Mehkar Municipal Council, within the stipulated or approved extension periods, the Construction Agency

shall pay to the Chief Officer, Mehkar Municipal Council by way of ascertained liquidated damages for such default the sum at the below mentioned rates or more per day till such default continues, and the amount of such liquidated damages if any may be deducted from any unpaid dues to the Construction agency(s) or if the liquidated damages not materialized from dues to be paid to the Construction agency, it may be recovered from the Construction agency(s) through legal process by Chief Officer, Municipal Council, Mehkar. **provided the amount to be recovered under this clause and clause no. 12.12, shall not exceed ten (10) percent of the lump sum tendered amount of the whole work.**

The rate of liquidated damages to be recovered from the Construction Agency is given below.

Minimum rate of liquidated damages will be Rs.10,000/-

- 1) 1st mile stone -Rs. 2,500/- per day
- 2) 2nd mile stone - Rs. 5,000/- per day
- 3) 3rd mile stone - Rs. 7,500/- per day
- 4) 4th mile stone - Rs. 10,000/- per day

12.14. ACTION & COMPENSATION PAYABLE INCASE OF INFERIOR QUALITY OF MATERIALS / WORKMANSHIP:

If at any time before the security deposit or any part thereof is refunded to the Construction agency, it shall appear to the PMC/MMC or his subordinate in charge of the work, that any work has been executed with unsound, imperfect or unskilled, defective workmanship or with materials of inferior/substandard/fake quality, or that any materials or articles provide by him for the execution of the Work are not suited to the Work, or are of a quality inferior to that contracted for, or are otherwise not in accordance with the contract, it shall be lawful for the PMC/MMC to intimate this fact in writing to the Construction agency(s), and then notwithstanding the fact that the work, materials or articles complained of may have been inadvertently passed, certified and paid for, the Construction Agency shall be bound forthwith to rectify or remove and reconstruct the work so specified in whole or in part, as the case may require, or if so required, shall remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost, and in the event of his failing to do so within a period to be specified by the PMC/MMC in the written intimation aforesaid, the Construction agency(s) shall be liable to pay compensation at the aforesaid, the Construction agency(s) shall be liable to pay compensation at the rate of one percent or such lower percentage as approved by the MMC on the amount of the lump sum for every day not exceeding ten days during which the failure so continues, however the compensation so levied will not exceed 10% of the amount of the Contract. In the event of any such failure as aforesaid, the PMC/MMC may rectify or remove and re-execute the work or remove and replace the materials or articles complained of as the case may be, at the risk and expense in all respects of the Construction agency(s). If the PMC/MMC consider that any such inferior work or materials as described above may be accepted or made use of, it shall be within his discretion to accept the same at such reduced

rates as he may fix thereof.

12.15 PENALTIES/ FINE

- 1) **Rs.25,000/-** (Rupees Twenty-Five Thousand) per day or more amount shall be recovered, if construction programme in PERT/CPM or BAR CHART is not submitted within a month's period from date of work order & the said amount shall not be refunded to Construction agency.
- 2) **Rs. 10,000/-** (Rupees Ten Thousand) per day failure to comply with the provision in the Safety Code shall make the Construction Agency liable to pay to the MMC as compensation for each default and the same shall be payable up to the date the said corrective measures are affected and accepted by the PMC/MMC. The decision of the MMC shall be final and binding in this regard.
- 3) **Rs.25,000/-** (Rupees Twenty-Five Thousand) per day failure to complete sample flat within three months as per written direction and approval of building material such as flooring tile, door window material, sanitary and plumbing fitting, electrical fixture, kitchen platform etc.

12.16 WORKS TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS DRAWINGS, ORDERS, ETC.

The Construction agency(s) shall Execute and Complete the entire work/project as per approved drawings and details. The Construction Agency shall rectify, as ordered by the PMC/MMC any errors, which may be found therein during the execution of the said work, and shall provide all plants, labors and materials for the purpose. The Construction Agency shall also provide all plants, labor and materials which may be necessary and requisite for the Works. All materials and workmanship are to be the best of their respective kinds. The Construction agency(s) shall complete the Work, which in all respects should be as per the specifications given by the MMC. The Work should necessarily be completed within the date of completion as specified herein and, in the manner, as desired by the MMC. The complete set (s) of all the drawings and copy of contract documents shall be kept at the Site office.

12.17 ALTERNATION IN DRAWINGS OR SPECIFICATIONS, ETC. NOT TO INVALIDATE CONTRACTS:

The MMC/PMC shall have the power to make any alterations, modifications in, or additions to, the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work. One time revision from the Construction agency will be allowed with the consent of the Chief Officer. If the Construction Agency wishes to change the specification of higher grade, then with the consent of Chief Officer, he is allowed to do so with no extra cost. While making such alterations, the MMC may require certain items of the Work to be omitted, from being done or any additional item of Work to be done. The Construction Agency shall be bound to carry out the work/omit the work in accordance with any such instructions which may be given to him/them in writing signed by the MMC and such alterations shall not invalidate the Contract. And any additional work which the Construction Agency may be

directed to do in the manner above specified as part of the work shall be carried out by the Construction Agency on the same conditions in all respects on which he agreed to do the main work, The additional or curtailed work shall be carried out or omitted at the current State Schedule of R of P.W.D. prevailing of that year at the time of execution or deletion. If such rate is not available in the contract or DSR then such work shall be carried out or omitted at the rates mutually agreed upon between the MMC and the Construction agency(s). No work shall be executed before prior approval of the rate.

Rates for works not entered in estimate or schedule of rate of the district

If the additional or altered work, for which no rate is entered in the schedule of rates of the division, is ordered to be carried out before the rates are agreed upon, then the Construction Agency shall within seven (7) days of the date of receipt by him of the order to carry out the work, inform the MMC of the rate which he/ they propose to charge for such class of work, and if the MMC does not agree to this rate he shall send a notice in writing and then the MMC shall be at liberty to cancel his order to carry out such a class of work, and arrange to carry it out in such manner as he may consider advisable; provided always that if the Construction agency(s) shall commence work or incur any expenditure in regard hereto before the rates have been determined as lastly hereinbefore mentioned, then in such case, he/they shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him / them prior to the date of such determination of the rate as aforesaid according to such rate or rates as may be fixed by the MMC. In the event of disputes, the decision of the MMC shall be final.

Where, however, the work is to be executed according to the designs, drawings and specifications accepted by the MMC the alterations above referred to shall be within the scope of such designs, drawings and specifications appended to the tender.

The time limit for the completion of the work shall be extended in the proportion that the increase in its cost occasioned by alterations or additions bears to the cost of the original contract work, and the certificate of the MMC as to such proportion shall be conclusive.

12.18 NO CLAIM OR COMPENSATION FOR ALTERATION IN OR RESTRICTION OF WORK:

- 1) If at any time after the execution of the contract documents the PMC/MMC shall for any reason what-so-ever (other than default on the part of the Construction Agency for which the MMC is entitled to rescind the contract) desire that the whole or any part of the work specified in the tender should be suspended for any period or that the whole or part of the work should not be carried out at all, he shall give to the Construction Agency a notice in writing of such desire and upon the receipt of such notice the Construction Agency shall forthwith suspend or stop the work wholly or in part as required, after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury to the work already done or endanger the safety thereof, provided that the decision of the Engineer as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the

Construction agency. The Construction Agency shall have no claim to any payment or compensation whatsoever by reason of or in pursuance of any notice aforesaid, on account of any suspension stoppage or curtailment except to the extent specified herein after.

- 2) Where the total suspension of the work ordered as aforesaid continued for a continuous period exceeding 90 days, the Construction Agency shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving a 10 day's prior notice in writing to the PMC/MMC, within 30 Days of the expiry of the said period of the 90 days, of such intention and requiring the PMC/MMC to record the final measurement of the work already done and to pay final bill. Upon giving such notice the Construction Agency shall be deemed to have been discharged from his obligations to complete the remaining unexecuted work under his contract. On receipt of such notice the PMC/MMC shall proceed to complete the measurements and make such payment as may be finally due to the Construction Agency within a period of 90 days from the receipt of such notice in respect of the work already done by the Construction agency. Such payment shall not in any matter prejudice the right of the Construction Agency to any further Compensation under the remaining provision of this clause.
- 3) Where the PMC/MMC required the Construction Agency to suspend the work for a period in an excess of 30 days at any time or 60 days in the aggregate, the Construction Agency shall be entitled to apply to the PMC/MMC within 30 days of resumption of work after such suspension for payment of compensations to the extent of pecuniary loss suffered by him in respect of working machinery remained idle on the site or on the account of his having and to pay the salary or wages of labor engaged by him during the said period of suspension provided always that the Construction Agency shall not be entitled to any claim in respect of any such working machinery salary or wages for the first 30 days whether consecutive or in the aggregate or such suspension or in respect or any suspension whatsoever occasioned unsatisfactory work or any other default on his part. The decision of the MMC in this regard shall be final and conclusive against the Construction agency.

12.19 CLAIM FOR COMPENSATION FOR DELAY IN STARTING THE WORK.

No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance works, on account of any delay in according to sanction of estimates.

12.20 ACTION WHEN CONSTRUCTION AGENCY(S) BECOMES DEFAULTER:

If the Construction agency(s) shall become bankrupt or if bankruptcy or liquidation proceedings are commenced against it or likely to be commenced against it, or if it enters into any arrangement with or makes any assignment/compromise for the benefit of its creditor/s or is likely to do so, or if a liquidator or receiver is appointed for its assets or it has suspended or delayed the performance of its part of the contract (except on account of causes mentioned in Clause 13 or in consequence of its not having proper instructions for which the Construction agency(s) shall have duly applied), the MMC shall have the right to terminate to the Contract. Further, it shall be lawful for the MMC to enter upon the Site,

and take possession of the Works and to employ any other person or persons to carry out and complete the same, and to authorize such person(s) to use the plant, materials and any other property of the Construction agency(s) upon the Works.

Further, the MMC shall not render itself liable for any civil or criminal action by doing the aforesaid.

The costs and charges which may be incurred in carrying on and completing the said Works shall be payable to the MMC by the Construction agency(s), and may be set off by the MMC against any moneys due or to become due to the Construction agency(s). The use of patented materials, methods and design will, however, be restricted only for the purpose of completion of the incomplete works.

12.21 ACTION WHERE NO SPECIFICATIONS.

In the case of any class of work for which there is no such specification as is mentioned in Chapter-6 such work shall be carried out in accordance with specifications in Red Book or NBC or IS specifications and in the event, there being no specifications then in such case work shall be carried out in all respect in accordance with all instructions and requirements of the PMC/MMC.

12.22 TIME LIMIT FOR UNFORESEEN CLAIMS:

Under no circumstances whatever shall the Construction Agency be entitled to any compensation from MMC on any account unless the Construction Agency shall have submitted claim in writing to the PMC/ MMC within one month of the date of such claim occurring.

12.23 CLAIM FOR QUANTITIES ENTERED IN THE TENDER OR ESTIMATES (VARIATION)

For any addition or curtailment of item/scope/quantity of the work shall be carried out or omitted at the current District schedule of rate of P.W.D. prevailing of that year at the time of execution or deletion. If such rate is not available in the contract or SSR then such work shall be carried out or omitted at the rates mutually agreed upon between the MMC and the Construction agency(s). No such work shall be executed before prior approval of the rate.

12.24 EXTENSION OF TIME ON ACCOUNT OF ALTERATIONS ETC.:

Provided nevertheless that if the Construction agency(s) shall be of the opinion that it is entitled to any extension of time on account of the works being altered, varied or added to or on account of any delay by reason of any inclement weather or any other causes beyond the control of the Construction agency(s) or in consequence of any orders to that effect from the MMC (which orders the MMC is hereby empowered to make), then in any such case or cases, it shall be competent for the MMC by an order in writing to extend the stipulated period for final completion by such period or periods as it may deem

reasonable and the Construction agency(s) shall the re upon complete the Work within such extended period or periods as aforesaid.

Further that the Construction Agency (s) shall not be entitled to any extension of time unless it shall, within thirty days (30 days) after the happening of the event in respect of which it considers itself to be entitled to any such extension of time, give to the MMC written notice of such claim for the extension of time and of the ground or grounds therefore and of the period thereof, unless in any case the MMC shall in his discretion, dispense with the requirement of such notice and certify the extension of time provided further that in cases in which any extension of time has been granted, the aforesaid provisions relating to payment of damages for default in completion of the work within the time so extended shall apply.

- 1) The definition of added, varied & alter shall mean as under:
 - a) Added: Any extra work not included in the tender. Added works mean other than not included in the tender costing not more than 10% of the work.
 - b) Varied: Major change and/or shifting of location(s) after one month of the anticipated date of commencement of that activity.
 - c) Alter: Any major change in plan or specifications after one month of the anticipated date of commencement of that activity.
- 2) The BAR/ PERT Chart shall be modified at every mile stone as stated under clause no.12.12 by keeping original contract period to complete the project within contract period by deploying more labor and machinery.
- 3) All independent work activity shall be completed within contract period such as compound wall, storm water drain, external plumbing, external electrification work, street Light, roads, landscape work etc.
- 4) Work activities which are coming in critical path of PERT chart will be considered for extension if applicable.
- 5) Liquidated damages/compensation will be levied at any stage as specified under clause no. 12.13 milestone or even after completion of project on the basis of Bar Chart/ PERT Chart & percentage of payment against work completed without show cause notice to Construction agency.
- 6) No extension on time limit will be considered for following difficulties expressed by Construction agency.
 - a) Delay of work during festival period such as Deepawali, Durga Pooja, Ramzan etc.
 - b) Delay of work due to approval of material.
 - c) Delay of work due to delay in payment to Construction agency.
 - d) Delay of work due to heavy rain.

12.25 PRIORITY OF DOCUMENTS

In case of any discrepancy between the drawings and the specifications, the MMC's decision shall be final to decide which of the two is to be followed.

Between the General Conditions of Contract and Special Conditions of Contract, if any the later shall prevail.

12.26 METHOD OF PAYMENT:

Payment of the Construction agency(s) shall be made by Real Time Gross Settlement ("R.T.G.S.") with any Scheduled Bank with which the MMC is having an account.

12.27 BILLS TO BE ON PRINTED FORM.

The Construction Agency shall submit all bills on the printed forms prescribed by the MMC, to the PMC. The charges to be made in the bills shall always be as per the schedule of payment specified in the tender or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the tender, at the cost approved by the MMC for such work.

12.28 BILLS TO BE SUBMITTED MONTHLY.

A bill shall be submitted by the Construction Agency in each month or before the date fixed by the PMC/MMC for all work executed in the previous month, and the PMC shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, so far as it is admissible, shall be adjusted, if possible, within ten days from the presentation of the bill. If the Construction Agency does not submit the bill within the time fixed as aforesaid, the PMC shall measure up the said work in the presence of the Construction Agency or his duly authorized agent whose counter signature to the measurements list shall be sufficient warrant, and PMC/MMC may prepare a bill from such list which shall be binding on the Construction Agency in all respect.

12.29 PAYMENT AT REDUCED RATES ON ACCOUNT OF ITEMS OF WORK NOT ACCEPTED AS COMPLETED, TO BE AT THE DISCRETION OF PMC/MMC

Sub-standard Structural / Construction Work / Item shall be summarily rejected. In cases, where manufactured products are required to be used in the work/ project, and they are not as per specifications (due to non-availability) then the MMC may accept the same at reduced payment for use of such products.

12.30 PAYMENT ON INTERIM CERTIFICATE TO BE REGARDED AS ADVANCES.

The Construction Agency shall on submitting a monthly bill therefore, been titled to receive payment proportionate to the part of the work then approved by PMC and passed by the PMC / MMC, whose certificate if such approval and passing of the sum so payable shall be final and conclusive against the Construction agency. The Construction Agency (s) shall be paid at the time of Running Account (R.A.) bills a sum equal to 95% of the total

value of work done since the last payment according to the schedule of payment attached. All such interim payments shall be regarded as payments by way of advance against the final payments only and not as payments for work actually done and completed, and shall not preclude the PMC/MMC from requiring any bad, unsound, imperfection unskillful work to be removed or taken away and reconstructed or re-erected nor shall any such payment be considered as an admission of the due performance of the Construction Agency any part thereof in any respect or the occurring of any claim, nor shall it conclude, determine or affect in any other way the powers of the PMC/MMC as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or affect the Contract. The final bill shall be submitted by the Construction Agency within one month of the date fixed for the completion of the work. Otherwise, the PMC/MMC's certificate of the measurements and of the total amount payable for the work shall be final and binding on all.

Such retained amount will be released in the next alternate R.A. Bill, provided the PMC certifies that such particular items is executed as per specifications stipulated in the tender and all the test results are received and are satisfactory and the quality of work is as per standard specifications and all directions issued by the Chief Officer, Municipal Council, MEHKAR have been complied in to. Payment will be released only when the items is complete. If the item of Work is not complete for all buildings, then proportionate payment based on the Built-up area (percentage of the Item x Built up area of building/ Total Built up area) only will be released. Interest on delay payment from MMC is not entitled to Construction Agency.

12.31 COMPLETION CERTIFICATE IN THE FORM OF FINAL BILL :

The certificate of the MMC hereinafter referred to showing the final balance due or payable to the Construction agency(s) shall be conclusive evidence of the works having been duly completed and that the Construction agency(s) shall be entitled to receive payment of the final balance in accordance with such certificate, but without prejudice to the liability of the Construction agency(s) under the provision of clause 10. Format of Completion Certificates are annexed herewith as **Form No.19.5**.

12.32 FINAL CERTIFICATE:

On Completion of the work, the Construction Agency shall be furnished with a certificate by the PMC/MMC of such completion, but no such certificate shall be given nor shall the work be considered to be completed until the Construction Agency shall have remove from the premises on which the work shall have been executed, all scaffolding, surplus materials and rubbish and clean off the dirt from all wood work, doors, windows, walls, floors, etc., or upon which the work has been executed, or of which he/they had possession for the purpose of executing the work, or until the work has been measured by the PMC or jointly by PMC and the Construction agency, until they have received the approval of the MMC, the said measurements being binding and conclusive on the Construction agency. If the Construction Agency fails to comply with the requirements of this clause as to the removal of scaffolding, surplus materials and rubbish and cleaning of dirt on or before the date fixed

for the completion of the work, the MMC may, at the expense and risk of the Construction Agency remove or arrange for a third party to remove such scaffolding, surplus materials and rubbish, and dispose of the same as he thinks fit and clean off such dirt as aforesaid. Further, the MMC shall not render itself liable for any civil or criminal action by doing the aforesaid and the Construction Agency shall forthwith pay the amount of all expenses so incurred, but shall have no claim in respect of any such scaffolding or surplus materials as aforesaid, except for any actually realized sum by the sales thereof.

If the Construction Agency fails to pay such charges, it shall be deducted by the MMC from the dues to be paid to the Construction agency, or from security deposit.

12.33 MAINTENANCE AND REPAIRS DURING GUARANTEE PERIOD OF FIVE (5) YEARS:

Unless if otherwise stated differently, the Construction agency(s) shall guarantee the satisfactory performance of all services and amenities for **Ten (10) years** after the date of completion of work and carry out necessary repairs/improvements that are pointed out within this period for sub-standard/defective but acceptable work.

For the entire period of defect liability, starting from the date of handing over of work to the user department, Construction Agency shall maintain staff necessary for rectification of defects, if any. Such staff shall include one mason, one plumber and one electrician, who shall hold such qualifications as directed by the MMC.

Construction Agency shall deposit the bank guarantee equivalent to 1% of tender cost for water proofing and anti-termite treatment for 5 years including the cost of urinals, w.c. units, flooring tiles, dado etc. to the MMC. (Note: Refer clause no. 4.7.6.5). If the defects are not rectified the bank guarantee will be encashed and MMC will carry out the rectification of defects.

12.34 DECISION OF PMC/MMC SHALL BE FINAL:

Except where otherwise specified in the Contract, the decision of the MMC/PMC shall be final, conclusive and binding on the Construction Agency upon all questions relating to the meaning of the specifications, designs, drawings and technical instructions here-in-before mentioned and as to the quality of workmanship or materials used on the work, or as question(s), claim(s), right(s), matter(s) out of or relating to the contract, instructions, orders, or the contract conditions, or otherwise concerning the execution or failure to execute the same, whether arising, during the progress of the works, or after the completion or abandonment thereof.

12.35 DIRECTION AND CONTROL OF PMC/MMC

- 1) Except where otherwise specified in the contract and subject to the powers delegated to the Engineer by the MMC, the decision of the PMC for the time being shall be final, relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work, or as to any other question, claim right, matter or things whatsoever, if any way arising out of

correlating to the contract, designs, drawings, specifications, estimates, instructions, orders, or other conditions, or otherwise concerning the works, or the execution, or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment thereof –

- 2) If the Construction Agency is not satisfied with the decision/ order passed by the Municipal Engineer as aforesaid, the Construction Agency may within thirty days of receipt by him of any order, appeal against it to the Chief Officer, concerned with the contract work or project.

12.36 CONTROL OVER WORKS & REMOVAL OF EMPLOYEE:

The MMC shall have at all times access to the works which are to be entirely under its control. The MMC may require the Construction agency/Construction agency's employee to be removed from the works if such person is, in his opinion, incompetent or misconducts himself, and thereon the Construction agency(s) shall forthwith comply with every such requirement of the MMC.

The Construction Agency shall ensure that while on duty, its employees conduct themselves in an appropriate manner and shall not be under the influence of liquor or other intoxicants and in the event any employee is found to be under the influence of the same, the MMC shall have the right to demand the Construction Agency to replace the said employee immediately and a penalty may be levied on the Construction agency.

12.37 WORK TO BE OPEN TO INSPECTION. CONSTRUCTION AGENCY OR RESPONSIBLE AGENT TO BE PRESENT

All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of PMC/ MMC and his subordinates, and the Construction Agency shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the PMC/ MMC and his subordinates to visit the work shall have been given to the Construction agency, 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 Construction agency's duly authorized agent shall be considered to have the same force and effect as if they had been given to the Construction Agency himself.

12.38 NOTICE TO BE GIVEN BEFORE WORK IS COVERED UP.

The Construction Agency shall give not less than five days' notice in writing to the PMC/MMC or his subordinate 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 taken before the same is so covered or placed beyond the reach of measurement and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the PMC/MMC or his subordinate in charge of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given consent obtained the same shall be

uncovered at the Construction agency's expenses, and in default thereof, no payment or allowance shall be made for such work or for the materials with which the same was executed.

12.39 QUALITY ASSURANCE PLAN

The Construction Agency shall prepare a quality assurance plan (QAP) and get the same approved from the PMC/MMC within 30 days from the date of work order. The QAP shall include a) an organization chart of his technical personnel to be deployed on the work along with their qualifications, job descriptions defining the functions of reporting, supervising, inspecting and approving, b) list of tools, equipment's and the machinery and instrumentation which he proposes to use for the construction and for testing in the field and / or in the laboratory and monitoring, c) written method statements detailing his exact proposals of execution of the work in accordance with the specifications, etc. The Construction Agency shall deploy the personnel and equipment on the field as per the approved chart and list respectively and shall modify supplement the organization chart and the list of machinery, equipment etc. as per the direction of the PMC/MMC as and when required as per site conditions. The quality of the work shall be properly documented through certificate, records, checklists and log books of results etc. Such records shall be compiled from the beginning of the work and be continuously updated and supplemented and this shall be the responsibility of the Construction agency. The forms shall be got approved from the PMC/MMC. Where the work is to be done on lump sum basis on Construction agency's design the Construction Agency shall also prepare and submit a maintenance manual giving procedure for maintenance, with the periodicity of maintenance of works including inspections, tools and equipment's to be used, means of accessibility for all parts of the structure. He shall also include in the manual, the specifications for maintenance work that would be appropriate for his design and technique of construction. This manual shall be submitted within the contract period.

12.40 TESTING OF MATERIAL OR ANY TYPE OF CONCRETE ELEMENT:

All the tests for testing the quality, durability, strength and soundness of materials of construction, precast pre-stress, post stress, component, if any, and the building structure as a whole as specified under various chapters herein shall be carried out by the Construction agency(s) to the satisfaction of the PMC/MMC at the Construction agency(s)' cost.

12.41 MINIMUM AGE OF PERSONS EMPLOYED, THE EMPLOYMENT OF DONKEYS AND OTHER ANIMALS AND THE PAYMENTS OF FAIR WAGES:

- i. No Construction agency(s) shall employ any person who is under the age of eighteen (18) year.
- ii. No Construction agency(s) shall employ donkeys or other animals with breaching of string or thin rope. The breaching must be at least three inches wide and should be of tape (Newer).
- iii. No animal suffering from sores, lameness or emaciation or which is immature shall be

- employed on the work.
- iv. The MMC or his representative is authorized to remove from the work any person or animal found working which does not satisfy the conditions mentioned herein above and the MMC shall not be liable for any delay caused in the completion of the work by such removal.
 - v. The Construction agency(s) shall pay fair and reasonable wages as per the existing acts to the workmen employed by him.
 - vi. Construction Agency shall provide drinking water facilities to the workers. Similar amenities shall be provided to the workers engaged on large work in urban areas.
 - vii. Construction Agency to take precaution against accidents which take place on account of labor using loose garments while working near machinery.

12.42 WORK ON SUNDAYS OR WEEKLY OFF:

No work shall be done on weekly off without the sanction in writing of the MMC /PMC. The weekly off shall be declared by the Construction Agency on the commencement of the work.

12.43 EMPLOYMENT OF SCARCITY LABOUR.

If Government declares a state of scarcity or famine to exist in any village situated within 10 miles of the work, the Construction Agency shall employ upon such parts of the work, as are suitable for unskilled labor, any person certified to him by the PMC/MMC, or be any person to whom the PMC/MMC may have delegated this duty in writing to be in need of relief and shall be bound to pay to such person wages not below the minimum which Government may have fixed in this behalf. Any disputes which may arise in connection with the Implementation of this clause shall be decided by the MMC whose decision shall be final and binding on the Construction Agency.

12.44 EMPLOYMENT OF LOCAL LABOUR:

The Construction Agency shall employ the unskilled labor to be employed by him on the said work only from locally available Labors and shall give preference enrolled under Maharashtra Government and Self Employment Departments Scheme. Provided, however, that if the required unskilled labors are not available locally, the Construction Agency shall in the first instance employ such number of persons as is available and thereafter may with previous permission, in writing of the PMC of the said work, obtained the rest of requirements of unskilled labor from outside the above scheme.

12.45 EMPLOYMENT OF FEMALE LABOUR:

The employment of female labors on works in neighborhood of soldier's barracks should be avoided as far as possible. The Construction Agency shall employ the labors with the nearest Employment Exchange.

12.46 EMPLOYMENT OF FAMINE LABOUR:

The Construction Agency shall employ any famine, convict or other labor of a particular kind or class if ordered in writing to do so by the PMC/MMC.

12.47 CARPENTER/BLACK-SMITH ETC.

The Construction Agency shall engage apprentice such as brick layer, carpenter, wiremen, plumber, as well as blacksmith by recommended by the State Apprenticeship Advisor Director of Technical Education, Dhobi Talaw, Mumbai: 400001. In the construction work (as per Government of Maharashtra, Education Government No. TSA/5170/T5689, dated 7.7.1972).

12.48 MINIMUM WAGES

Wages to be paid to the skilled and unskilled labors engaged by the Construction agency. The Construction Agency shall pay the laborer's skilled and unskilled according to the wages prescribed by the Minimum Wages Act of 1948 applicable to the area in which the work of the Construction Agency is in progress.

- 1) The Construction Agency shall comply with the provisions of the Apprentices Act, 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the MMC, may in his discretion may cancel the contract. The Construction Agency shall also be liable, for any pecuniary liability arising out on account of any violation by him of the provision of the Act.
- 2) The Construction Agency shall pay the laborer's skilled and unskilled according to the wages prescribed by the Minimum Wages act of the 1948 applicable to the area in which the work is in progress.

12.49 GOVERNMENT CIRCULAR NO.CAT-1284/ (120)/BLDG.2 DT.14.8.85.

The Construction Agency shall duly comply with all the provisions of the Contract Labor (Regulation and Abolition) Act, 1970 (37of1970) and the Maharashtra Contract Labor (Regulation and Abolition) Rules, 1971 as amended from time to time and all other relevant statute sand statutory provisions concerning payment of wages particularly to work men employed by the Construction Agency and working on the site of the work. In particular the Construction agencies have to pay wages to each worker employed by him on the site of the work at the rates prescribed under the Maharashtra Contract Labor (Regulation and Abolition) Rules, 1971. If the Construction Agency fails or neglects to pay wages at the said rates or makes short payment and the MMC makes such payment of wages in full or part there of less paid by the Construction Agency as the case may be the amount so paid by the MMC to such workers shall be deemed to be an arrear soft and revenue and the MMC shall been titled to recover the same as such from the contract or deduct the same from the amount payable by the MMC to the Construction Agency here under or from any other amount/s payable to him by the MMC.

12.50 CESS ON BUILDING& CONSTRUCTION LABOUR WELFARE:

An amount of equal to one percent on amount of tendered amount shall be deducted from the payment of Construction Agency as access on building & construction labor welfare. The deducted amount shall be remitted into account number 00422010000153 in the Bank of India of Chairman, Maharashtra Building & Other construction labor welfare circle, Mumbai.

12.51 CONDITIONS FOR MALARIA ERADICATION ANTI MALARIA AND OTHER HEALTH MEASURES:

- i. The ant malarial and other health measures shall be as directed by the joint Director (Malaria and Filarial) of Health Service, Buldhana.
- ii. Construction Agency shall see that mosquito prone conditions are not created so as to keep vector population to minimum level.
- iii. Construction Agency shall carry out anti-malaria measures in the area as per guidelines prescribed under National Malaria Eradication Program and as directed by the Joint Director (M&F) of Health Services, Buldhana.
- iv. In case of default in carrying out prescribed anti-malaria measures resulting in increase in malaria incidence, Construction Agency shall be liable to pay to Statutory Authority the amount spent by it on ant malarial measures to control the situation in addition to fine.

v. RELATIONS WITH PUBLIC AUTHORITIES.

The Construction Agency shall make sufficient arrangements for draining away the sewage water as well as water coming from the bathing and washing places and shall dispose of this water in such a way as not to cause any nuisance. He shall also keep the premises clean by employing sufficient number of sweepers. The Construction Agency shall comply with all rules, regulations, bye- laws and directions given from time to time by any local or public authority in connection with this work and shall pay fees or charges which are livable on him without any extra cost of MMC.

(Government of Maharashtra P.W.D. Resolution No. CAT-1086/CR-243/D-Bldg.2 dated 11.9.1987.)

12.52 RESPONSIBILITIES OF CONSTRUCTION AGENCY(S) FOR DAMAGE BY FIRE, ETC.:

From the date of commencement of the Works upto the date of on which the Works are handed over to the MMC, the work shall be the responsibility of the Construction agency. The Construction agency(s) shall be held responsible for any damage done to the same by fire or any other cause, and it shall be liable to make good all such damage and to carry out any repairs which may be rendered necessary to the same by fire or other causes, due to any such cause and restore the Works to a condition equivalent to its condition before such damage.

If the Construction Agency fails to do so, the MMC may arrange for the repair or replacement of the damage and shall deduct the costs for the repairs or replacements from

the pending bills of the Construction agency, security deposit or any other amount due to the Construction Agency under the Agreement, without affecting the other rights and remedies of the MMC under this Agreement.

Further, the Construction Agency covenants that, it will not store in or around the Site any article of combustible or inflammable or dangerous nature. If any such article is needed for the execution/completion of the Work, the Construction Agency shall take all necessary precautions and measures to prevent any fire or damage from such articles.

The Construction Agency shall indemnify the MMC from any claims for injuries to any third person (including the employees of the Construction agency), for structural damage whether to any part/s of the Work and/or adjoining or neighboring structures, damage to any property whether of the MMC, Construction Agency and/or third party, due to from any neglect or default, want of proper care or misconduct on the part of the Construction agency(s) or of anyone in its employment during the execution of the Work.

12.53 MEASURE FOR PREVENTION OF FIRE.

The Construction Agency shall not set fire to any standing jungle, trees, brush-wood or grass without a written permit from the PMC. When such permit is given, and also in all cases when destroying cut or drag trees brushwood, grass etc. by fire, the Construction Agency shall take the necessary measure to prevent such fire spreading to or otherwise damaging surrounding property.

12.54 LIABILITIES OF CONSTRUCTION AGENCY(S) FOR ANY DAMAGES DONE IN OR OUT SIDE OF THE WORK AREA:

Compensation for all damages done intentionally or unintentionally by Construction agency's labor whether in or beyond the limits of the MMC's property including any damage caused by spreading of fire shall be estimated by the PMC or such other officer as he may appoint and the estimate of the PMC subject to the decision of the MMC on appeal shall be final and the Construction Agency shall be bound to pay the amount of the assessed compensation on demand, failing which, the same will be recovered from the Construction Agency as damages in the manner prescribed in the clause 12.01 or deducted by the PMC from any sums that may be due or become due from the MMC to Construction Agency under this contract or otherwise. The Construction Agency shall bear the expenses of defending any action or other legal proceeding that may be brought by any persons for injury sustained by him owing to neglect of precautions to prevent the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequences.

12.55 CONSTRUCTION AGENCY LIABLE FOR DAMAGE DONE AND FOR IMPERFECTIONS:

- a) If during the period of 60 (Sixty) months from the date of completion as certified by the PMC/ MMC pursuant to clause 12.07 of the contract, and if in the opinion of the PMC/

MMC of the said work is defective in any manner whatsoever, the Construction Agency shall forthwith on receipt of notice in that behalf from the MMC, duly commence execution and completely carry out at his cost in every respect all the work that may be necessary for rectifying and setting right the defects specified the rein including dismantling and reconstruction of unsafe portions strictly in accordance with and in the manner prescribed and under the supervision of the PMC/MMC. In the event of the Construction Agency failing or neglecting to commence execution of the said rectification work within the period prescribed therefore in the said notice and /or to complete the same as a fore said as required by the said notice, the PMC/MMC may get the same executed and carried out departmentally or by any other agency at the risk, on account and at the cost of the Construction agency. The Construction Agency shall forthwith on demand pay to the MMC the amount of such cost, charges and expenses sustained or incurred by the MMC of which the certificate of the PMC/ MMC shall be final and binding on the Construction agency. Such costs, charges and expenses shall be deemed to be arrears of land revenue and in the event of the Construction Agency failing or neglecting to pay the same on demand as a fore said without prejudice to any other right sand remedies of the MMC; the same may be recovered from the Construction Agency as arrears of land revenue. The MMC shall also be entitled to deduct the same from any amount which may then be payable or which may there after become payable by the MMC to the Construction Agency either in respect of the said work or any other work what so ever or from the amount of security deposit retained by MMC .For the entire period of defect liability, starting from the date of handing over of work to the user department, Construction Agency shall make available staff necessary for rectification of defects, if any. Such staff shall include mason, plumber, carpenter electrician, etc., who shall hold such qualifications as directed by the MMC.

- b) For item/work provided with manufacturer/applicators warranty, refer Chapter 9, clause 9.7

12.56 A) CONSTRUCTION AGENCY TO SUPPLY PLANT, LADDERS SCAFFOLDINS, ETC. AND IS LIABLE FOR DAMAGES ARISING FROM NON-PROVISIONS OF LIGHTS, FENCING ETC.

The Construction Agency shall supply at his own cost all materials, plant, tools appliances, implements, ladders, cordage, tackles, scaffolding and temporary works requisite or proper for the proper execution of the work, whether in the original, altered or substituted from, and whether included in the specification or other documents forming part of the Construction Agency referred to in these conditions or not and which may be necessary for the purpose of satisfy in go complying with the requirements of the PMC/ MMC 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 the carriage there fore to and from the work.

List of machinery (Form II) in Construction agency's possession and which they propose to use on the works should be submitted along with the tender.

The Construction Agency shall provide suitable scaffolds and working platforms, gangways and stairways and shall comply with the following regulations in connection therewith-

- i. Suitable scaffolds shall be provided for work men for all works that cannot be safely done from ladder or by other means.
- ii. A scaffold shall not be constructed, taken down or substantially altered except.
 - b. Under the supervision of a competent and responsible person; and
 - c. As far as possible by competent workers possessing adequate experience in this kind of work.
- iii. All scaffolds and appliances connected therewith and all ladders shall-be of sound material.
 - a. Be of adequate strength having regard to the load sands trains to whichthey will be subjected, and
 - b. Be maintained in proper condition Scaffolds shall be so constructed that no part thereof can be displaced in consequence of normal use
- iv. Scaffold shall not be over-loaded and so far, as practicable the load shall be evenly distributed.
- v. Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds.
- vi. Scaffolds shall be periodically inspected by competent person.
- vii. Before allowing scaffold to be used by his workmen the Construction Agency shall whether the scaffold has been erected by his workmen or not, take steps to ensure that it complies fully with the regulations herein specified.
- viii. Working platform, gangway, stairways shall-
 - a) Be so constructed that no part thereof can sag unduly on unequally.
 - b) Be so constructed and maintained, having regard to the prevailing conditions as to reduce as for as practicable risks of person stripping or slipping and
 - c) Be kept free from any unnecessary obstruction
 - d) In the case of working platform, gangways, working place sand stairways at a height exceeding 3.00 meters.
- ix. Every working platform and every gangway shall be closely boarded unless other adequate measures are taken to ensure safety,
Every working platform and gangway shall have adequate width; and Every workingplatform and gangway, working place and stairway shall be suitable fenced.
- x. Every opening in the floor of a building or in a working platform shall expect for the time and to the extent require to allow the excess of persons or the transport or shifting of material be provided be suitable means to prevent the fall of persons or material
- xi. When persons are employed on a roof where there is a danger of falling from a height exceeding 3.00 meters (to be specified) suitable precautions shall be taken to prevent the fall be provided be suitable means to prevent the fall of persons or material.
- xii. Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffolds or other working places.
- xiii. Safe means of access shall be provided to all working platforms and other working places.
- xiv. The Construction agency/(s) will have to make payments to labors as per Minimum Wages Act.

B) CONSTRUCTION AGENCY TO SUPPLY HOISTING MACHINE

The Construction Agency shall comply with the following regulations as regards the Hoisting Appliances to be used by him:

- i. Hoisting machines and tackles, including their attachments, anchorages and supports shall.
 - a. Be of good mechanical construction, sound material and adequate strength and free from patent defect;
 - b. Be kept in good repair and in good working order.
- ii. Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patent defect.
- iii. Hoisting machines and tackles shall be examine and adequately tested after erection on the site and before use and be re-examined in position at intervals to be prescribed by the PMC/MMC.
- iv. Every chain, ring, hook, shackle, swivel and pulley block used in hoisting or lowering materials or as a means of suspension shall be periodically examined.
- v. Every crane driver or hoisting appliance operator shall be properly qualified.
- vi. No person who is below the age of 18 years shall be in control of any hoisting machine, including any scaffold, or give signals to the operator.
- vii. In case of every hoisting machine and of every chain, ring, hook, shackle, swivel and pulley block used in hoisting or lowering or as a means of suspension, the safe working load shall be ascertained by equate means.
- viii. Every hoisting machine and all gear referred to in preceding regulation shall be plainly marked with the safe working load.
- ix. In the case of a hoisting machine having a variable safe working load each safe working load and the condition sunder which it is applicable shall be clearly indicated.
- x. No part of any hoisting machine or any gear referred to in regulation above shall be loaded beyond the safe working load except for the purpose of testing.
- xi. Motors, gearing transmissions, electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguards.
- xii. Hoisting appliances shall be provided with such means as will reduce to a minimum the risk of the accidental descent of the load.
- xiii. Adequate precaution shall be taken to reduce to a minimum the risk of any part of a suspended load becoming accidentally displaced.

C) CONSTRUCTION AGENCY TO SUPPLY FENCING AND LIGHT

The Construction Agency shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out work sand counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or the materials, failing which the same may be provided by the PMC/MMC at the expense of the Construction Agency and the expenses may be deducted from any money due to the Construction Agency under the Construction Agency from his security deposit or the proceeds of sale thereof, or of sufficient portion thereof. The Construction Agency shall provide all necessary fencing and Lights required to protect the public from accident, and shall also be bound to bear the expenses of defense of every suit,

action or other legal proceeding, that may be brought by any person for injury sustained owing to neglect of the above precautions, and to pay any damage 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 Construction Agency be paid for compromising any claim by any such person.

12.57 SUM PAYABLE BY WAY OF COMPENSATION TO BE CONSIDERED AS REASONABLE COMPENSATION WITHOUT REFERENCE TO ACTUAL LOSS:

All sums payable by the Construction agency(s) by way of compensation under any of these conditions shall be considered as a reasonable compensation to be applied to the use of the MMC without reference to the actual loss or damage sustained, and whether any damage has or has not been sustained.

12.58 ENTERING UPON OR COMMENCING ANY PORTION OF WORK.

The Construction Agency shall not enter upon or commence any portion of work except with the written authority and instructions of PMC/MMC. Failing such authority, the Construction Agency shall have no claim to ask for measurements of or payments for work.

12.59 CHANGES IN CONSTITUTION OF FIRM TO BE NOTIFIED

During the development of project, if there is change in the Government Policies, Acts, Norms, Rules and Regulations which require modifications in the current scope of the project, then Construction Agency shall make those changes as directed by the MMC without any discrepancy.

Any change in the constitution of the contracting firm shall be forthwith notified by the Construction agency(s) to the MMC for his information & record. If such a change in the constitution of the contracting firm of the Construction Agency is not notified to the MMC within fifteen (15) days, then the same shall be held as breach of contract and a legal proceeding shall follow.

12.60 WORK NOT TO BE SUB-LETED:

The contract shall not be assigned or sublet without the written approval of the PMC/MMC and if the Construction Agency shall assign or sublet his contract, or attempt to do so or become insolvent or commence any proceedings to get himself adjudicated and insolvent or make any composition with his creditors, or attempt to do so or if bribe, gratuity, gift loan, perquisite, reward or advantage, pecuniary or otherwise shall either directly or indirectly be given, promised or offered by the Construction Agency or any of his servants or agents to any public officer or person in the employment of MMC 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 PMC/MMC may there upon by notice in writing rescind the contract, and the security deposit of the Construction Agency shall thereupon stand forfeited and be absolutely at the disposal of MMC , and the same consequences shall ensure as if the contract had been rescinded under Clause 12.03 thereof and in addition the

Construction Agency shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

- a) The Construction Agency may sublet any portion of specified work or part thereof up to certain limit with the approval of the MMC in writing. Subletting shall not alter the Construction agency's obligations.
- b) The Construction Agency shall not be required to obtain any consent from the MMC and the conditions of subletting will not apply for the appointment of duly licensed Sub-Construction Agency for following work portions.
 - (i) Electrical works.
 - (ii) Plumbing works.
 - (iii) Centering and shuttering works.
 - (iv) Construction of G.S.R.
 - (v) Water Proofing works.
 - (vi) Labor Construction Agency for labor appointment.
- c) Beyond what has been stated in Clause 12.26 (a) and (b) here in above, if the Construction Agency sublets the Contract or any part thereof, the same shall be treated as an Event of Default and the MMC shall be entitled to terminate this Contract.
- d) Wrongful subletting of the Contract shall be construed as committing misrepresentation and fraud by the Construction Agency and appropriate action shall be taken as may be deemed necessary, including to blacklisting with the MMC.

12.61 GURANTEE FOR DURABILITY OF THE STRUCTURE FOR DESIGN LIFE:

- a) The Construction Agency shall ensure that the structure of building constructed for the tenements are durable and shall last for a period of design life (Please refer N.B.C)
- b) Design and drawings for the building shall conform to the requirement stipulated in chapter no.4 'Designs Criteria' and Conditions stipulated therein.

12.62 TAXES RATES AND CESS:

The bidders are directed to quote their bids by considering implications of Goods and Service Tax on the estimated cost. The tendered cost shall be inclusive of existing and prospective of all taxes, rates and Cess if any and shall be inclusive of tax leviable in respect of works contract under the provision of **Goods and Service Tax Act** and implication thereof.

No reimbursement of any taxes/ rates/ Cess/ GST will be given by the MMC.

12.63 QUARRY FEES, ROYALTIES, ETC.:

All taxes, quarry fees, royalties, octroi duties and ground rent for stacking materials, if any, shall be paid by the Construction agency.

12.64 GUARANTEE FOR DURABILITY OF THE STRUCTURE FOR 50 YEARS:

1. The structure shall be designed for loads and stresses as mentioned in **IS 456- 2000** as per provision of DSR. The RCC design of building shall be based on consideration of earthquake forces as per prevailing relevant IS code and seismic coefficient shall be assumed for calculation of earthquake forces as per prevailing relevant IS codes. The importance factor of building shall be considered as 1.0.
2. For any type of foundation required for building in case the soil and sub-soil water at site has high sulphate and chloride content, the Construction Agency shall have to take utmost precautions to obtain a dense concrete of low permeability.
3. The Construction Agency shall observe method of controlling while designing and constructing various mechanisms of wear and deterioration of concrete so as to make the structure give satisfactory service and safety throughout the life without undue maintenance.
4. In observing the design controls, various code of practice and design guides, which give recommendations on durability, shall be followed. The minimum cement content, water cement ratio, minimum grade of concrete, minimum cover to reinforcement for exposure conditions of environment in city shall be strictly followed.
5. The mix design and concrete of various grades, shall be as per latest relevant IS specifications keeping in view both strength and durability. The exposure condition shall be got approved from MERI Nashik/ Government Institutes before start of work.
6. The concrete shall be of low permeability to be durable. For this purpose,
 - a. The concrete shall be strong and dense, with sufficient low water cement ratio,
 - b. The concrete shall be compacted thoroughly, Sufficient hydration of the cement shall be ensured through proper curing methods,
 - c. The aggregate cement ratio for given aggregate shall be sufficient to provide adequate workability with low water cement ratio so that concrete can be compacted with means available with the Construction agency. Use of plasticizer for workability without increasing the water cement ratio.
7. The curing affects primarily the concrete in the cover to the reinforcement and by definition this is the concrete that protects the reinforcement for corrosion by the ingress of aggressive agent. The Construction Agency shall therefore give very special attention to the curing of concrete. The period of curing mentioned in IS code shall be strictly adhered to. The water use for curing shall be potable.
8. The Construction Agency shall give special attention to maintain the specified cover during execution as this is very important to transfer the forces in reinforcement, to provide fire resistance to the steel and to protect an alkaline environment at the surface of the steel.
9. The Construction Agency shall ensure in the design and construction that there shall be no deflection, creep, and cracks in the structure beyond permissible limits.

CHAPTER NO. 13
ADDITIONAL GENERAL SPECIFICATION

13.1 PREAMBLE

The specification of items of building and infrastructure work are included in chapter no.6 'Schedule-C'. The specification of works of various items which are not covered in Red-Book and which are necessary for completion of work are covered in this chapter. Following Specifications listed are representative only and not exhaustive.

13.2 PRE-CONSTRUCTION ACTIVITIES

13.2.1 Inspection of Sites:

The Construction Agency shall visit and examine the site and satisfy as to the nature and correct dimensions of work and facilities for obtaining material and shall obtain generally his own information on all matters affecting the execution of work. No extra charge made in consequence of any misunderstanding or incorrect information on any of these points on the ground of insufficient description will be allowed. All expenses incurred by the Construction agency's in connection with obtaining information for submitting this tender including his visit to site and efforts in compiling the tender shall be borne by the Construction Agency and no claims for reimbursement thereof shall be entertained.

13.2.2 Compliance to Local Laws:

The Construction Agency shall conform to the provisions of any Act of the Legislature relating to the work and to the Regulation of Bye Laws of any authority. He shall also obtain the permission of the Municipality or any other Authorities if required under the existing rules.

13.2.3 Site Cleaning:

All the rates quoted are inclusive of removal of rubbish / debris collected during the progress of work, rejected material and clearance of site before and after the work is completed. Not more than one truck load shall be stored that to for not more than 3 days. The Construction Agency shall arrange to remove the same immediately. If the Construction Agency is failing to remove the same and the expenses shall be recovered from the Construction Agency and he will not dispute for the expenses so incurred.

13.2.4 Construction Agency's Responsibility:

The work will from time to time be examined by PMC/MMC, but such examination shall not in any way exonerate the Construction Agency from the obligation to remedying any defects which may be observed at any stage of the work or after the same is completed.

13.3 GENERAL SPECIFICATIONS FOR INTERIOR FURNISHING WORK

13.3.1 GENERAL:

- a. The Construction Agency is advised to study all the drawings in detail, including the intent of the design. All necessary clarifications should be sought by the Construction Agency prior to submission of the tender.
- b. All work shall be carried out in the best workmanship like manner and wherever, specifications for any items are not given, the relevant Indian Standard Institution specifications shall be applicable and followed.
- c. The specifications are for work to be done, item to be supplied and materials to be used in the works as shown and defined on the drawings and described herein, to the satisfaction of the PMC/MMC.
- d. The workmanship is to be the best possible and of a high standard. The Construction Agency shall take all steps immediately to make up deficiency if any noticed by the PMC/MMC. The materials to be provided by the Construction agency shall be in accordance with the samples already got approved from the PMC/MMC by the Construction Agency and in conformity with specifications and approved list called upon to do so by the PMC/MMC.
- e. Samples of all materials are to be submitted to the PMC/MMC for their approval before the Construction Agency orders of deliver the material to the site. Samples together with their packing are to be provided free of charge by the Construction Agency and should any materials be rejected they will be removed from the site at the Construction agency's expense. All samples will be required to submit specimen finishes of colors, fabrics etc. for the approval of the PMC/MMC before proceeding with the work.
- f. The Construction Agency shall be responsible for providing and maintaining temporary overages required for the protection of finished work. Construction Agency shall also to clean out all wood shavings, cut ends and other waste from all parts of the works before coverings or infillings are constructed.
- g. The Construction Agency shall maintain uniform quality and consistency in workmanship throughout the execution of the work.

13.3.2 MATERIALS:

1. Plywood:

All ply or block board shall be of Termite proof marine ply, National Ply / Bhutan Ply/ Hunsur Ply/ Donyi Ply /Duro Ply as approved by the PMC/MMC. All exposed blockboard edges shall have Cedar Wood lipping of 10 mm thick unless otherwise specified. When decorative ply/block board is used for paneling, the same shall be of matching grains.

2. Screws:

All screws shall be of steel screws of nettle fold make confirming to IS - 1365.

3. **Hinges:**
Stainless steel hinges shall be used and get the approval from PMC/MMC for quality and make.
4. **Door Closures:**
Door closures shall be of Godrej/ Everite, Hardwin and before using PMC/MMC's approval shall be taken.
5. **Locks:**
Locks shall be as approved by the PMC/MMC.
6. **Adhesives:**
The adhesives used shall be Fevicol only.
7. **Glass:**
The glass shall be Modi float clear glass.
11. **Laminate Sheets:**
All laminates will be of maple or green ply or Formica having minimum thickness of 1.5mm. The colors will be selected and approved by the PMC/MMC.
12. **Veneer:**
The veneer shall be White Cedar of 4 mm thickness of approved make. The designs will be selected and approved by the PMC/MMC.
11. **Built In-Joinery:**
Where joinery work is specified to be built-in, it shall be the responsibility of the Construction Agency to ensure that the joinery works are set in plumb and true in line and shall not be damaged or displaced by subsequent operations.
12. **Trim:**
Moldings shall be of first-class cedar, true to detail, clear and sharply defined. It shall be securely fastened with finished nails and screws well set in position and nail holes puttied with putty colored to match trim.
13. **Melamine Polishing:**
All unevenness shall be rubbed down to smoothness with sand paper and the surface shall be well dusted. The pores in the wood shall be filled up with filler made of a paste whitening in water on methylated spirit (with a suitable pigment like burnt sienna or amber if required).

13.3.3 PROTECTION OF WORK:

The Construction Agency shall be responsible for the temporary doors and closing in of openings necessary for the protection of the work during progress. Construction Agency shall also provide and maintain any other temporary covering required for the protection of finished/unfinished wood work that may be damaged during the progress of the work if left unprotected.

13.4 NON-DESTRUCTIVE TESTS:

Minimum of five 5% of structural elements shall be tested by non-destructive test, such as ultrasonic test, pulse velocity test I.S. 1331 Part I and rebound hammer test I.S.1331 Part II probe penetration, and maturity test. The minimum strength at nine and half (9.5) % confidence shall be 1.1. x characteristic strength. This test shall not be accepted for testing the concrete, where cubes have shown below required strength.

13.4.1 ACCEPTANCE CRITERIA FOR CONCRETE:

In order to ensure proper control on the quality of concrete, acceptance criteria as laid down in I. S. Specification No.I.S.456-2000 has to be followed. Random samples from fresh concrete should be taken as specified in IS-1199, and cubes should be made, cured and tested as specified in IS-516. The test strength of the sample shall be the average of the strength of three specimens. The individual variation should not be more than fifteen 15%.

13.4.2 FREQUENCY OF SAMPLING:

The minimum frequency of each sampling concrete shall be in accordance with the following. Quantity of concrete in the No. of Samples

Work Cu.M	
1 – 5	1
6 – 15	2
16 – 30	3
31 – 50	4
51 and above	4 sets plus one additional set of each
	Additional 50 m3 or part thereof

CHAPTER NO. 14
LABOUR REGULATIONS

14.1 PREAMBLE:

During continuance of the Contract, the Construction Agency shall abide at all times by all existing labor enactments and rules made there under regulations, notifications and bye laws of the State or Central Government or local authority. And any other labor law (including rules), regulations, bye laws that may be passed or notifications that may be issued under any labor law in future either by the State or the Central Government or the local authority. Construction Agency has to obtain labor license from Maharashtra Labor Welfare Board. Construction Agency will be solely responsible for safety of labors. Insurance of every labor shall be Construction Agency responsibility and no claim on this account shall be entertained.

The Construction Agency shall keep the employer indemnified in case any action is taken against the employer by the competent authority or account of contravention of any of the provision of any Act or rules made there under, regulations or notifications including amendments. It is the responsibility of Construction Agency to provide all the facilities to labors at his own cost. If the MMC is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non – observance of the provisions stipulated in the notifications / bye laws / Acts / Rules / Regulations including amendments, if any, on the part of the Construction Agency, the MMC shall have the right to deduct any money due to the Construction Agency including his amount of performance security. The MMC shall also have right to recover from the Construction Agency any sum required or estimated to be required for making good the loss or damage suffered by the MMC. The Employees of the Construction Agency and the Sub-Construction Agency in no case shall be treated as the Employees of the MMC at any point of time.

Failure to comply with the provision in the safety code shall make the Construction Agency liable to pay to the PMC/MMC as compensation an amount of Rs. 50/- (Rupees fifty) per day for each default and the same shall be payable up to the date the said corrective measures are affected and accepted by the PMC/MMC. The decision of the MMC shall be final and binding in this regard.

Salient features of some of the major labor laws that are applicable to construction industry are given below.

Labor Compliance related details and charts shall be approved from PMC/ MMC and it is mandatory responsibility of Construction Agency to follow the compliances. These compliances include -

- 14.2** EMPLOYEES STATE INSURANCE CONTRIBUTION
- 14.3** EMPLOYEES PROVIDENT FUND AND MISC. PROVISIONS ACT 1952
- 14.4** WEEKLY DAY OF REST
- 14.5** DISPLAY OF NOTICE REGARDING WAGES, WEEKLY DAY, DAY OF REST ETC.
- 14.6** FIXATION OF WAGE PERIODS
- 14.7** REGISTER OF WORKMEN
- 14.8** EMPLOYMENT CARD

- 14.9** REGISTER OF WAGES ETC.
- 14.10** PRESERVATION OF REGISTERS
- 14.11** APPEAL AGAINST DECISIONS OF INSPECTING OFFICER
- 14.12** REPRESENTATION OF PARTIES
- 14.13** INSPECTION OF REGISTERS AND OTHER DOCUMENTS
- 14.14** AMENDMENTS
- 14.15** MODEL RULES FOR LABOUR WELFARE
- 14.16** ACCOMODATIONFOR LABOUR
- 14.17** SCALE FOR LATRINES AND URINALS
- 14.18** CONSTRUCTION OF LATRINES
- 14.19** PROVISION OF SHELTER DURING REST
- 14.20** CRECHES
- 14.21** CANTEEN
- 14.22** INFORCEMENT
- 14.23** INTERPRETATION

CHAPTER NO. 15**ANNEXURE I****I. QUALITY CONTROL TESTS**

The Construction Agency shall carry out all the tests for the respective material as mentioned in the tables below and as per releavent IS code as directed by PMC/ MMC.

Sr No.	Material	Test
1.	Stone	i) Compressive Strength. ii) Water Absorption
2.	Trap Metal	i) Crushing value. ii) Impact value. iii) Abrasion value. iv) Water Absorption. v) Flakiness Index & Elongation index vi) Gradation
3.	Bricks	i) Compressive Strength. ii) Water Absorption. iii) Efflorescence
4.	Flooring Tiles / Glazed Tiles	i) Flexural strength ii) Water Absorption iii) Transverse strength iv) Breaking Load
5.	Cement	i) Compressive Strength ii) Initial setting time. iii) Final setting time. iv) Specific Gravity v) Soundness vi) Fineness vii) Std. Consistency viii) Workability
6.	Steel	i) Weight per meter. ii) Ultimate Tensile stress. iii) Yield stress iv) Elongation

		v) Bend Test. vi) Chemical tests
7.	Interlocking concrete paving block	i) Compressive Strength ii) Flexural Test iii) Resistance to wear iv) Water Absorption
8.	Cement Concrete	i) Concrete Mix design ii) Compressive strength iii) Flexural strength iv) Permeability Test v) Slump Test
9.	Sand	i) Water absorption ii) Fineness Modulus iii) Slit Content iv) Bulkage v) Specific Gravity
10.	Water	i) P.H. Value for water ii) Chloride & Sulphate content.

II. CONSTRUCTION MATERIAL TESTING & ITS FREQUENCY

Sr. No.	Material	Frequency
1.	CEMENT 1) Consistency 2) Initial & Final Setting time 3) Fineness 4) Specific Gravity 5) Soundness 6) Compressive Strength	One test for each consignment of 100 MT& part thereof.
2.	METAL 1) Sieve Analysis (Gradation) 2) Sieve Analysis Red Book Specification Water Absorption Impact (Concrete WBM/BT) Crushing Abrasion Flakiness & Elongation Index Plasticity Index for blind age used for WBM	1 Test for every day work 1 Test per 100 m ³ 1 Test per 200 m ³ 1 Test per 200 m ³ 1 Test per for Each Source 1 Test per for Each Source 1 Test per 200 m ³ 1 Test per 25 m ³
3.	SAND 1) Water Absorption & Specific Gravity 2) Fineness Modulus 3) Slit Content 4) Bulk age	1 Test per for Each Source 1 Test per for Each day 1 Test per for Each day work 1 Test per for Each day work
4.	BRICKS 1) Water Absorption 2) Comp Strength 3) Effloresce	For each 50000 No. bricks Above three tests are to be carried out
5.	Flooring Tiles 1) Flexural Strength 2) Water Absorption 3) Abrasion	For 2000 No. of Tiles above three tests are to be carried out
6.	Mangalore tiles 1) Water Absorption 2) Breaking Load	1 Test- 6 Tiles per 50000 Number 2 Test- 6 Tiles per 50000 Number
7.	Glazed Tiles 1) Water Absorption	1 Test- 6 Tiles per 2000 Number
8.	Concrete Mix Design	1 Concrete Mix Design for each

9.	Compressive strength C. C. Cubes for Qty Qty. up to 5 m ³ 6-15 m ³ 16-30 m ³ 31-50 m ³ Quantity above 51 m ³	grade of concrete per every per 1 Set (3 No.) 2 Set (3 No.) 3 Set (3 No.) 4 Set (3 No.) 4+1 additional set per 50 m ³
10.	MURUM/ SOIL for earth work 1) Optimum Dry Density 2) C.B.R. 3) Liquid & Plastic Limit/Plasticity Index 4) Filed Density 100% P.D. 5) Filed Moisture Content	2 Test per 3000 m ³ 1 Test per 3000 m ³ 1 Test per 3000 m ³ 1 Test per 3000 m ³ 1 Test per 3000 m ³
11.	WATER 1) P.H. Value for Water and Sand 2) Chloride & Sulphate content	1 test per Source 2 test per Source
12.	Steel 1) Wt per meter 2) Ultimate Tensile Stress 3) Yield stress 4) Elongation	One test for every lot. thereof for each diameter

CHAPTER NO. 16**ANNEXURE II****LIST OF APPARATUS REQUIRED FOR TESTING**

Sr. No.	Name of Apparatus	No. (min) required
1.	30 m and 50 m chain/ tape	2 No.
2.	Automatic levelling instrument/ Tachometer with all accessories like 5.00 metre staff	2 No.
3.	Vernier callipers	2 No.
4.	Cube moulds for concrete/Cube moulds for cement mortar	6 Sets
5.	Silt jar for sand silt testing.	3 Sets
6.	Oven-Electrically operated, thermostatically controlled, range up to 200 0C sensitivity 10C.	1 No.
7.	Platform balance 300 kg capacity	2 No.
8.	Balance 20 kg capacity - self indicating type	1 No.
9.	Electronic Balance 5 kg capacity, accuracy 0.5 gm	2 No.
10.	Water bath- electrically operated and thermostatically controlled with adjustable shelves, sensitivity 10C.	1 No.
11.	Thermometers: Mercury-in-glass thermometer, range 00 to 2500C Mercury-in-steel thermometer with 30 cm stem, range up to 3000C.	1 No.
12.	Kerosene or gas stove or electric hot plate.	1 No.
13.	Set of IS sieves with lid and pan: 450 mm diameter, 200 mm diameter, 63 mm, 53 mm, 37.50 mm, 26.50 mm, 13.20 mm, 9.50 mm, 6.70 mm, and 4.75 mm size 2.36 mm, 2.0 mm, 1.18 mm, 600-micron, 425-micron, 300-micron, 150 micron, and 75 microns	1 Sets 2 Sets
14.	Water testing Kit	1 Set
15.	Vicat apparatus for testing setting times	1 Set
16.	Slump testing apparatus	2 Sets
17.	Compression and Flexural strength testing machine, 200 tonne capacity with additional dial for flexural testing.	1 No.
18.	Chloride and Sulphate Kit	2 No.
19.	Moisture Content Jar	1 No.

CHAPTER NO. 17**FORM NO. I to V****17.01 FORM NO. I - DETAILS OF LIST OF WORKS IN HAND AS ON SUBMISSION OF TENDER:****I-(A) WORKS IN HAND**

Sr. No.	Name of the work	Agreement No.	Tendered Amount / Project Cost	Date of commencement	Stipulated date of Completion	Value of work already done (Rs. in lakhs)	Value of balance work (Rs. in lakhs)	Value of balance work to be done during this contract period.	Probable date of completion	Remarks
1	2	3	4	5	6	7	8	9	10	11

Note: - Works in hand shall be supported by certificate issued by agency/ authority/Executive engineer.

Signature of Bidder.

Signature of MMC.

17.02 FORM NO. I - LIST AND DETAILS OF TENDERED WORKS**I-(B) WORKS TENDERED**

Sr. N o.	Name of the work	Name and address of the MMC	Tendered Amount Rs. In lakh	Time Limit	Probable date when decision expected	Other relevant date if any
1	2	3	4	5	6	7

17.03 FORM NO. II –LIST OF PLANT AND MACHINERY IMMEDIATELY AVAILABLE WITH THE TENDERER

FOR THIS WORK:

Sr. No.	Name of equipment	No. of Units	Kind and make	Capacity	Age and Condition	Present location	Remarks
1	2	3	4	5	6	7	8

Signature of Bidder

Signature of MMC

17.04 FORM NO. III : DETAILS OF WORK OF SIMILAR TYPE AND MAGNITUDE CARRIED OUT BY BIDDER DURING LAST FIVE YEARS i.e., FROM ----- to -----.

Sr. No	Name of work	Name and Address of the organisation for whom the work was done	Place and County	Agreement No.	Date of commencement	Tendered cost	Total cost of work done	Date of completion	Principle Features & Built-up area (sq.mt.)
1	2	3	4	5	6	7	8	9	10

Signature of Bidder

Signature of MMC

17.05 FORM NO. IV : DETAILS OF TECHNICAL PERSONS AVAILABLE WITH THE BIDDER SINCE FIVE YEARS.

Sr. No .	Name of Personnel with age	Designation	Qualification	Whether working in field or office	Experience of execution of similar work	Tenure of persons who is working with the tenderer (in Years)	Remarks
1	2	3	4	5	6	7	8

Note: - Project in charge from technical person shown in above table shall be available on site of work during execution.

Signature of Bidder

Signature of MMC

17.06 FORM NO. V - (A)**STATEMENT SHOWING PAYMENT RECEIVED (i.e., RECEIPT) IN ALL CLASSES OF CIVIL ENGINEERING CONSTRUCTION WORKS DURING LAST FIVE YEARS FOR REGISTERED CONSTRUCTION AGENCY.**

Sr. No.	Name of Work	Name of MMC and Address	Amount put to tender/tendered cost.	Agreement No.	Date of Commencement	Type and Nature of Work	Expenditure of Project of last five years.			Amount of work still remaining to be executed	Expected date of completion
							----- ---	----- ---	----- --		
1	2	3	4	5	6	7	8	9	10	11	12

Note: Form shall be certified by the chartered Accountant.

Signature of Bidder

Signature of MMC

17.07 FORM NO. V - (B)**STATEMENT SHOWING PAYMENT RECEIVED (i.e., RECEIPT) IN ALL CLASSES OF CIVIL ENGINEERING CONSTRUCTION WORKS DURING LAST FIVE YEARS BY UN-REGISTERED CONSTRUCTION AGENCY/BUILDER/CONSTRUCTION AGENCY etc.**

Sr. No.	Name of Work	Project Cost	Agreement No.	Date of Commencement	Type and Nature of work	Expenditure of Project of last five year			Amount of work still remaining to be executed	Expected date of completion
						-----	-----	-----		
1	2	3	4	5	6	7	8	9	10	11
				Grand Total						

Note: - Form shall be certified by the Chartered Accountant.

Signature of Bidder

Signature of MMC

18.02 DECLARATION OF THE CONSTRUCTION AGENCYS:

I / we _____ hereby solemnly affirm and declare that, I / we have made myself / ourselves thoroughly conversant with the local laws, local conditions, such as soil/ sub soil strata, topography, regarding availability of all materials such as, stones, murum, sand, bricks, metal, cement, steel, water and all other requisite matters and availability of skilled and unskilled labor on which, I /we have based my /our rates for this work. The drawings, specifications, conditions and materials required for this work have been carefully studied and understood by me/ us before submitting this Tender. I/we undertake to use only such materials which are recognized to be of the best quality by the appropriate industrial standards and which shall be duly approved by the Chief Officer, Municipal Council, MEHKAR i.e., MMC, or its duly authorized representative in writing before the commencement of any “Work” as mentioned in the Tender and to abide by the decision of the MMC in all respects and at all times.

Solemnly affirmed at _____)

On this ____ day of _____ 20_____) (Signature of the Construction agency)

Identified by

Signature of the Advocate

18.03 INDEMNITY BOND:

(On Stamp paper Rs. 1000/-)

This Indemnity Bond is made on this _____day of _____, 20__ by M/s_____ a company/ partnership firm/ sole proprietor having their registered office at _____, (hereinafter referred to as the “*Construction Agency*”) in favor of Chief Officer, Municipal Council, MEHKAR.(hereinafter referred to as the “*MMC*”).

WHEREAS:

The Construction Agency and the MMC have entered into an agreement dated _____for _____

NOW THIS DEED WITNESS THAT:

1. The Construction Agency does hereby covenant with the MMC that the Construction Agency will indemnify and keep indemnified the MMC (and each of the officers, directors, employees, advisors and Affiliates) for any action, suit, litigation or claim of any nature whatsoever made by any person of any nature whatsoever in respect of the work done by the Construction Agency by virtue of any act of commission or omission of the Construction agency.
2. The Construction Agency agrees to compensate the MMC against any loss, costs, charges and expenses including attorney fees that the MMC may incur or suffer on account of such action, suit, litigation claim or any dispute.
3. The Construction Agency shall also indemnify the MMC (and each of the officers, directors, employees, advisors and Affiliates) for making good any claim/penalty/loss or damages, including costs (including council fees and legal cost) thereof, in respect of any breach or violation of any provisions of any law, including labor laws governing the employees of the Construction agency. In case of any failure to make good the above/any losses/expenses to the MMC, the same shall be deducted from the amounts to be paid to Construction agency, as per the bills raised, or may be deducted from the security deposit or from any payments to be made to the Construction Agency under the aforesaid Agreement.
4. The Construction Agency shall be solely indemnifying the MMC (and each of the officers, directors, employees, advisors and Affiliates), from costs or liabilities, arising therefrom (including council fees and legal cost) for any claims, against the MMC for any accidents, injuries, death and/or damages caused to any individual/s and/or property of any third party, due to negligence of the Construction Agency or its employees, during performance of their duties under the Agreement.

Dated this _____ day of _____

IN WITNESS WHEREOF the Construction Agency hereto have hereunto set and subscribed their respective hands the day and the year hereinabove written.

SIGNED, SEALED AND DELIVERED by the within named Construction agency:

Mr. _____

(1) _____

In the presence of

(1) _____

(2) _____

18.05 GUARANTEE BOND FOR WATER PROOFING TREATMENT

(On stamp paper of Rs. 1000 each)

(Model Proforma)

Dated: -

To,

Chief Officer,
Municipal Council,
Mehkar

Sub.: Construction of -----.

Sir,

I/We ----- have executed and completed the work of Water Proofing Treatment (hereinafter referred to as “*treatment*”) on ----- date.

I/We hereby guarantee that, the treatment shall be valid for a period of 5 years (hereinafter referred to as the “Guarantee Period”) immediately commencing from the date of completion of building as aforesaid. In the event of any defaults arising during the Guarantee period I/ We will immediately rectify all such defects at my/our own cost to the entire satisfaction of the Chief Officer, Municipal Council, Mehkar (hereinafter referred to as “MMC”).

However, in case the efforts to rectify the same are not initiated by us within two (2) days from the knowledge of the occurrence of such defects, the MMC reserves the right to rectify such defects and recover the entire cost of the same from us.

I/ We undertake to pay such cost, without demur to the MMC within five (5) days from the demand for such amount, in the manner as shall be directed by the MMC.

Agency

Signature of Construction

-परिशिष्ट - अ०
प्रतिज्ञापत्र

मी ----- वय -----

- वर्षे राहणार -----सत्यप्रतिज्ञेवर लिहून देतो की,

मी ----- या कंपनीचा प्रोप्रायटर / भागीदार असून मी ----

----- या कामासाठी ई — निविदा

सादर केली आहे. सदर निविदेसोबत कागदपत्रे सादर केली आहेत. सदर कागदपत्रे

सत्य, बरोबर व परिपूर्ण आहेत. सदर कागदपत्रांमध्ये त्रुटी किंवा चुका नाहीत असे

शपथपूर्ण मान्य करत आहे. या कागदपत्रांमध्ये काही चुकीची, दिशाभूल करणारी,

खोटी व अपूर्ण माहिती आढळल्यास मी कायदेशील कारवाईस पात्र राहील.

निविदाधारकाचे नाव

पत्ता

दिनांक —

निविदाधारकाची सही

साक्षीदाराचे नाव

पत्ता

दिनांक —

साक्षीदाराची सही

-परिशिष्ट -ब०**प्रतिज्ञापत्र**

मी / आम्ही याद्वारे असे नमूद करतो की, महाराष्ट्र नगरपरिषद, नगर पंचायती व औद्योगिक नगरी अधिनियम १९६५ चे कलम १६ (१) (आय) व कलम ४४ (१) (ब) तरतुदीच्या, ज्या खाली उद्धृत केलेल्या आहेत. माहिती आहे आणि गंभीरपणे नमूद करतो की, नगरपालिकेशी किंवा नगरपालिकेच्या अधिन किंवा नगरपालिकेने किंवा नगरपालिकेच्या वतीने करण्यात येणाऱ्या संविदेमध्ये नगरपरिषदेच्या कोणत्याही नगरसेवकाचा हिस्सा किंवा आर्थिक हितसंबंध किंवा आमच्याशी भागीदारी नाही.

कलम १६ (१) (आय) : यापुढे तरतूद केली असेल याव्यतिरिक्त, नगरपालिकेच्या आदेशावरून केलेल्या कोणत्याही कामात किंवा नगरपालिकेशी किंवा नगरपालिकेच्या अधिन किंवा नगरपालिकेने किंवा नगरपालिकेच्यावतीने केलेल्या कोणत्याही संविदेत जिचा स्वतःचा किंवा आपल्या भागीदारामार्फत प्रत्यक्ष किंवा अप्रत्यक्षरित्या कोणताही हिस्सा किंवा हितसंबंध असेल.

कलम ४४ (१) (ब) : पालिका सदस्य म्हणून किंवा नगरपालिकेच्या कोणत्याही समितीचा सदस्य म्हणून ज्या कोणत्याही बाबतीत कलम १६ चे पोट-कलम (३), खंड (अ), (ब), (क), (इ) व (ग) मध्ये वर्णन केल्याप्रमाणे त्याचा किंवा त्याच्या भागीदाराचा प्रत्यक्ष किंवा अप्रत्यक्षरितीने कोणताही हिस्सा किंवा हितसंबंध असेल मग अशा हिश्याची किंवा हितसंबंधाची किंमत काहीही असो, किंवा जीत त्याचा अशीलाच्या, प्रकर्त्याच्या किंवा इतर व्यक्तींच्या वतीने व्यावसायिकदृष्ट्या त्याचा हिस्सा किंवा हितसंबंध असेल अशा कोणत्याही बाबतीत मतदान करील.

निविदा धारकाचे नाव :-

पत्ता :-

निविदा धारकाची सही

दिनांक :-

साक्षीदाराचे नाव :-

पत्ता :-

साक्षीदाराची सही

दिनांक :-

18.06 CHECK LIST FOR FINAL BILL PROCESSING:

Name of work:			
Sr.No	Particulars	Information In the form of Yes/No	Remarks
A.	Technical		
1.	Whether as built drawing is submitted by the Construction agency?		
2.	Whether the project is completed within stipulated time period?		
3.	Whether structural stability certificate is submitted		
4.	Whether water supply completion certificate is submitted by Construction agency/PMC?		
5.	Whether drainage completion certificate is submitted by Construction agency/PMC?		
6.	Whether electrification completion certificate is submitted by Construction agency/PMC?		
B.	Finance		
1.	Whether water proofing guarantee is submitted by the Construction agency?		
2.	Whether anti-termite guarantee is submitted by the Construction agency?		
3.	Whether all other required guarantees in respect of fixtures such as electrical (eg.pump, Lights, transformer, fans) are submitted by the Construction agency?		
4.	Whether requisite security deposit is recovered from Construction agency?		

5.	Whether penalty (if applicable) is recovered from Construction agency?		
6.	Whether excess/ saving statement (if any) is finalized?		
7.	Whether no due certificate is submitted by Construction agency?		
8.	Whether all NOCs are obtained by Construction Agency?		
C.	Clearance		
1.	Whether occupancy certificate is obtained?		
2.	Whether requisite procedure for transferring the building on PRB register of PWD is completed?		

Note: This Checklist shall be verified and certified by PMC

APPENDIX - IV

LIST OF DOCUMENTS TO BE ATTACHED WITH R. A. BILLS / FINAL BILL

Sr. No	Document	Attached Yes/No
1.	Letter of Construction Agency to PMC with copy to MMC(No. and Date) (Form B - 1)	
2.	Letter of PMC to MMC with copy to Construction agency(No. and Date)(Form B - 2)	
3.	Submission of Running Account Bill No. --- (No. and Date)(Form B - 3)	
4.	Certificate of PMC with bill and in MB (Form B - 4)	
5.	Certificate of Construction Agency with bill (Form B - 5)	
6.	Certificate by PMC regarding deployment of key staff and other staff (Form B - 6)	
7.	Certificate by EE / DE / PE regarding deployment of key staff and other staff by PMC (Form B - 7)	
8.	FORM NO 67 (P.W. 466) (Form B - 8)	
9.	Abstract of Bill (Form B - 9)	
10.	Account of Work (Form B - 10)	
11.	Payment Schedule as per Tender (Form B - 11)	
12.	Payment Schedule Abstract (Form B - 12)	
13.	Details about withheld amount (Form B - 13)	
14.	Reasons of Delay of work (Form B - 14)	
15.	Abstract of test reports with copies of test reports. (Form B - 15)	
16.	Test Frequency Chart (Form B - 16)	
17.	Sample Approved During Period of Bill (Form B - 17)	
18.	Abstract of Steel Receipt and Challans (Form B - 18)	
19.	Steel Consumption Statement (Form B - 19)	
20.	Abstract of Cement Receipt (Form B - 20)	
21.	Cement Consumption Statement (Form B - 21)	
22.	Bar Chart (Physical) (Form B - 22)	
23.	Bar Chart (Financial)	
24.	Another document attached if any	
25.	Progress Report (in pictorial diagram of each building)	
26.	Photographs	
27.	Acquittance (Form B - 23)	

Note: Every page shall be signed by PMC and Construction agency.

FORM B - 1

Date:

To

PMC

Subject:

Ref: Agreement No.

Date of Commencement:

Respected Sir,

Please find enclosed here with the R.A. Bill for the above said work for your kind consideration, approval please.

Encl:

- 1] Bill.
- 2] Prescribed Bill forms.
- 3] Lab Test Reports.
- 4] Bar Chart.
- 5] Steel and Cement Challan
- 6] CAR Policy
- 7] Bank Guarantee

For

Construction agency

Copy submitted to: Chief Officer, Municipal Council, MEHKAR.

FORM B - 2

Date:

To
Chief Officer,
Municipal Council,
MEHKAR.

Sub: - Submission of R.A. Bill No._____.

Name of Work:_____

Ref: 1) Agreement No.
2) Construction agency's Letter No. ____ Date_____

Respected Sir,
Please find enclosed herewith R.A. Bill No.for the above said work of the Agency. -
-----, for your consideration, approval and payment please.

Thanking You,
Yours truly,

for:

PMC
[]

Encl:
1] Construction agency's Bill.
2] Prescribed Bill forms.
3] Lab Test Reports.
4] Bar Chart.
5] M.B. No.

FORM B - 3**SUBMISSION OF RUNNING ACCOUNT BILL NO.**

Name of Work :
 Name of Construction agency :
 Name of P.M.C. :
 Agreement No. :
 R.A. Bill No. :
 Date :

Sr. No.	Descriptions	Particular
1.	Running Account Bill No. and date of submission	
	a. Period of bill	
	b. Date of recording	
	c. M.B. No.	
	A. For	
	d. Date of bill submitted by the Construction Agency to PMC	
	e. Date of bill submitted by the PMC to MMC	
2.	Name of Architect Cum PMC	
3.	Name of Construction agency	
4.	Date of Work Order	
5.	Agreement No.	
6.	Time Limit for completion of work	
7.	Scheduled date of Completion	
8.	Extension of Time Limit, (if any) and their letter no.	
9.	Compensation levied, (if any)	
10.	Estimate Cost of work	
11.	Scope of work including infrastructure of work	
12.	Tender Cost of work	
13.	Date of completion after extension	
14.	Up to date amount of Bill- R.A.	
	A) For	
15.	Amount of This R.A. Bill No.	
	A) For	
A.	In percentage of tender amount	
	A) For	

B.	In amount	
	A) For	
16.	Security Deposit	
	a. In form of Bank Guarantee No. BG. No. Rs. /- valid up to / /	
	b. CAR Policy No. Valid up to/ /	
	Note: - PMC should verify whether the Bank Guarantee/CAR policy is expiring within ___ months from the date of recording. If so, he should not send the bill unless the Bank Guarantee/ CAR Policy is extended by the Construction agency. If PMC submitted the bill of Construction Agency after expiry of Bank Guarantee or CAR policy the equivalent amount will be recovered from bill of PMC. PMC should collect Xerox copy of B.G. and CAR Policy from Construction Agency or MMC. Attach the Xerox copy.	
	a. Total amount of security deposit to be recovered through R.A. Bills.	
	b. Total amount of security deposit recovered up to previous bill No.	
	c. Amount of the security deposit to be recovered in this R.A. bill	
	d. Outstanding of security deposit.	
17.	Recovery of compensation if any and their letter No.	
	a. Amount of compensation recovered up to previous bill. No.	
	b. Amount of compensation to be recovered in this bill.	
	c. Total amount recovered against compensation(a+b)	
18.	Progress Of Works	
	a. % of Work to be done as per target i.e. as per contract agreement	
	b. Actual % of work done till the date of this bill	

	c. % of time consumed as per total time period.	
	d. Whether extension is demanded.	
	e. Whether PMC has recommended in detail	
	f. Whether PMC has approved the extension.	
19.	Whether bill has been duly signed by the Construction Agency or his authorized person copy of authority letter should be attached.	
	a. Name of persons signing the bill on behalf of Construction Agency and PMC and Architect and their specimen signature.	
	b. Whether signature is duly stamped by authority person.	
20.	P.M.C. and Architects certificate as per MMC format.(Whether attached)	
21.	Whether arithmetic accuracy of Measurements is found correct.	

FORM B - 4

CERTIFICATE OF P.M.C.

Name of work: _____

R. A. BILL No. ____ / Extra Item No. __

It is certified that the work measured and recommended for payment of this ____ Running Account Bill of Construction Agency are fully consistent with the type, quality and specification prescribed in the agreement entered in to with the Construction agency/ Approved Drawings/ specifications.

For

(PMC)

FORM B - 5

CERTIFICATE OF CONSTRUCTION AGENCY WITH BILL

Name of Work: _____

I have satisfied myself by PMC that the value of work done up to date excluding the measured-up additions and alterations is not less than Rs. _____ Only conforming with the Construction Agency's agreement and that with the exceptions of authorized additions and alterations, the work has been done according to the prescribed specifications.

The detail measurements of authorized additions and alterations up to date are recorded in
M.B No. Page no.: Date:

For

For

(Construction agency)

(PMC)

FORM B - 6

CERTIFICATE BY PMC REGARDGING DEPLOYMENT OF KEY STAFF AND OTHER STAFF.

Name of Work: _____

It is certified that the Key Staff and other Staff as per manning schedule is deployed by me on the above-mentioned work site.

For

(PMC)

FORM B - 7

**CERTIFICATE BY KEY STAFF AND OTHER STAFF REGARDING
DEPLOYMENT BY PMC.**

Name of Work: _____

It is certified that the Key Staff and other Staff as per manning schedule is deployed by PMC on the above-mentioned work site.

For

(PE/DE/EE)

FORM B - 8**Form 67 (P.W. 466)**

R.A. Bill No.

Form 67 (P.W.466)

RUNNING ACCOUNT BILL (INTERMEDIATE)

To be used for “Intermediate payments” to the Construction Agency on lump sum contracts.

Sr. No.	Particular	Remarks
1.	Name of Architect	
2.	Name of P.M.C.	
3.	Name of Construction Agency	
4.	Name of Work	
5.	Serial No. of this Bill	
6.	No. and date of previous bill for this work	
7.	Reference of agreement	
8.	Accepting Authority and execution of contract agreement	Chief Officer, Municipal Council, MEHKAR.
9.	Date of written order to commence work	
10.	Date of Completion as stipulated in the contract	
11.	Extension granted upto	

For

For

(Construction agency)

(PMC)

FORM B - 9**ABSTRACT OF BILL**

Name of Work :

Name of Construction agency :

Name of P.M.C. :

Agreement No. :

R.A. Bill No. :

Sr. No.	Particulars	Up to date Amount	Amount as per previous Bill	Amount as per this bill since previous
1	2	3	4	5

For

For

(Construction agency)

(PMC)

FORM B - 11**PAYMENT SCHEDULE AS PER TENDER**

Name of Work :
 Name of Construction Agency :
 Name of P.M.C. :
 Agreement No. :
 R.A. Bill No. :

For
 (Construction Agency)

For
 (PMC)

FORM B - 12**PAYMENT SCHEDULE ABSTRACT**

Name of Work :
 Name of Construction Agency :
 Name of P.M.C. :
 Agreement No. :
 R.A. Bill No. :

Sr. No	Particular	% as per Schedule	Considered in Previous Bill	Considered Since Previous Bill %	Update
1					
	Up to plinth				
	Gr.floor				
	1st Floor				
	2nd Floor				
	3rd Floor				
	4th Floor				
	5th Floor				
	6th Floor				
	7th Floor				

		Terrace Floor				
		Infrastructure & other				

For

For

(Construction Agency)

(PMC)

FORM B - 13**DETAIL ABOUT WITHHELD AMOUNTS**

Name of Work :

Name of Construction Agency :

Name of P.M.C. :

Agreement No. :

R.A. Bill No. :

Sr. No	Particulars	Amount in Rs.	Reason of Withheld Amount
1.	Amounts withheld till previous bill		
2.	Amounts proposed to be withheld in this bill		
3.	Amounts proposed to be released in this bill		
4.	Total amount withheld till this		

258

Signature of Construction agency

No. of Corrections

Signature of MMC

	bill		
--	------	--	--

For

For

(Construction Agency)

(PMC)

FORM B - 14

REASONS OF DELAY OF WORK IF ANY

Name of Work :

Name of Construction Agency :

Name of P.M.C. :

Agreement No. :

R.A. Bill No. :

Sr. No	Month and Year	Description	No. of Days

For

For

(Construction Agency)

(PMC)

FORM B - 15**ABSTRACT OF TEST REPORTS**

Name of Work :

Name of Construction Agency :

Name of P.M.C. :

Agreement No. :

R.A. Bill No. :

Sr. No	Name of material use for work in this bill	Date of receipt	Quantity received	Unit	Testing frequency as per agreement	No. Of tests carried out	Remark about test value
1	2	3	4		5	6	7
1							
2							
3							
4							
5							
6							

For

For

(Construction Agency)

(PMC)

Signature of Construction agency

261
No. of Corrections

Signature of MMC

FORM B - 16

TEST FREQUENCY CHART

Name of Work :

Name of Construction Agency :

Name of P.M.C. :

Agreement No. :

R.A. Bill No. :

Sr . No	Item Description	Test	Frequency (MIN)	Unit	Quantity			No. of test Required	No.of test		Total Test	Remarks
					In th is Bi ll	U p to la st	Up to Da te		Out side lab	Fiel d lab		

For

For

(Construction Agency)

(PMC)

Signature of Construction agency

262
No. of Corrections

Signature of MMC

FORM B - 17**SAMPLES APPROVED DURING PERIOD OF BILL**

Name of Work :

Name of Construction Agency :

Name of P.M.C. :

Agreement No. :

R.A. Bill No. :

Sr. No	Name of material	As per Agreement		As per Approval		Date of approval
		Brand	Details of materials such as thickness, Diameter length, width weight etc.	Brand	Details of materials such as thickness, Diameter length, width weight etc.	
1	2	3	4	5	6	7

For

For

(Construction Agency)

(PMC)

Signature of Construction agency

263
No. of Corrections

Signature of MMC

FORM B - 20**ABSTRACT OF CEMENT RECEIPT**

Name of Work :

Name of Construction agency :

Name of P.M.C. :

Agreement No. :

R.A. Bill No. :

Sr. No	Date	Inv. No	Make	Quantity	Unit	Total	Remark
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

For

For

(Construction Agency)

(PMC)

Signature of Construction agency

266
No. of Corrections

Signature of MMC

FORM B - 21**CEMENT CONSUMPTION STATEMENT**

Name of Work :

Name of Construction Agency :

Name of P.M.C. :

Agreement No. :

R.A. Bill No. :

Sr. No	Description of Items	Executed Quantity	Unit	Theoretical ratio of consumption	Consumption in Bags		Remarks
					Theoretical	Actual	
1							
2							
3							
4							

For

For

(Construction Agency)

(PMC)

FORM B - 22

BAR CHART

Sr. No.	Particulars	Month/ Weeks	Duration	January				February				March				
				1	2	3	4	1	2	3	4	1	2	3	4	
1																
2																
3																
4																
5																
6																
7																

For

For

(Construction Agency)

(PMC)

FORM B - 23
ACQUITANCE

Name of Work: _____

R.A. BILL NO. _____

Received Rs.

.....

as an intermediate payment in connection with the contract with the Chief Officer, Municipal Council, MEHKAR.

Date:

Witness:

Signature of Construction Agency and Stamp

Paid by me Cash/ or Cheque No.....

Dated initials of the person

Actually, making the person

18.07 CHECK LIST FOR HANDING OVER OF THE PROJECT :

Name of work:			
Sr. No.	Particulars	Information In the form of Yes/No	Remarks
A.	Technical		
1.	Whether water connection is obtained?		
2.	Whether electrical connection is obtained?		
3.	Whether Sewage connection is obtained?		
4.	Whether electrical fixtures are working?		
5.	Whether sanitary fixtures are working?		
6.	Whether external color is as per MMC's approval?		
7.	Whether landscape is as per MMC's approval?		
8.	Whether infrastructure works such as Road, Storm water drain, Compound wall, etc. are completed in all respect?		
9.	Whether inventory of whole project is completed?		
10.	Whether all work is executed as per approved drawings and specifications?		
11.	Whether completion certificate is submitted by Architect / PMC / Construction Agency / their sub consultant		
B.	Clearance		
1.	Whether Occupation certificate is obtained?		
2.	Whether Firefighting NOC is obtained?		
3.	Whether Lift NOC is obtained?		

Note: This Checklist shall be verified and certified by PMC

Appendix –I	
TREE PLANTATION DETAILS	
Sr.No	List of Plants, Trees, Shrubs, Ground Covers and Climbers
A	Trees
1	Neem
2	Gul mohar
3	Desi Mango
4	Amaltas
5	Coconut tree (without trunk)
6	Bottle Palm
7	Temple Tree
8	Badam
B	Shrubs and Flowering Plants
1	Ixoria coccinea
2	Nerium Oleander Kaner
3	PluneriaPudica
4	Bouganvilliea
5	TecomaTranza
6	Hibiscus
7	Rose
8	Marigold
9	Jasmine
C	Ground Covers and Climbers
1	Alternanthera Red
2	Scarlet Flame
3	Ficus Panda
4	Allamanda violacea
	<p>Note:</p> <ol style="list-style-type: none"> 1. Required no./ Sq.M and type of required plants, trees to be taken as directed by Engineer In charge and as per Bye Laws. 2. All plant materials shall be healthy sound vigorous free from plant diseases, insects, pests and shall have healthy, well-developed root system. No plant material will be accepted if branches are damaged or broken. 3. All necessary stock shall be inspected and approved by Engineer In charge.

