

MIRA- BHAINDAR MUNICIPAL CORPORATION

(WATER SUPPLY DEPARTMENT)

TENDER NOTICE NO. 04 (2026-27)

For

**Annual maintenance of C.I., D.I., & M.S. Pipeline at Prabhag Samiti No.01,02,
03,04,05 & 06 in Mira Bhaindar Municipal Corporation area. (Panel)**

Executive Engineer

Water supply dept.

Chhatrapati Shivaji Maharaj marg,

Bhaindar (w) Ph. 2819 2828

Mira -Bhaindar Municipal Corporation

SAVE EVERY DROP OF WATER

Issued to:.....

MIRA - BHAINDAR MUNICIPAL CORPORATION
WATER SUPPLY DEPARTMENT

Name of Work :- **Annual maintenance of C.I., D.I., & M.S. Pipeline at Prabhag Samiti No.01,02, 03,04,05 & 06 in Mira Bhaindar Municipal Corporation area. (Panel)**

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TENDER NOTICE



मिरा-भाईंदर महानगरपालिका

स्व. इंदिरा गांधी भवन, मुख्य कार्यालय, छत्रपती शिवाजी महाराज मार्ग,
भाईंदर (प.), ता.ठाणे-401101 दुरध्वनी क्र.28192828

पाणी पुरवठा व मलनिःसारण विभाग



// निविदा सुचना क्र. 04 (2026-27) //

मिरा-भाईंदर महानगरपालिका हद्दीतील खालील कामांकरीता मोहोरबंद दर e-Tendering पद्धतीने मागविण्यात येत आहेत. सदर कामाचे कोरे निविदा फॉर्म दि.16/07/2026 ते दि.24/07/2026 रोजी 12.00 वाजेपर्यंत महानगरपालिकेच्या e-Tendering संकेतस्थळ <https://mahatenders.gov.in> येथे उपलब्ध होतील. निविदाधारकाने निविदा फॉर्म फी व इसारा रक्कम ऑनलाईन रिसीप्ट सिस्टीमव्दारे भरणा करावी. अन्यथा निविदा ग्राह्य समजण्यात येणार नाही. तसेच कामाची निविदा पूर्व बैठक दि.20/07/2026 रोजी ठिक 12.00 वाजता मा.शहर अभियंता, मिरा-भाईंदर महानगरपालिका यांचे दालनात राहिल. कामाचा अनुभव व अटीशर्ती निविदा फॉर्म मध्ये नमूद केल्याप्रमाणे असावीत.

सदर कामी मागविलेल्या मोहोरबंद निविदा दि.24/07/2026 रोजी दुपारी 1.00 वाजेपर्यंत वरील संकेतस्थळावर स्विकारण्यात येतील व दि.27/07/2026 रोजी दुपारी 12.30 वाजता उपस्थित ठेकेदार व त्यांचे प्रतिनिधी यांच्या उपस्थितीत / अनुउपस्थितीत उघडण्यात येतील.

कोणतेही कारण न देता कोणतीही ऑनलाईन निविदा स्वीकारणे अथवा सर्वच निविदा नाकारणे याबाबतचा अंतिम अधिकार मा. आयुक्त, मिरा-भाईंदर महानगरपालिका यांनी राखून ठेवला आहे.

अ.क्र	कामाचे नाव	अंदाजित खर्च (जी.एस.टी वगळून)	इसारा रक्कम	निविदेचा प्रकार	निविदा फॉर्म फी	मुदत
1	मिरा-भाईंदर महानगरपालिका क्षेत्रातील प्रभाग समिती क्र.1,2,3,4,5 व 6 मध्ये वितरण व्यवस्थेअंतर्गत येणाऱ्या जलवाहिन्यांची देखभाल दुरुस्ती करणे (पॅनलव्दारे)	रु.2,95,01,685/-	रु.2,95,017/-	बी-1	रु.2000/- + रु.360/- GST = रु.2360/-	12 महिने

टीप :- लिफाफा क्र.1 मधील तांत्रिक कागदपत्रे (Hard Copy) निविदा भरल्यानंतर 72 तासांच्या आत पाणी पुरवठा व मलनिसारण विभागात सादर करण्यात यावी.

(दिपक खांबित)
शहर अभियंता
मिरा-भाईंदर महानगरपालिका

जा.क्र.मनपा/पा.पु.व मलनि/04/2026-27
दि.13/07/2026

Contractor/Agency

No. of Corrections

Executive Engineer



MIRA BHAINDAR MUNICIPAL CORPORATION

Indira Gandhi Bhavan, Chhatrapati Shivaji Maharaj Marg,
Bhaindar (W) 401101, Tal. Dist – Thane, 28192828

Water Supply & Sewerage Department



// TENDER NOTICE No. 04 (2026-27) //

Mira Bhaindar Municipal Corporation invites sealed tenders for following works in MBMC area in the form of e-Tendering. The tender form and other relevant documents will be available for download on MBMC's e-Tendering website as <https://mahatenders.gov.in> from **Dt.16/07/2026 TO 24/07/2026** till 12.00 pm. Tender Form Fee & EMD should be submitted through online receipt system. Failing which the tender will be disqualified. There is no any concession to qualified unemployed Engineer for EMD/ Security Deposit. Tender Form Fee & EMD should be submitted through online receipt system. Prequalification criteria and other terms and conditions are mention in tender form the pre-tender conformance will be held on **dt 20/07/2026** at 12.00 hrs in the office of the Hon City Engineer MBMC.

The last date for submission of tenders completed in all respects on **Dt. 24/07/2026** up to 1.00 pm on the above mentioned website. Mira Bhaindar Municipal Corporation. The tenders shall be opened in the presence/absence of the bidders or their representatives on the **Dt.27/07/2026** at 12.30 pm at the Tender cell of Mira Bhaindar Municipal Corporation.

Hon.Commissioner of Mira Bhaindar Municipal Corporation has reserve right to accept or reject any or all bids without assigning any reasons.

Sr.No	Name of Work	Estimate Cost (In Rs.) (Excluding GST)	Earnest Money Deposit (EMD) (In Rs.)	Type of Tender	Cost of Tender documents (In Rs.)	Period of Completion
1	Annual maintenance of C.I., D.I., & M.S. Pipeline at Prabhad Samiti No.01,02, 03,04,05 & 06 in Mira Bhaindar Municipal Corporation area. (Panel)	Rs.2,95,01,685/-	Rs.2,95,017/-	B-1	Rs.2000/- + Rs.360/- GST = Rs.2360/-	12 Month

Note :- Hard Copy of Envelope No.1 of the same tender shall be submitted in office of Executive Engineer Water Supply Department within 72 hours after submission of online tender.

(Deepak Khambit)
City Engineer
Mira Bhaindar Municipal Corporation

No :- MNP/WS & Sew/04/2026-27

Date :- 13/07/2026.

Contractor/Agency

No. of Corrections

Executive Engineer

DETAIL TENDER NOTICE

**MIRA - BHAINDAR MUNICIPAL CORPORATION
DETAILED TENDER NOTICE**

Sealed percentage rate tender in B-1 forms in two envelope system are invited for the following work from the Contractor registered with MJP.

Name of Work :- Annual maintenance of C.I., D.I., & M.S. Pipeline at Prabhag Samiti No.01,02, 03,04,05 & 06 in Mira Bhaindar Municipal Corporation area. (Panel)

TENDER PROGRAMME..

- 1) The tender document are available at Mahatenders.gov.in 16/07/2026 to 24/07/2026.
- 2) The prequalification criteria , Terms and conditions are available on website.
- 3) The digital signature is mandatory. The bidder will have to purchase it from any government digital certificate authority.
- 4) For any other queries, bidder can contact Help Line No. 0120-4200462, 0120-4001002.
- 5) Blank Tender document can be download from above mentioned website. The tender document cost Rs.2,360/-(Rs. Two thousand three hundred sixty Only) (Non-Refundable) shall be paid by online.
- 6) Earnest Money Deposit of Rs. 2,95,017/- (Rs. Two lac ninety five thousand seventy Only) should be paid in the form of DD/PAYORDER/CASH-online.
- 7) Security Deposit :Initial Security deposit of 3 % in the form of D.D./ Pay order or Bank guarantee in the name of Commissioner, Mira Bhaindar Municipal Corporation drawn on any Scheduled Bank and balance 2 % will be deducted from R.A. bills.
Balance 2% Security Deposit of estimated cost or contract value whichever is higher will be recovered at the rate of 5% of bill amount through each R.A. Bill to the extent that total required security deposit.

a) Stamp Duty - Stamp duty at 2.00% of total security deposit or at the rate in force on the date of agreement, in addition to Rs.100/- stamp paper.

b) There shall be no liability on the Mira Bhaindar Municipal Corporation, to pay any interest on the security deposited by or recovered from the Contractor.

c) **If it is found that the lowest tenderer is not recommended, then a reference will be made to second lowest to deposit A.S.D. in the form of demand draft in the specified time period.**

d) The security deposit shall be refunded after completion of defect liability period prescribed for this contract in accordance with the provision in clause 1 and 20 of the contract.

8) The bidder has to submit the tender Documents and Financial Bid online only.

9) The tender will be Submission last dt. 24/07/2026 day at 1.00 pm online only.

10) Validity of the Offer :

Contractor/Agency

No. of Corrections

Executive Engineer

120 days from the date of opening of the tender.

11) Manner of submission of tender and its accompaniments

Tender is to be submitted according to three envelopes system, Which should be submitted online in

Technical - Bid & Financial Bid Format Only. Envelop No. 1 (Technical Bid) can be submitted by uploading the required documents as demanded in tender document, which are scanned in prescribed. The EMD and Document fees should be submitted “Online”.

12) Detail Tender Schedule

Sr. No.	Activities	Date & Time
1.	Tender publishing date	16/07/2026
2.	Document download start date	16/07/2026 at 12 noon
3.	Document download end date	24/07/2026 at 12 noon
4.	Pre-bid meeting date	20/07/2026 at 12 noon
5.	Bid submission start date	16/07/2026 at 12 noon
6.	Bid submission close date	24/07/2026 at 12 noon
7.	Bid opening date (Technical Bid)	27/07/2026 at 12.30 pm

13) a)Technical Proposal. :

Technical Proposal work shall contain following documents.

1)	Form Fee Receipt (Online Form fee Receipt - Scan Copy)			
2)	Earnest Money Deposit Receipt (Online Earnest Money Deposit Receipt (Scan Copy))			
3)	Balance Sheet of Last 3 Years. (C.A. certified copy of Balance sheet (Scan Copy). (In Year of 2023-24, 2024-25, 2025-26)			
4)	GST Registration Certificate. (GST Registration Certificate (Scan Copy))			
5)	A	Maximum Turnover of Bidder in last 05 years	-	It should be minimum upto 75% of the annual amount of the cost of due contract (Annual Cost = Total Cost of Work / Period of work in years.) (C.A. Certified copy of last 5 year annual turnover. (Scan Copy) (In Year of 2021-22, 2022-23, 2023-24, 2024-25, 2025-26)

6)	Following works experience in Govt. / Semi Govt. organization			
	B	The minimum cost of the work of similar nature and value completed by the contractors in the last 5 years	-	Three completed works, of which work wise costing should not be less than the amount equal to 40% of the estimated cost. In same work following work should be done by bidder. OR Two completed works, of which work wise costing should not be less than the amount equal to 50% of the estimated cost. In same work following work should be done by bidder. OR One completed work costing should not be less than the amount equal to 80% of the estimated cost. In same work following work should be done by bidder. providing & laying of CI/DI pipeline OR maintenance of C.I., D.I. & M.S. pipeline work done certificate 40 % 03 Works 50 % 02 Works 80% 01 Works (In Year of 2021-22, 2022-23, 2023-24, 2024-25, 2025-26) Note: The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 10% per annum
7)		Bid capacity of Bidders (Bid Capacity) Bidder should have qualified for Bid Capacity	-	(A x N x 2) - B where A = Maximum Annual Turnover during last 5 years (at current rate) N = Number of years prescribed for completion of the project/work B = Value of works in hand (during period of the due work) (Tenderer's submission of bid capacity certificate certified by C.A (Scan Copy))
8)	Affidavit on stamp paper of Rs.500/- stating authenticity of the documents enclosed/uploaded while submission of the tender to be enclosed in envelope no.1 as per Annexure No. 1 (It will be mandatory for the tenderer to submit an affidavit in the prescribed format as Annexure No. 1 on Rs. 500 stamp paper only dated after the date of publication of the tender. Otherwise, the said affidavit will not be considered)			
9)	The Bidder Shall not be Blacklisted in any other government / semi government / Urban Local bodies on contractors letter head. The Bidder organization shall upload an undertaking (Submission of declaration letter by the tenderer regarding non-blacklisting. (Scan Copy))			

Annexure - 1

Affidavit (on Rs.500/- Stamp Paper)

Name of Work :- -----

I age address
..... (Authorized signatory to sign the contract), hereby submit, vide this affidavit in truth, that I am the owner of the contracting firm / authorized signatory and I am submitting the documents in envelope no.1 for the purpose of scrutiny of the contract. I hereby agree to the conditions mentioned below :-

- a. I am liable for action under Indian Penal Code for submission of any false / fraudulent paper / information submitted in envelope no.1.
- b. I am liable for action under Indian Penal Code if during contract period and defect liability period, any false information, false bill of purchases supporting proof of purchase, proof of testing submitted by my staff, subletting company or by myself, I will be liable for action under Indian Penal Code.
- c. I am liable for action under Indian Penal Code if any paper are found false / fraudulent during contract period and even after the completion of contract (finalization of final bill).

(Signature of
contractor)
(seal of company)

14) Envelope No. 2 (Financial Bid)

Will also be submitted online the contractor shall quote for the work as per details given in the main tender and also based on the details of conditions, issued/additional stipulations made by the Department.

15) Financial proposal :

Financial proposal shall contain offer of bid and including unconditional covering letter.

Time of Contract : The contract period is Twelve months.

16) Hon. Commissioner, MBMC reserves the right to accept or reject any or all tenders without assigning any reason thereof.

FORM B-1

FORM B-1
PERCENTAGE RATE TENDER AND CONTRACT

DEPARTMENT **MIRA-BHAINDAR MUNICIPAL CORPORATION.**
DIVISION : **WATER SUPPLY DEPARTMENT.**

**Name of Work :- Annual maintenance of C.I., D.I., & M.S. Pipeline at Prabhag Samiti
No.01,02, 03,04,05 & 06 in Mira Bhaindar Municipal Corporation
area. (Panel)**

GENERAL RULES & DIRECTIONS FOR THE GUIDANCE OF CONTRACTORS

1. All works, proposed to be executed by Contract, shall be notified in a Form of invitation to tender, pasted on a Notice Board hung up in the office of the Executive Engineer.

This form will state the works to be carried out as well as the date of submitting and opening tenders, and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit to be deposited by the successful Tendered and the percentage, if any, to be deducted from bills. It will also state whether refund of quarry fees, royalties and ground rents will be granted. Copies of any other documents required in connection with the work shall be signed by the Executive Engineer for the purpose of identification and shall also be open for Inspection by Contractors at the office of the Executive Engineer during office hours.

Where the works are proposed to be executed according to the specifications recommended to a Contractor and approved by a competent authority on behalf of the Mira Bhaindar Municipal Corporation, such specifications with designs and drawings shall form a part of the accepted tender.

FORMAT for Letter of Commercial Offer
(To be printed on letterhead of the firm and submitted in Envelope -2)

To,
The Commissioner
Mira Bhayandar Municipal Corporation, Bhayandar

Sub: Annual maintenance of C.I., D.I., & M.S. Pipeline at Prabhag Samiti No.01,02, 03,04,05 & 06 in Mira Bhaindar Municipal Corporation area. (Panel)

(Estimated cost Rs. 2,95,01,685/-)

Dear Sir,

Tenderer's Offer

I/We hereby tender for the execution, for MIRA BHAYANDAR MUNICIPAL CORPORATION (here-in-before and hereinafter referred to as Corporation or MBMC) of the work specified in such memorandum at _____ percent below/above the estimated rates entered in Schedule 'B' (Memorandum showing items of work to be carried out) and in accordance in all respects with the specifications, designs, drawings, and instructions in writing referred to in rule 1 hereof and in Clause 13 of the annexed conditions of contract and agree that when materials for the work are provided by the corporation, such materials and the rates to be paid for them shall be as provided in Schedule 'A' hereto.	In figures as well as in words
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Memorandum

1 A General Description

Annual maintenance of C.I., D.I., & M.S. Pipeline at Prabhag Samiti No.01,02, 03,04,05 & 06 in Mira Bhaindar Municipal Corporation area. (Panel)

- | | |
|-----------------------------|--|
| B. Estimated Cost | Rs. 2,95,01,685/- |
| C. Earnest Money | Rs. 2,95,017/- |
| D. Security Deposit | Rs. 5% of Accepted Tender Cost. |
| i. Initial security deposit | At the time of agreement 3% of Accepted Tender Cost |
| ii. | Balance 2% Security Deposit will be Deducted from R.A. Bill at rate of 5% from each RA bill. |

- E. Time allowed for completion of the work from date of written order to commence 12 (twelve months) Calendar months including monsoon.

- 2 I/We agree that this offer shall remain open for acceptance for a minimum period of 180 days from the date of opening the same 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. or otherwise delivered, at the office of such authority. The Earnest money deposited on-line only. The amount of Earnest Money shall not bear interest and shall be liable to be forfeited to the MBMC should I/We fail to (I) Abide by the stipulation to keep the offer open for the period mentioned above or (ii) sign and complete the contract documents as required by the Engineer and furnish the security deposit, as specified in item (d) of the memorandum contained in Para - I above within the time limit, laid down in clause, (1) of the annexed general conditions of the contract. The amount of earnest money may be refunded to me/us after work order if so desired by me/us in writing unless the same or any part thereof has been forfeited as aforesaid.
3. Should this tender be 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 Corporation, the sums of money mentioned in the said conditions.

Agency _____

Name & Address _____

Dated _____ day of _____ 20

(Witness _____

Name & Address _____

Occupation _____

The above tender is hereby accepted by me for and on behalf of the Mira Bhayandar Municipal Corporation

Officer _____

Dated _____ day of _____ 20

Signature of Agency before submission of tender

Signature of witness to Agency's signature)

Signature of the officer by whom accepted

Executive Engineer
Mira- Bhayandar Municipal Corporation.

CONDITIONS OF CONTRACT

Clause 1 : The person/persons whose tender may be accepted (hereinafter called the contractor which expression shall unless excluded by or repugnant to the context include his heirs, executors, administrators and assignors) shall (A) within 10 days (which may be extended by the Executive Engineer concerned upto 15 days if the Executive Engineer thinks fit to do so) of the receipt by him of the notification of the acceptance of his tender deposit with the Executive Engineer in cash or Government securities endorsed to the Executive Engineer (if deposits for more than 12 months) or the full amount to the security deposit is made up. All compensation or other sums of moneys payable by the contractor to MBMC under the terms of his contract may be deducted from or paid by the sale of sufficient part of his security deposit or from the interest arising there from, from any sums which may be due or may become due by MBMC to the contractor under 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 legal steps will be taken against the contractor for recovery of the amount. The amount of the security deposit lodged by a contractor shall be refunded along with the payment of the final bill, if the date upto, which the contractor has agreed to maintain the work in good order, or if the date upto which the contractor has guaranteed for any defect (whichever is later) is over. If such date is not over only 50% amount of security deposit shall be refunded along with the payment of the final bill and on certifying by the Engineer-in-charge that 50% Security Deposit will be sufficient to meet all the liability for the balance defect liability period. The amount of security deposit retained by the MBMC shall be released after expiry of period upto, which the contractor has agree to maintain the work in good order or upto which the contractor has guaranteed for any defect (whichever is later) is over. In the event of the contractor failing or neglecting to complete rectification work within the period upto which the contractor has agree to maintain the work in good order, then subject to provisions of clause 17 and 20 hereof the amount of security deposit retained by MBMC shall be adjusted towards the excess cost incurred by the MBMC on rectification work.

Clause 2 : The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the order to commence work is given to the contractor. The work shall throughout the stipulated period of the contract be proceeded with, with all due diligence (time being deemed to be of the essence of the as contract on the part of the contractor. And further to ensure good progress during execution of the work, the contractor shall be bound in all cases in which the time allowed for any work exceeds one month to complete for complete minimum quantum of work as compared to accepted tender cost as stated below: -

- | | | |
|----|--------------------|------------------|
| 1. | 1/4 of the work in | 1/4 of the time |
| 2. | 1/2 of the work in | 1/2 of the time. |
| 3. | 3/4 of the work in | 3/4 of the time. |

And abide by the programme of detailed progress laid down by the Executive Engineer. However, in case of ground water source adopted for the scheme the work of development of source shall only be taken in band by the contractor first and only after ascertaining adequacy of the yield through GSDA during the summer period, the remaining works shall be undertaken for execution after obtaining written permission from the Executive Engineer. No material shall be purchased till the adequacy of the source is confirmed and written orders to proceed for remaining works are obtained from the Executive Engineer. In case of failure of the original source due to inadequate yield or any other reason the contractor shall have to take up the work of other suitable source suggested by GSDA and to ascertain its adequacy during summer. In such case the Executive Engineer will ascertain the reasonable time required for completion of remaining works included in the contract and shall grant suitable extension to the Contractor the decision of the engineer-in-charge regarding suitable extension shall be treated as final an binding on the contractor. However, such extension shall not be less than '1/2 of period of completion stated in the original contract. The Contractor shall prepare revised programme of work based on extended time limit granted and shall get the same approved from the executive Engineer. Based on approved revised programme the progress of the contractor shall be watched for imposing compensation by the Executive Engineer. The Contractor shall prepare modified programme on completion of successful yield test and get it approved from the Engineer-in-charge and such approved and modified programme shall be binding on the Contractor in case

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of all other schemes where ground water is not proposed as source and have other assured water source, works of all the sub-works can be taken up by the contractor simultaneously and for such scheme the time limit stated in the Contract shall be treated as final and binding on the Contractor. Executive Engineer should be the final authority in this respect irrespective of the fact that the tender is accepted by MBMC.

*Action when
whole of
security
deposit is
forfeited*

Clause 3 : In any case in which under any clause of this contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit (actually in hand with the Engineer-in-charge on the date on which action under this clause is taken irrespective of Security Deposit specified in the contract whether paid in one sum or Deducted by installments) or in the case, of abandonment of the work owing to serious illness or death of the contractor or any other cause the Engineer, on behalf of the MBMC, shall have power to adopt any of the following courses, as he may deem best suited to interest of MBMC:-

(a) To rescind the contract (for which recession notice in writing to the contractor under the hand of Executive Engineer shall be conclusive evidence) and in that case the Security Deposit of the contractor shall stand forfeited and be absolutely at the disposal of MBMC.

(b) To carry out the work or any part of the work departmentally or through other contractor by debiting the original contractor with the cost of the work, expenditure incurred on tools and plant, and charges for advertisement for fixing new contractor and those on additional supervisory staff including the cost of work charged, establishment for getting the unexecuted part of the work completed and crediting him with the value of the work done departmentally /or through new contractor in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to the costs and other allied expenses so incurred and as so to the value of the work so done departmentally shall be final and conclusive against the contractor.

(c) To order that the work of the contractor be measured up and to take such part thereof as shall be unexecuted out of his hands, and to give it to another contractor 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 contract agency will be debited to other contractor and the value of the work done or executed through the new contractor be credited in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to all the cost of the work and other expenses incurred as aforesaid for getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under clause (a) above, the contractor shall not be entitled to recover or be paid, any sum for any work therefore actually performed by him under this contract unless and until the Executive Engineer shall have certified in writing about 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 the courses referred to in clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited the contractors, the amount of excess shall be deducted from any money due to the contractor by MBMC under the contract or otherwise howsoever or from his security deposit or the sale proceeds thereof provided however that the contractor shall have no claim against MBMC even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in clauses (a), (b) and (c) is adopted by the Executive Engineer, the contractor shall have no claim to compensation for any loss sustained by him by reason of not having purchased or procured any materials, or entered into any engagements, or made any advance on account of or with a view to the execution of the work or the performance of the contract. The extra cost involved in the completion of the balance work carried out through the other contractor under Clause - 3(C) shall be recoverable from the contractor over and above the compensation levied under Clause 2 and the Security Deposit shall be apportioned against the total recoveries for this purpose also.

Clause 4 : If the progress the of any particular portion of the work is unsatisfactory, the Executive Engineer shall not with standing that the general progress of the work is in accordance with the condition mentioned in clause 2 be entitled to take action under clause 3 (b) after giving the contractor 10 days notice in writing. The contractor will have no claim for compensation, for any loss sustained by him owing to such action.

Action when the work is progress; of any particular portion of the work is unsatisfactory

Clause 5 : In any case in which any of the powers conferred upon Executive Engineer by clauses 3 and 4 hereof shall have become exercisable and the same shall not have been exercised the non- exercise thereof shall not constitute waiving of any of the conditions hereof the such powers shall not withstanding be exercisable in the event of any future case of default by the contractor for which under any clauses hereof he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Executive Engineer taking action under Sub-Clause (a) or (c) of clause 3, he may, if he so desires, take possession of all or any tools and plants, materials and stores, in or upon the work or the site thereof or belonging to the contractor, 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 Executive Engineer whose certificate thereof shall be final. In the alternative the Executive Engineer may after giving notice in writing to the contractor or his clerk of the work, foreman or other authorized agent require him to remove such tools, plant, materials or stores from the premises within a time to dc specified in such notice, and in the event of the contractor failing to comply with any such requisition, the Executive Engineer may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and at his risk in all respects, and the certificate of the Executive Engineer 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 contractor.

Contractor remain liable to the 'com - pansation if action not taken under clauses 3 & 4

Power to take possession of or sell contractor's plant

Clause 6 : If the contractor shall desire an extension of the time for completion of work on the ground of his having been unavoidably hindered in its execution or on any other ground, he shall apply in writing to the Executive Engineer before the expiration of the period stipulated in the tender or before the expiration of 30 days from the date on which he was hindered as aforesaid or on which the cause for asking for extension occurred, whichever is earlier and the Executive Engineer or in the opinion of Commissioner, as the case may be, if in his opinion, there were reasonable grounds for granting the extension, grant such extension as he thinks necessary or proper. The decision of the Executive Engineer in this matter shall be final.

Extension of Time

Clause 7 : On the completion of the work the contractor shall be furnished with a certificate by the Executive Engineer (hereinafter and hereinbefore called the Engineer-in-charge) of such completion but neither such certificate shall be given nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall have been executed, all scaffolding surplus materials and rubbish his tools, plants and equipments and shall have cleaned off the dirt from all woodwork, doors, windows, walls, floor or other parts of any building in or upon which the work has been executed or of which he may have had possession for the purpose of executing the work nor until the work shall have been measured by the Engineer-in-charge or where the measurements have been taken by his subordinates until they have received approval of the Engineer-in-charge the said measurements being binding and conclusive against the contractor. If the contractor shall fail to comply with the requirements of this clause as to the removal of scaffolding, surplus materials and rubbish and cleaning off the dirt on or before the date fixed for the completion of the work, the Engineer-in-charge may at the expense of the contractor, remove such scaffolding, tools and plants, equipments surplus materials and rubbish and dispose off the same as the thinks

Final certificate

Contractor/Agency

No. of Corrections

Executive Engineer

fit and clean off such dirt as aforesaid and the contractor shall forthwith pay the amount of all expenses so incurred but shall have no claim in respect of any such scaffolding tools and plants equipments or endanger the safety thereof provided that the decision of the Engineer as to the stage at which the work or any part of its could be or could have been safely stopped or suspended shall be final and conclusive against the contractor. The contractor shall have no claim to any payment or compensation whatsoever by reason of or in pursuance of any notice as aforesaid on account of any suspension, stoppage or curtailment except to the extent specified hereinafter.

2) Where the total suspension of work ordered as aforesaid continued for a continuous period exceeding 90 days the contractor 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 90 days prior notice in writing to the Engineer, within 30 days of the expiry of the said period of 90 days, of such mention and requiring the Engineer to record the final measurements of the work already done and to pay final bill. Upon giving such notice the contractor shall be deemed to have been discharged from his obligation to complete the remaining unexecuted work under his contract. On receipt of such notice the Engineer shall proceed to complete the measurement and make such payment as may be finally due to the contractor within a period of 90 days, from the receipt of such notice in respect of the work already done by the contractor. Such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.

3) Where the Engineer required the contractor to suspend the work for a period in excess of 30 days at any time or 60 days in the aggregate, the contractor shall be entitled to apply to Engineer within 30 days of the resumption of work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery rendered idle on the site or on the account of his having required to pay the salary or wages of Labour engaged by him during the said period of suspension, provided always that the contractor 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 of such suspension or in respect of any suspension whatsoever occasioned by unsatisfactory work or any other default on his part. The decision of the Engineer in this regard shall be final and conclusive against the contractor.

No claim to compensation on account of loss due to delay in supply of materials by MBMC.

[4] In the event of – Any total stoppage of work on notice from the Engineer under Sub clause (1) in that behalf. Withdrawal by the Contractor from the contractual obligation to complete the remaining unexecuted work under sub clause (2) on account of continued suspension of work for a period exceeding 90 days.

(iii) Curtailment in the quantity of item or item originally tendered on account of any alteration, omission or substitution in the specifications, drawings, designs or instructions under clause 14 where such curtailment exceed 25% in quantity and the value of the quantity curtailed beyond 25% at the rates for the item specified in the tender is more than Rs.5000/-.

It shall be open to the contractor, within 90 days from the service of (I) the notice of stoppage of work or (ii) the notice of withdrawal from contractual obligations under the contract on account of the continued suspension of work or (iii) notice under clause 14 resulting in such curtailment to produce to the Engineer satisfactory documentary evidence that he had purchased or agreed to purchase materials for use in the contracted work, before receipt by him of the notice of stoppage, suspension or curtailment and require the MBMC to take over on payment such material at the rates determined by the Engineer, provided, however, such rates shall in no case exceed the rates at which the same was acquired by the contractor. The MBMC shall thereafter take over the material so offered provided the quantities offered are not in excess of the requirements of the unexecuted work as specified in the accepted tender and are of quality and specifications approved by the Engineer.

Clause 8 (A): The contractor shall not be entitled to claim any compensation from MBMC for the loss suffered by him on account of delay by MBMC in the supply of materials entered in Schedule 'A' where such delay is caused by –

No claim to compensation on account of loss due to delay in supply of materials by MBMC

Difficulties relating to the supply of railway wagons,

- i) Force major.
- ii) Act of God
- iii) Act of enemies of the State or any other reasonable cause beyond the control of MBMC.

In the case of such delay in the supply of materials. MBMC shall grant such extension of time for the completion of the works as shall appear to the Executive Engineer to be reasonable in accordance with the circumstances of the case. The decision of the Executive Engineer as to the extension of time shall be accepted as final by the contractor.

Clause 9: Under no circumstance whatever shall the contractor be entitled to any compensation from MBMC on any account unless the contractor shall have submitted claim in writing to the Engineer-in-charge within one-month of such claim occurring.

*Time limit for
unforeseen
Claims*

Clause 10: If any time before the security deposit or any part thereof is refunded to the contractor, it shall appear to the Engineer-in-charge or his subordinate in charge of the work, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of inferior quality or that any materials or articles provided by him for the execution of the work are unsound, or of a quality inferior to that contracted for or otherwise not in accordance with contract it shall be lawful for the Engineer-in-charge to intimate this fact in writing to the contractor and then notwithstanding the fact that the work, materials or articles complained of may have been inadvertently passed, certified and paid for the contractor 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 Engineer-in-charge in the written intimation aforesaid, the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day not exceeding ten days during which the failure so continues and in the case of any such failure the Engineer-in-charge 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 contract. Should the Engineer-in-charge consider that any such inferior work or materials as described above may be accepted or may use of it shall be within his discretion to accept the same at such reduced rates as he may fix therefore.

*Action and
Compensation
payable in case of
bad work*

Clause 11 : 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 the Engineer-in-charge and /or his subordinate and /or his superior and the contractor shall at all time during the usual working hours and at all other times at which reasonable notice of the intention of the Engineer-in-charge and his subordinate and / or his superior to visit the work shall have been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing present for that purpose. Orders given to the contractor's duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

*Works to be opened to
inspection*

*Contractor or responsible
agent to be present*

Clause 12 : The Contractor shall give not less than 5 days notice in writing to the Engineer-in-charge 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 therefore taken before the same is so covered up 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 Engineer-in-charge 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 have been given or consent obtained, the same shall be uncovered at the contractor's expense, and in default thereof no payment or allowance shall be made for such work or for the materials with which the same was executed.

*Notice to be
given before
work is
covered*

Clause 13: If during the period of 12 months from the date of completion as certified by the Engineer-in-charge pursuant to clause 7 of the contract or 63 months from commissioning the work, whichever is earlier in the opinion of the Executive Engineer, the said work is defective in any manner, whatsoever, the contractor shall forthwith on receipt of notice in that behalf from the Executive Engineer duly commence execution and completely carry out at his cost rectifying and setting right the defects specified therein including dismantling and reconstruction of unsafe portion strictly in accordance with and in the manner prescribed and under the supervision of the Executive Engineer in the event of the contractor 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 aforesaid as required by the said notice and/or to complete the same as aforesaid as required by the said notice, the Executive Engineer get the same executed and carried out departmentally or by any other agency at the risk on account and at the cost of contractor. However the defect shall not include the works of routine maintenance, repainting, replacement of stolen items / damaged works for which contractor is not responsible defect arise due to lack of timely maintenance, reduction in performance due to use of the machinery and equipment to the extent such are normally affects the performance / efficiency, normal wear and tear of machinery accessories and equipments, rewinding of electrical motors damaged due to inadequate voltage/ damaged due to use conditions not recommended by the contractor / manufacturer, damages due to unusual floods etc. The contractor shall forthwith on demand pay to the MBMC the amount of such costs, charges and expenses sustained or incurred by the MBMC of which the certificate of Executive Engineer, shall be final and binding on the contractor. Such cost charges and the expenses shall be deemed to be debt due from the contractor and in the event of the contractor failing or neglecting to the same on demand as aforesaid without prejudice to any other rights and remedies of the MBMC the same may be recovered from the contractor as arrears of land revenue through the Collector of District. The MBMC shall also be entitled to deduct the same from any amount which may then be payable or which may thereafter become payable by the MBMC to the contractor either in respect of the said work or any other work whatsoever or from the amount of security deposit retained by the MBMC.

*Contractor liable
for damage done
for imperfections.*

ANNEXURE TO CLAUSE 20 :

The defect liability period shall be as under :

Types of Work	Defect liability period after commissioning
1 Annual Maintenance of C.I. & M.S. Pipeline in MBMC area.	06 month

a) Distribution System.

Clause 14 : The contractor shall supply at his cost all materials (except such special materials, if any as may in accordance with the contract, be supplied from the MBMC's stores) plant tools, appliances implements, ladders, tools, tackle scaffolding and temporary works requisite or proper for the proper execution of the work whether in the original, altered or substituted from the whether included in the specification or other documents forming part of the contract of referred to in these conditions or not and which may be necessary for the purpose or satisfying or complying with the requirements of the Engineer-in-charge as to any matter as to which under these conditions he is entitled to be satisfied or which he is entitled to require together with the carriage here for to and from the work. The contractor shall also supply without charge and from the work. The contractor shall also supply without charges the requisite number of persons with the means and materials necessary for the purpose of setting out works and 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 Engineer-in-charge at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof, or a sufficient portion thereof. The contractor 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

*Contractor to
supply plant,
ladders
scaffolding etc*

person for injury sustained owing to neglect of the above precautions, and to pay any damages and costs which may be awarded in any such suit action or proceedings to any such person, or which may with consent of the contractor be paid or compromising any claim by any such person.

Measure for prevention of fire.

Clause 15: The contractor shall not set fire to any standing jungle, trees, brushwood or grass without a written permission from the Executive Engineer.

When such permit is given and also in all cases when destroying cut or dug up trees brushwood, grass etc. by fire, the contractor shall take necessary measure to prevent such fire spreading to or otherwise damaging surrounding property.

The Contractor shall make his own arrangements for drinking water for the labours employed by him.

Liability of contractor for any damage done in or outside work area.

Clause 16: Compensation for all damages done intentionally or unintentionally by contractor's labour directly or indirectly in connection with execution of the contracted work whether in or beyond the limits of MBMC's property including any damage caused by the spreading at fire mentioned in clause 22 shall be estimated by the Engineer-in-charge or such other officer as he may appoint and the estimate of the Engineer-in-charge subject to the decision of the Superintending Engineer on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand failing which the same will be recovered from the contractor as damages in the manner prescribed in Clause -1 or deducted by the Engineer-in-charge from any sums that may be due or become due from MBMC to contractor under this contract to otherwise. The contractor shall bear the expenses of defending any action or other legal proceedings 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 consequence thereof

Clause 17: The employment of female labour on works in neighborhood of soldier's barracks should be avoided as far as possible.

*Employment of female labour
Work on Sunday*

Clause 18 : No work shall be done on a Sunday without the sanction in writing of the Engineer-in-charge.

Work not to sublet

Clause 19 : The contractor shall not be assigned or sublet this work and if the contractor without become insolvent or commence any proceedings to get himself adjudicated and insolvent or make any composition with his creditors, or attempt to do 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 contractor or any of his servants or agents to any public officer or person in the employment of MBMC in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-charge may thereupon by notice in writing rescind the contract, and the security deposit of the contractor shall ensure as if the contract had been rescinded under Clause 3 hereof and in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

*Contractor may be rescinded and security deposit forfeited for submitting It without approval or for binding a public officer or If contractor becomes
Direction and control of the Executive Engineer*

Clause 20 : All works to be executed under the contract shall be executed under the direction & subject to the approval in all respect of the Executive Engineer shall be entitled to direct at what point or points and in what manner they are to be commenced and from time to time carried on.

Clause 21 : (1) Except where otherwise specified in the contract and subject to the powers delegated to him by the MBMC under the code, rules, orders then in force, the decision of the Superintending Engineer of the Circle for the time being shall be final, conclusive and binding on all parties of the contract upon all questions relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used on the work, or as to any other question claim, right matter, or thing whatsoever, in anyway arising out of or relating to the contract designs drawings, specifications, estimates instructions, orders or these conditions, or otherwise concerning the works, or the execution, or failure to execute the same whether arising during the progress of work, or after the completion abandonment thereof.

(2) The contractor may within thirty days of receipt by him of any order passed by the Executive Engineer as aforesaid appeal against it to the Commissioner concerned with the contract work or project provided that -

(a) The accepted Value of the Contract exceeds Rs. 10 lakh (Rupees Ten Lakhs).

(b) Amount of claim is not less than Rs. 1.00 Lakh (Rupees One Lakh).

(3) If the contractor is not satisfied with the order passed by the Executive Engineer as aforesaid, the contractor may, within thirty days of receipt by him of any such order, appeal against it to the Commissioner, Mira-Bhaingar Municipal Corporation, who if convinced that prima facie, the contractor's claim rejected by Executive Engineer is not frivolous and that there is some substance in the claim of the contractor as would merit a detailed examination in the claim of the contractor as would merit a detailed examination. The decision of the Commissioner shall be final and binding on the contractor and the Engineer-in-charge.

*Lump sums
in Estimate*

Clause 22: When the estimate on which a tender is made include lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for each item, or if the part of work in question is not in the opinion of the Engineer-in-charge capable of measurement, the Engineer-in-charge may as his discretion pay the lump sum amount entered in the estimate and the certificate in writing of the Engineer-in-charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of this clause.

*Action where
no
specifications*

Clause 23: In the case of any class of work for which there is no such specification as is mentioned in Rule 1 of form B-I such work shall be carried out in accordance with the Divisional specifications and in the event of there being no Divisional specification, then in such case the work shall be carried out in all respects in accordance with all instructions and requirements of the Engineer-in-charge.

*Definition
of work*

Clause 24: The expression 'works' or 'work' where used in these conditions, shall unless there be something in the subject or context repugnant to such construction, be construed 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, substituted or additional.

*Contractor's
percentage*

Clause 25: The percentage referred to in the tender shall be deducted from/added to the gross amount of the bill before deducting the value of any stock issued.

*Refund of
quarry fees
and royalties*

Clause 26: All quarry fees, royalties, Octroi duties and ground rent for stacking materials, if the contractor should pay any, royalties who will not be entitled to a refund of such charges from MBMC

*Compensation
under Workmen
compensation Act,*

Clause 27: The contractor shall be responsible for and shall pay any compensation to his workmen payable under the Workmen's 1923 (VIII of 1923) (hereinafter called the said Act) for injuries caused to the workmen. If such compensation is payable/paid by MBMC as principal employer under Sub-section (1) of section 12 of the said Act on behalf of the contractor. Claim for quantities entered in the tender or estimate it shall be recoverable by MBMC from the contractor under sub section (2) of the said section, such Compensation shall be recovered in the manner laid down in Clause 1 above.

Clause 28 (A): The contractor 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. If such expenses are incurred by MBMC, the same shall be recoverable from the contractor forthwith and be deducted without prejudice to any other remedy of MBMC from any amount due or that may become due to the contractor.

Clause 28 (B): The contractor 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 and shall comply with the following regulations in connection therewith.

- (a) The workers shall be required to use the equipment so provided by the contractor and the contractor 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 or drawing 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.

Clause 28 (C) : The contractor shall duly comply with the provisions of 'The Apprentices Act, 1961' (LII of 1961) and the rules and orders made there under and the orders that may be issued from time to time under the Act. If he fails to comply the said rules and on his failure or neglect to do so, he shall be subject to all the liabilities and penalties provided by the said Act and said rules. Further his failure will be treated as breach of the contract and the Superintending Engineer may at his discretion cancel the contract. The contractor shall also be liable pecuniary liability arising on account of any violation by him of the provisions of the Act.

(2) Quantities in respect of the several items shown in the tender are approximate and no revision in the tendered rate shall be permitted in respect of any of the items so long as, subject to any special provision contained in the specifications prescribing a different percentage of permissible variation the quantity of the them does not exceed the tender quantity by more than 25 percent or so long as the value of the excess quantity beyond the limit of tendered quantities at the rate of the item specified in the tender, is not more than Rs.5000/- (whichever is more).

(3) The contractor shall, if ordered in writing by the Engineer to do also carry out any quantities in excess or the limit mentioned in sub clause (1) hereof on the same conditions as and in accordance with the specifications in the tender and at the rates (i) derived from the rates entered in the current schedule of rates and in the absence of such rates (ii) at the rate prevailing in the market, the said rates being increased or decreased as the case may be by the percentage which the total tendered amount bears to the estimated cost of the work as put to tender based upon the schedule of rates applicable to the year in which the tenders were invited (for the purpose of operation of this clause, this cost shall be taken to be Rs. in words (Rupees only) as per D.S.R..

(4) This clause is not applicable to extra items.

(5) Claims arising out of reduction in the tendered quantity of any item beyond 25 percent will be governed by the provision of clause 15 only when the amount of such reduction beyond 25 percent at the rate of the item specified in the tender is more than Rs.5000/-. This reduction is exclusively of the reduction mentioned in clause No. 14 & 15 of work and site condition.

(6) There is no change in the rate if the excess is less than or equal to 25%. Also there is no change in the rate if quantity of work done is more than 25% of the tendered quantity, but value of the excess work at the tender rates does not exceed Rs.5000/-.

(7) The quantities to be paid at tendered rate shall include: - Tendered quantity plus. 25% excess of the tendered quantity or the excess quantity of the value of Rs.5000/- at the tendered rates whichever is more.

(8) In the schedule B any probable item is included without stating its quantity but by stating the rate for such item, then the tendered quantity for such item shall be treated as Zero for applicability of this Clause.

ANNEXURE CLAUSE – EXCESS QUANTITY

CLARIFICATION TO THE CLAUSE OF EXCESS QUANTITY.

- 1) The Executive Engineer will see that the claim towards the excess quantities as per respective Clause of B - 1 agreement is submitted to the higher authorities for approval immediately on its cropping up. While making such payments, the total expenditure on the scheme shall not exceed sanctioned cost of the scheme.
- 2) Quantity equal that of quantity as per Schedule B plus 25% or Rs. 5,000.00 (Rupees Five Thousand Only) whichever is more, shall be paid at accepted tender rate as usual after submission of excess quantity proposal to the competent authority for approval.
- 3) The Executive Engineer is hereby authorized to make 50% payment of the excess quantity beyond 25% over tender quantity or Rs. 5,000.00 (Rupees Five Thousand Only) cost, whichever is more at proposed rates after submission of excess quantity proposal to the competent authority for approval.
- 4) The powers for approval of excess beyond estimated quantity worth Rs. 10.00 lakhs are vested with Executive Engineer. The City Engineer is empowered to approve proposal of excess quantity worth Rs. 30.00 lakhs only subject to condition that due to approval of excess quantity proposal there should not be any increase in the sanctioned cost of the Scheme. Excess Quantity proposal involving approval of excess quantity beyond 30.00 lakhs is in the power of Commissioner of MBMC subject to revised administrative approval to the work.

Clause 29: If the rate entered into Schedule B for the work of excavation of pipe line is a combined rate for different strata's, then the rate entered in Schedule B will be applicable for quantity 25% in addition to the quantity mentioned in Schedule - B of all items of excavation for pipe line trenches and for excess over 25% of Schedule - B quantity the rate payable to the contractor shall be worked out from the CSR by considering following percentage of excavation in different strata's irrespective of actual strata met at the site for the increased quantity.

For Distribution System

- i) Earth all types of earth, soils, sand, gravel, and soft murum, with lead upto 50 m and lift as involved, including dewatering, shoring and strutting etc. excluding refilling etc. 40% of average rate for Lift 0.00 to 1.50 m and 0% for lift 1.50 to 3.00 m.
- ii) Excavation in hard murum with lead of 50 m and lifts as involved, including dewatering, shoring and strutting, excluding refilling 0.00% for average rate of lift 0.00 to 1.50 m and 0.00% for 1.50 to 3.00.
- iii) Excavation for pipe trenches in Slush / Muddy / Slushy / soil with lead upto 50 m dewatering shoring and strutting, excluding backfilling 30% of average rate for lift 0.00 to 1.50 m and 0.00% for lift 1.5 to 3.00 m.
- iv) Excavation for pipe trenches in soft rock and old cement lime masonry including lead upto 50 m, required lift, dewatering, shoring, strutting, excluding back filling 15% of average rate for lift 0.00 to 1.50 and 0% for lift 1.5 to 3.0 m.

- v) Excavation for pipe trenches in hard rock by chiseling and by mechanical means or by any other means including rimming and leveling - lead upto 50 m, dewatering, shoring, strutting, excluding back filling 15% of average rate for lift 0.00 to 1.50 m

*Employment of
famine labour etc.*

Clause 30: The contractor shall employ any famine, convict or other labour of a particular kind or class if ordered in writing in writing to do so by the Engineer-in-charge.

Clause 31: 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.

*Claim for
Compensation
Delay in starting
the work*

Clause 32: No compensation shall be allowed for any delay in the execution of the work on account of water standing in borrow pits compartments. The rates are inclusive for hard or cracked soil, excavation in mud, sub-soil, water standing in borrow pits and no claim for an extra rate shall be entertained, unless otherwise expressly specified.

*Claim for
Compensation
Delay in
execution work.*

Clause 33: The contractor shall not enter upon or commence any portion of work except with the written authority and instructions of the Engineer - in Charge or of his subordinate-in-charge of the work Failing such authority the contractor shall have no claim to ask for measurements of or payment for work.

*Entering upon
commence any
portion of work*

Clause 34:

- j) No contractor shall employ any person who is under the age of 18 years
ii) No contractor shall employ donkeys or other animals with breeching of string of thin rope. The breeching must be at least three inches wide and should be of tape (Newar).
iii) No animal suffering from sores, lameness or emaciation or which is immature shall be employed on the work.

*Minimum age of
persons employed
the employment of
donkeys & for
other animals &
the payment of fair
wages.*

iv) The Engineer-in-charge or his Agent is authorized to remove from the work, any person or animal found working which does not satisfy these conditions and no responsibility shall be accepted by MBMC for any delay caused in the completion of the work by such removal.

v) The contractor shall pay fair and reasonable wage to the workmen employed by him in the contract undertaken by him. In the event of any dispute arising between the contractor and his workmen on the grounds that the wages paid are not fair and reasonable the dispute shall be referred without delay to the Executive Engineer who shall decide the same. The decision of the Engineer shall be conclusive and binding on the contractor but such decision shall not in any way affect the conditions in the contract regarding the payment to be made by MBMC to the contractor at the sanctioned tender rates.

vi) Contractor shall provide drinking water facilities to the workers. Similar amenities shall be provided to the workers engaged on large work in urban areas.

vii) Contractor to take precaution against accidents which takes place on account of labour using loose garments while working near machinery. He shall not allow his workers to wear loose clothes like Dhoti, Jhabba etc. near machinery.

Clause 35: Payment to contractors shall be made by cheque drawn on any Bank within the division convenient to them MBMC provided .

*Methods of
payment*

Clause 36: Any contractor who does not accept these conditions shall not be allowed to tender for works. Entering into contract by the Contractor with MIP by the contractor shall be considered as incontrovertible proof of acceptance of all conditions of the contract by the contractor.

Clause 37: If Government declares a state of scarcity of famine to exist in any village situated within 16 kilometers of the work, the contractor shall employ upon such parts of the work, as are suitable for

Contractor/Agency

No. of Corrections

Executive Engineer

*Acceptance of
conditions
Compulsory
before tendering
for work
Employment of
Scarcity labour*

unskilled labour, any person certified to him by the Executive Engineer or be any person to whom the Executive Engineer 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 Govt. may have fixed in his behalf. Any dispute which may arise in connection with the implementation of this clause shall be decided by the Executive Engineer whose decision shall be final and binding on the Contractor.

*Price not to
Exceed fixed
by Govt.*

Clause 38: The price quoted by the contractor shall not in any case exceed the control price if any fixed by Govt. or reasonable price which it is permissible for him to charge a private purchaser for the same class and description, the controlled price or the price permissible under Hoarding and Profiteering Ordinance 1948 as amended from time to time, if the price quoted exceeds the controlled price or the price permissible under Hoarding and Profiteering Prevention Ordinance the contractor will specifically mention this fact in his tender along with the reasons for quoting such higher prices. The purchaser at his discretion will in such case exercise the right of revising the price at any stage so as to conform with the controlled price on the permissible under the Hoarding and Profiteering Prevention Ordinance. The discretion will be exercised without prejudice to any other action that may be taken against the contractor.

*Rate inclusive of
Sales Tax*

Clause 39: The rates to be quoted by the contractor must be inclusive of Sales Tax and other taxes. No extra payment on this account will be made to the contractor.

*Sates Tax on
surplus material*

Clause 40: In case of materials that may remain surplus with the contractor from those issued by the MBMC for the work contracted for the date of ascertainment of the materials being surplus will be taken as the date of sale for the purpose of sales tax and the sales tax will be recovered on such sale.

*Employment of
Local Labour*

Clause 41 : The contractor shall employ at east 80 per cent of the total number of unskilled labour to be employed by him on the said work from out of the persons ordinarily residing in the district in which site of the said work is located.

Provided, however, that if the required number of unskilled labour from that district is not available, the contractor shall in the first instance employ such number of persons as is available and thereafter may with previous permission in writing of the Executive Engineer-in-charge of the said work, obtain the rest of the requirement of unskilled labour from outside district.

*Wages to be paid to
the skilled and
unskilled by the
contractor.*

Clause 42: The contractor shall pay the labourers skilled and unskilled according to the wages prescribed by the Minimum wages Act applicable to the area in which the work of contractor labours engaged contractor is located.

Clause 43 : All amounts whatsoever which the contractor is liable to pay to the MBMC in connection with the execution of the work including the amount payable in receipt of (i) materials and/or stores supplied/issued hereunder by the MBMC to the contractor (ii) hire charges in respect of heavy plant, machinery and equipment given on hire by the MBMC to the Contractor for execution by him of the work and/or on which advances have been given by the MBMC to the contractor, (iii) excess amount incurred by MBMC over the Security Deposit furnished by the Contractor for completion of works in view of provision of Clause 3(b), 3(c) and Clause 5(iv). Liquidated Damages ' Compensation amount which could not be recovered from the Security Deposit due to non-availability of adequate Security Deposit to cover such compensation, (v) Penalty under Clause 8 so far as the part which could not be recovered from any payment due to the contractor or from Security Deposit available with Engineer-in-Charge, (vi) amount of compensation recoverable under Clause 17 which could not be recovered from the amount of Security Deposit, (vii) extra expenditure incurred by the Engineer-in-charge for carrying out rectification of defective works under Clause 20, (viii) any other payment / compensation/ penalty / dues etc. recoverable by the Engineer-in-charge from contractor which could not be recovered from the amount of security deposit shall be deemed to be debt payable by the Contractor to the MBMC and the MBMC without prejudice to any other right and remedies of the MBMC may recover the same from the contractor as arrears of land revenue through the Collector of the District.

Clause 44 : The successful tenders will be required to produce to the satisfaction of the specified concerned authority a valid and consequent license issued in favour under the provisions of the Contract

Contractor/Agency	No. of Corrections	Executive Engineer
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Labour (Regulation and Abolition) Act, 1970 before starting the work. On failure to do so, the acceptance of tender should be liable to be withdrawn and also Earnest Money / Security Deposit forfeited.

"The Contractor shall duly comply with all the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 (37 of 1970) and the Maharashtra Contract Labour (Regulation and Abolition) Rules 1971 as amended from time to time and all other relevant statutes and statutory provisions concerning payment of wages particularly to workmen employed by the contractor and working on the site of the work. In particular the contractor shall pay wages to each worker employed by him on the site of the work at the rates prescribed under the Maharashtra Contract Labour (Regulation and Abolition) Rules 1971. If the contractor

fails or neglects to pay wages at the said rates or makes short payment and the MBMC makes such payment of wages in full or part thereof less paid by the contractor, as the case may be, the amount so paid by the MBMC to such workers shall be deemed to be debt payable by the contractor and the MBMC shall be entitled to recover the same as such from the contractor or deduct same from the amount payable by the MBMC to the contractor hereunder or from any other amounts payable to him by the MBMC

Clause 45 : Where the workers are required to work near Machine and are liable to accident they should not be allowed to wear loose clothes like Dhoti, Jhabba etc.

Clause 46 : Provision of all applicable Indian Laws shall be treated as applicable for this contract.

Clause 47 : In view of difficult position regarding the availability of the Foreign exchange, no foreign exchange, will be released by the Department for the purchase of the Plant and Machinery required for the execution for the work concerned.

Clause 48 : The tendered rates shall be inclusive of all taxes, tax payable in respect of works contract under the provisions of the Maharashtra Sales Tax on transfer of property in goods involved in the execution of works contract Act, 1985 (Maharashtra Act No .XIX of 1985). However the works contract tax shall be deducted from the Contractor's Running Account bills at the rates applicable as per rules in force and the same shall be remitted in the Govt. treasury / Bank and no reimbursement in this respect shall be made by the department.

Anti-Malaria And other health services

Clause 49:

- (A) The anti malaria and the health measures shall be as directed by the Joint Director (Malaria and Filaria) of Health Service, Pune.
- (B) Contractor shall see that mosquitogenic conditions are not created so as to keep vector population to minimum level.
- (C) Contractor shall carry out anti malaria measures in the area as per guidelines prescribed under National Malaria Eradication Programme and as directed by the Joint Director (M & F) of Health Services, Pune.
- (D) In case of default in carrying out prescribed anti malaria measures resulting in increase in malaria incidence contractor shall be liable to take measures to control the situation in addition to fine.
- (E) **Relations with Public Authorities:**
The contractor shall make sufficient arrangements for draining away the village water as well as water coming from the bathing and washing places and shall dispose off 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 contractor 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 charge which are livable on him without any extra cost to Government.

Clause 50: The successful contractor will have to enter into agreement in form specified by MBMC on a stamp of required amount as per rules in force. The stamp charges shall be borne by the contractor.

1. Receipts for payments made on account of any work, when executed by a firm should also be signed by all the partners except where the contractors are described in their tender as firm, in which case the receipt shall be signed in the name of the firm by one of the partners, or by some other person having authority to give effectual receipts of the firm.
2. All works shall be measured net by standard measure and according to the rules and customs of the MBMC and in absence of such rules and custom in MBMC then as per rules and customs of P. W. Department of Govt. of Maharashtra without reference to any local custom.
3. The measurements of work will be taken according to the usual methods in use in the Mira-Bhaindar Municipal Corporation and no proposals to adopt alternatives methods will be accepted. The Executive Engineer's decision as to what is the usual method in use in the MBMC will be final
4. The contractor will have to construct shed, for storing controlled and valuable materials issued to him under Schedule 'A' of the agreement, at work site having double locking arrangement. The materials will be taken for use in the presence of the Department person. No materials will be allowed to be removed from the site of works.
5. The tendered rate shall be inclusive of all taxes, duties levies, cess (including Sales Tax) as amended from time to time. No extra payment on this account shall be made to the contractor.

Clause 51 : Price Variation Clause : not Applicable

Clause 52: The contractor shall provided and maintain guards, guard rails, temporary bridge and walkways, watermen headlights and danger signals illuminated from sunset to sunrise and other necessary appliances and safeguards to protect the work, life property, the public, excavations, equipment and materials barricades shall be substantial construction and shall be painted such as to increase then visibility at night. For any accident arising out of the neglect of above instructions, the contractor shall be bound to bear the expenses of defense of every suit, action or other legal proceedings, at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay all damages and costs which may be awarded in any such suit, action or proceedings to any such person on which may with the consent of the contractor be paid in compromising any claim by any such person.

Clause 53: (Insurance)

Contractors shall take out necessary Insurance Policy / Policies so as to provide adequate insurance cover for execution of the awarded contract work from the Director of Insurance, Maharashtra State, Mumbai - 51 only. Its postal address for correspondence is "264, 1st Floor, MHADA, Opp. Kalanagar, Bandra (East), Mumbai - 400 051. Tel. No. 26438403 / Fax : 26438461 / 26438690). Insurance however, if the contractor desire to effect insurance with the local office of any insurance company, the same should be under the co-insurance-cum-servicing arrangements approved by the Director of Insurance If the policy taken out by the contractor is not on co-insurance basis (G.I.F. 60% and Insurance company 40%) the same will not be accepted and the amount of premium calculated by the Director of Insurance will be recovered directly from the amount payable to the contractors for the executed contract work which may be noted

- a) Loss of or damage to the Civil and Mechanical equipment's supplied / installed including the materials such as pipes, valves specials etc. brought on she.
- b) Loss of or damage to contractor's equipment's including his vehicles.

- c) Loss of or damage to property (except the works, Plant Material and Equipment) in connection with the contractor. And ;

Personal injury or death due to vehicles of the contractor and / or due to any accident that may arise at or around the site to the Contractor personal or to the MBMC staff or to any other person not connected with MBMC/contractor.

1. *Policies and certificates for insurance* shall be delivered by the Contractor to the Engineer for the Engineer's approval before the date of actual starting of work. All such insurance shall provide for compensation to be payable in the types of proportions of currencies required to rectify the loss or damage incurred.
2. *If* the contractor does not produce any of the policies and certificates required, the engineer may effect the insurance for which the contractor should have produced the policies and certificates and recover the premiums it has paid from payments otherwise due to the contractor or, if no payment is due, the payment of the premiums shall *be* of debt due.
3. Alterations to the terms of insurance shall not be made without the approval of the engineer.
4. The minimum insurance cover for loss and damages to physical, injury and death shall be 10% of the contract cost per occurrence with number of occurrences as 4 (four). After each occurrence the contractor shall pay additional premium necessary so as to keep the insurance policy valid always till the defect liability period is over.
5. No payment will be released to the contractor until the insurance coverage with the Govt. insurance fund, Maharashtra State is provided and unless the proof of insurance coverage is produced by the contractor to the Engineer- in- charge.

Clause 54: (CSMC)

In case MBMC decides to appoint a construction, supervision and management consultant for supervising/ monitoring works under this contract, the civil / mechanical / electrical contractor shall be liable to execute the work under the supervision of C.S.M.C. All decisions regarding the work in such cases shall be taken by the C.S.M.C. on behalf of M.B.M.C. and will be binding on the contractor.

In such cases the contractor will have to sign the agreement between the MBMC of C.S.M.C. in token of acceptance of the C.S.M.C. as the sole supervisor of the works under the agreement.

**MIRA-BHANDAR MUNICIPAL CORPORATION
WATER SUPPLY DEPARTMENT**

CONDITIONS FOR MATERIAL SCHEDULE 'A'

CSA-1 Other materials except as shown in Schedule 'A' required for the work shall be procured and supplied by the contractor at his cost. In such cases the test certificate for their quality shall have to be produced by the contractor.

CSA-2 Material shall be available for delivery on any working day from 11.00 A.M. to 05.00 P.M. with at least week's intimation in advance.

CSA-3 The contractor shall maintain proper account of consumption of all material supplied to him by the department as per schedule 'A' in the register which may be if required, modified as prescribed by Board and shall submit the extract of the same monthly to the Executive Engineer. The Executive Engineer shall reserve the right to stop further issue of material to the contractor if monthly account of the previously issued material is not submitted by the contractor. He shall be fully responsible for the consequence arising out of this.

The contractor shall responsible for proper handling and safe custody of material issued to him by Board, for use on the work and shall return to Government all surplus material after completion of work, if and as ordered by the Executive Engineer vide Clause - 12 of B.1 Form. The cost of damages or unserviceable material as would be fixed by the Engineer-in-Charge shall be recovered from the contractor. The material, which is not found, accounted properly after considering reasonable percentage of wastage shall be charged at panel rates or determined by the Engineer-in- Charge

CSA-4 The contractor shall at his own cost make arrangement for storing cement brought by him by constructing a pucca shed and platform, etc. with double locking arrangements. Any damage to the cement due to inadequate provision of store theft etc. will to the account of the contractor

CSA-5 If there is delay in supplying the materials due to reasons outside the control of the Department or due to the materials being out of stock, no claim for compensation will be considered on the ground of delay in the supply of the materials

CSA-6 All the materials mentioned in Schedule 'A' required for the work shall be obtained from the Department's store only where otherwise provided. The material obtained from other sources shall not be allowed to be used except under written permission of the Engineer-in-Charge and after producing necessary test certificate.

CSA-7 The contractor shall inspect the material thoroughly before taking delivery of the same and shall take the delivery in good and sound condition and sign the unstamped receipt in token of receipt. Damages to the material noticed afterwards will be to the account of the contractor.

CSA-8 Quantities in Schedule 'A' are approximate and shall vary according to actual and bonafied use.

- CSA-9 All the materials remaining unused after the completion of the work are to be returned to Board at their store at the cost of the contractor and the credit if due will be given as per rules enforces.
- CSA-10 Once the materials are issued to the contractor at the MBMC's store he shall remove the same immediately to his stores, failing which rent as decided by Engineer-in-Charge shall be recovered from the contractor.
- CSA-11 The contractor shall submit account of all the materials issued to him previously before demand for any fresh materials is made. Materials that cannot be accounted for shall be recovered from him at the rates decided by the Executive Engineer.
- CSA-12 The contractor will have to provide the manufacturer list report from Government Laboratory regarding steel to be provided by the contractor.
- CSA-13 If the contractor fails to return the balance materials with the firm, the same shall be recovered at 2.0 times the issue rate or at the prevailing market rate, whichever is higher.
- CSA-14 C.I. Flanged and S/s Specials required other than that not available with the department for the work will be supplied by contractor as per necessity of the work.
- CSA-15 The contractor shall be responsible for safety of materials (even if it is laid in ground) till satisfactory Hydraulic Test is completed and work is finally handed over to the MBMC.
- CSA-16 If the material supplied to the contractor at the place other than mentioned in Schedule-A, the Transport charges will be paid as per prevailing DSR for the shortest between stipulated place of delivery and actual place of delivery. In addition octroi on such a material, if paid by the contract, same shall be reimbursed to the contractor on production of proof of payment of such charges to Municipal Council.

SCHEDULE - B

MIRA BHAYANDER MUNICIPAL CORPORATION

Water Supply Department

Name of Work : Annual maintenance of C.I., D.I. & M.S. Pipeline at Prabhag Samiti No 01 to 06 in Mira Bhaindar Municipal Corporation area. (Panel)

Shedule B

Quantity as per Sanction	Item of Work	Estimated Rate		Unit	Total Amount according to Estimate	Specification		Additional Specification
		In Figures	In Words			Clouse No	Page No	
1	2	3	4	5	6	7	8	9
	Item No. 1							
	Excavation for foundation / pipe trenches in soft rock and old cement and lime masonry foundation asphalt road including and removing the excavated material upto a distance stacking as directed by Engineer-in-charge							As per the Direction given by the Engineer in Charge
247.50		660.45	Rs. Six hundred sixty & forty five paisa only	Cum	163461.38			As Above
	Item No. 2							
	Excavation for foundation / pipe trenches in earth soils of all types, sands gravel and soft muram, including removing the excavated material up to distance of 50 meters and lifts as belows, normal dewatering preparing							
495.00		173.25	Rs. One hundred seventy three & twenty five paisa only	Cum	85758.75			

Contractor/Agency

No. of Corrections

Executive Engineer

	Item No. 3							As Above
290.00	Maintenance MS Pipeline Including JCB Charges, Pump chrges, Generator, Light Vehicle, Welder, Fitter, Helper, Mazdoor etc. com.	32405.00	Rs. Thirty two thousand four hundred five only	Day	9397450.00			As Above
	Item No. 4							
	Providing and supplying ISI standard MS specials of required thickness with 3 coats of approved make epoxy paint (Shalimar, Ciba or Mahindra and Mahindra make) from inside and outside including all taxes Central and local), Octroi, inspection charges, transportation to stroes, site, and stacking etc.complete.							
107453.86		92.00	Rs. Ninety two only	Kg	9885755.55			As Above
	Item No. 5							
	Lowering , laying in position to correct line and level including M.S. specials with / without any out coating such as distance pieces, straps, bends, tapers, etc.in trenches upon preapred formation. The rate to include loading, unloading, hoisting marginal cutting wherever required, assembling and tack welding and trarsportation upto 500 mm. etc. complete.							
2290.00	Up to 250 mm dia.	917.70	Rs. Nine hundred seventeen & seventy paisa only	RMT	2101533.00			As Above
450.00	above 250mm upto 500mm	1080.45	Rs. One thousand eighty & forty five paisa only	RMT	486202.50			As Above
	Item No. 6							

	Providing and laying in situ following grades of C.C.of trap /granite /quartzite /gneiss metal for foundation and bedding including dewatering, formwork, compacting and curing,finishing etc.complete.							As Above
	a) 1:2:4 (M-150) grade							
49.61		6175.05	Rs. Six thousand one hundred seventy five & five paisa only	cum	306359.67			As Above
	Item No. 7							
	Lowering, laying and jointing with SBR rubber Gaskets D.I./C.I.S/S pipes of various classes with CI specials of f grade and alignment as directed by Engineer-In-charge including conveyance from store to site of work,							
200.00	100 mm	75.60	Rs. Seventy five & sixty paisa only	RMT	15120.00			As Above
200.00	150 mm	100.80	Rs. One hundred & eighty paisa only	RMT	20160.00			As Above
200.00	200 mm	133.35	Rs. One thousand thirty three & thirty five paisa only	RMT	26670.00			As Above
100.00	250 mm	175.35	Rs. One hundred seventy five & thirty five paisa only	RMT	17535.00			As Above
100.00	300 mm	189.00	Rs. One hundred eighty nine only	RMT	18900.00			As Above
50.00	350 mm	235.20	Rs. Two hundred thirty five & twenty paisa only	RMT	11760.00			As Above
50.00	400 mm	283.50	Rs. Two hundred eighty three & fifty paisa only	RMT	14175.00			As Above
45.00	450 mm	283.50	Rs. Two hundred eighty three & fifty paisa only	RMT	12757.50			As Above

40.00	500 mm	326.55	Rs. Three hundred twenty six & fifty five paisa only	RMT	13062.00			As Above
	Item No. 8							
	Providing and constructing R.C.C. chamber including excavation, soling PCC reinforcement concrete [M-25] raft & wall 0.30 m. thick with heavy MS frame with cover 12 m.thick plate.cover of chamber internal size 2m x 2m & depth as per required as instructed by Engineer-In-Charge..... Etc complete							
5.00		150000.00	Rs. One lac fifty thousand only	No	750000.00			As Above
	Item No. 9							
	Joint Collar - Providing and supplying D.I. fittings with ISI mark Mechanical joint conforming to tables 12 to table 31 of IS 9523/2000 upto latest amendments including cost of SBR/ EDPM gaskets, Nuts, Bolts, Washers and Ductile iron follower glands. Fittings should be with internally Ordinary portland cement mortar lined and externally metallic zinc coating/zinc rich paint with finishing layer of black bitumen coating including transportation and excluding all statutory duties and taxes such as GST levied by GoI and GoM in all respect etc. complete.							
25.00	100 mm	2990.00	Rs. Two thousand nine hundred ninety only	No	74750.00			As Above
20.00	150 mm	3658.00	Rs. Three thousand six hundred fifty eight only	No	73160.00			As Above
15.00	200 mm	6540.00	Rs. Six thousand five hundred forty only	No	98100.00			As Above

10.00	250 mm	8653.00	Rs. Eight thousand six hundred fifty three only	No	86530.00			As Above
10.00	300 mm	11215.00	Rs. Eleven thousand two hundred fifteen only	No	112150.00			As Above
5.00	350 mm	15867.00	Rs. Fifteen thousand eight hundred sixty seven only	No	79335.00			As Above
5.00	400 mm	19852.00	Rs. Nineteen thousand eight hundred fifty two only	No	99260.00			As Above
5.00	450 mm	22977.00	Rs. Twenty two thousand nine hundred seventy seven only	No	114885.00			As Above
5.00	500 mm	29696.00	Rs. Twenty nine thousand six hundred ninety six only	No	148480.00			As Above
	Item No. 10							
	Providing & Supplying C.I.D.F. sluice volve confirming for IS 2906/14846 including worm gear arrenge such as per test pressure stainless steel spindles, caps incl. all taxes transportation etc. complete.							
5.00	100 mm dia	8202.00	Rs. Eight thousand two hundred two only	No	41010.00			As Above
5.00	150 mm dia	12954.00	Rs. Twelve thousand nine hundred fifty four only	No	64770.00			As Above
5.00	200 mm dia	22338.00	Rs. Twenty two thousand three hundred thirty eight only	No	111690.00			As Above
5.00	250 mm dia	34513.00	Rs. Thirty four thousand five hundred thiteen only	No	172565.00			As Above
5.00	300 mm dia	43804.00	Rs. Forty three thousand eight hundred four only	No	219020.00			As Above

Contractor/Agency

No. of Corrections

Executive Engineer

5.00	350 mm dia	66774.00	Rs. Sixty six thousand seven hundred seventy four only	No	333870.00			As Above
5.00	400 mm dia	84888.00	Rs. Eighty four thousand eight hundred eighty eight only	No	424440.00			As Above
	Item No. 11							
0.00	Lowering, laying and jointing in position following C.I.D/F Reflux valves, Butterfly valves and Sluice valve including cost of all labour jointing material, including nut bolts and giving satisfactory hydraulic testing etc.complete.(Rate for all class)							
5.00	100 mm dia	2545.00	Rs. Two thousand five hundred forty five only	No	12725.00			As Above
5.00	150 mm dia	3998.00	Rs. Three thousand nine hundred ninety eight only	No	19990.00			As Above
5.00	200 mm dia	4160.00	Rs. Four thousand one hundred sixty only	No	20800.00			As Above
5.00	250 mm dia	5420.00	Rs. Five thousand four hundred twenty only	No	27100.00			As Above
5.00	300 mm dia	5621.00	Rs. Five thousand six hundred twenty one only	No	28105.00			As Above
5.00	350 mm dia	6927.00	Rs. Six thousand nine hundred twenty seven only	No	34635.00			As Above
5.00	400 mm dia	8357.00	Rs. Eight thousand three hundred fifty seven only	No	41785.00			As Above
	Item No. 12							

	Tail Pieces - Supply of C. I. Mechanical Compression Flanged / Socket Tailpiece (Popularly known as I TM Flanged / Socket Tailpiece) suitable for making flanged connection with the plain barrel of C. I. Spun Pipes (as per - IS - 1536 /2001) and D. I. Pipes (as per IS: 8329 / 2000).The Tailpiec to be supplied complete with sealing rubber gasket of S.B.R, C.I. Follower Glands and M.S. Nut Bolts.The whole assembly should be mechanically and hydraulically tested to the provisions as laid down in IS:1538 /1993. The rates are inclusive of cost of material, freight charges, loading, transportation and unloading at departemental store, excluding GST levied by Gol and GoM in all respect, etc. complete as directed.						
10.00	100 mm dia	1430.00	Rs. One thousand four hundred thirty only	No	14300.00		As Above
10.00	150 mm dia	2574.00	Rs. Two thousand five hundred seventy four only	No	25740.00		As Above
10.00	200 mm dia	3335.00	Rs. Three thousand three hundred thirty five only	No	33350.00		As Above
10.00	250 mm dia	5031.00	Rs. Five thousand thirty one only	No	50310.00		As Above
10.00	300 mm dia	5632.00	Rs. Five thousnd six hundred thirty two only	No	56320.00		As Above
5.00	350 mm dia	7427.00	Rs. Seven thousand four hundred twenty seven only	No	37135.00		As Above
5.00	400 mm dia	9694.00	Rs. Nine thousand six hundred ninety four only	No	48470.00		As Above
	Item No. 13						

	Bend - 22.5 Providing and supplying D.I. fittings with ISI mark Mechanical joint confirming to tables 12 to table 31 of IS 9523/2000 upto latest amendments including cost of SBR/ EDPM gaskets, Nuts, Bolts, Washers and Ductile iron follower glands. Fittings should be with internally Ordinary portland cement mortar lined and externally metallic zinc coating/zinc rich paint with finishing layer of black bitumen coating including transportation and excluding all statutory duties and taxes such as GST levied by Gol and GoM in all respect etc. complete.							
5.00	100 mm dia	1886.00	Rs. One thousand eight hundred eighty six only	No	9430.00			As Above
5.00	150 mm dia	2828.00	Rs. Two thousand eigfht hundred twenty eight only	No	14140.00			As Above
5.00	200 mm dia	4036.00	Rs. Four thousand thirty six only.	No	20180.00			As Above
5.00	250 mm dia	5379.00	Rs. Five thousand three hundred seventy nine only	No	26895.00			As Above
5.00	300 mm dia	7528.00	Rs. Seven thousand five hundred twenty eight only	No	37640.00			As Above
	Item No. 14							

	Bend - 45 Providing and supplying D.I. fittings with ISI mark Mechanical joint confirming to tables 12 to table 31 of IS 9523/2000 upto latest amendments including cost of SBR/ EDPM gaskets, Nuts, Bolts, Washers and Ductile iron follower glands. Fittings should be with internally Ordinary portland cement mortar lined and externally metallic zinc coating/zinc rich paint with finishing layer of black bitumen coating including transportation and excluding all statutory duties and taxes such as GST levied by Gol and GoM in all respect etc. complete.							
5.00	100 mm dia	1886.00	Rs. One thousand eight hundred eighty six only	No	9430.00			As Above
5.00	150 mm dia	2951.00	Rs. Two thousand nine hundred fifty one only	No	14755.00			As Above
5.00	200 mm dia	4505.00	Rs. Four thousand five hundred five only	No	22525.00			As Above
5.00	250 mm dia	6059.00	Rs. Six thousand fifty nine only	No	30295.00			As Above
5.00	300 mm dia	8471.00	Rs. Eight thousand four hundred seventy one only	No	42355.00			As Above
	Item No. 15							

	Bend - 90 Providing and supplying D.I. fittings with ISI mark Mechanical joint confirming to tables 12 to table 31 of IS 9523/2000 upto latest amendments including cost of SBR/ EDPM gaskets, Nuts, Bolts, Washers and Ductile iron follower glands. Fittings should be with internally Ordinary portland cement mortar lined and externally metallic zinc coating/zinc rich paint with finishing layer of black bitumen coating including transportation and excluding all statutory duties and taxes such as GST levied by Gol and GoM in all respect etc. complete.							
5.00	100 mm dia	2026.00	Rs. Two thousand twenty six only	No	10130.00			As Above
5.00	150 mm dia	3493.00	Rs. mThree thousand four hundred ninety three only	No	17465.00			As Above
5.00	200 mm dia	5240.00	Rs. Five thousand two hundred forty only	No	26200.00			As Above
5.00	250 mm dia	7427.00	Rs. Seven thousand four hundred twenty seven only	No	37135.00			As Above
5.00	300 mm dia	9925.00	Rs. Nine thousand nine hundred twenty five only	No	49625.00			As Above
	Item No. 16							
	Supply of CI mechanical Reducer diamentionally described in Table - 19 of IS-13382/1992 complete with sealing rubber gasket of SBR dimensionally described in IS -12820/1989) with cast iron follower gland and mild steel nutbolts coated or otherwise protected from rusting and suitable forC.I.pipes.							
10.00	150 x 100 mm	3795.00	Rs. Three thousnad seven hundred ninety five only	No	37950.00			As Above

Contractor/Agency

No. of Corrections

Executive Engineer

10.00	200 x 100 mm	4917.00	Rs. Four thousand nine hundred seventeen only	No	49170.00			As Above
10.00	200 x 150 mm	5470.00	Rs. Five thousand four hundred seventy only	No	54700.00			As Above
5.00	250 x 100 mm	6698.00	Rs. Six thousand six hundred ninety eight only	No	33490.00			As Above
5.00	250 x 150 mm	7141.00	Rs. Seven thousand one hundred forty one only	No	35705.00			As Above
5.00	250 x 200 mm	7141.00	Rs. Seven thousand one hundred forty one only	No	35705.00			As Above
5.00	300 x 100 mm	8881.00	Rs. Eight thousand eight hundred eighty one only	No	44405.00			As Above
5.00	300 x 150 mm	9318.00	Rs. Nine thousand three hundred eighteen only	No	46590.00			As Above
5.00	300 x 200 mm	8955.00	Rs. Eight thousand nine hundred fifty five only	No	44775.00			As Above
5.00	300 x 250 mm	9609.00	Rs. Nine thousand six hundred nine only	No	48045.00			As Above
5.00	350 x 200 mm	13535.00	Rs. Thirteen thousand five hundred thirty five only	No	67675.00			As Above
5.00	350 x 300 mm	10503.00	Rs. Ten thousand five hundred three only	No	52515.00			As Above
	Item No. 17							

	Tees - Providing and supplying D.I. fittings with ISI mark Mechanical joint conforming to tables 12 to table 31 of IS 9523/2000 upto latest amendments including cost of SBR/ EDPM gaskets, Nuts, Bolts, Washers and Ductile iron follower glands. Fittings should be with internally Ordinary portland cement mortar lined and externally metallic zinc coating/zinc rich paint with finishing layer of black bitumen coating including transportation and excluding all statutory duties and taxes such as GST levied by Gol and GoM in all respect etc. complete.							
10.00	100 x 100 x 100 mm	4305.00	Rs. Four thousand three hundred five only	No	43050.00			As Above
10.00	150 x 150 x 100 mm	6102.00	Rs. Six thousand one hundred two only	No	61020.00			As Above
10.00	150 x 150 x 150 mm	7021.00	Rs. Seven thousand twenty one only	No	70210.00			As Above
5.00	200 x 200 x 100 mm	8105.00	Rs. Eight thousand one hundred five only	No	40525.00			As Above
5.00	200 x 200 x 150 mm	9208.00	Rs. Nine thousand two hundred eight only	No	46040.00			As Above
5.00	200 x 200 x 200 mm	10766.00	Rs. Ten thousand seven hundred sixty six only	No	53830.00			As Above
5.00	250 x 250 x 100 mm	10315.00	Rs. Ten thousand three hundred fifteen only	No	51575.00			As Above
5.00	250 x 250 x 150 mm	11210.00	Rs. Eleven thousand two hundred ten only	No	56050.00			As Above
5.00	250 x 250 x 200 mm	13030.00	Rs. Thirteen thousand thirty only	No	65150.00			As Above
5.00	250 x 250 x 250 mm	14411.00	Rs. Fourteen thousand four hundred eleven only	No	72055.00			As Above
5.00	300 x 300 x 100 mm	12708.00	Rs. Twelve thousand seven hundred eight only	No	63540.00			As Above

Contractor/Agency

No. of Corrections

Executive Engineer

5.00	300 x 300 x 150 mm	14827.00	Rs. Fourteen thousand eight hundred twenty seven only	No	74135.00			As Above
5.00	300 x 300 x 200 mm	16321.00	Rs. Sixteen thousand three hundred twenty one only	No	81605.00			As Above
5.00	300 x 300 x 250 mm	18024.00	Rs. Eighteen thousand twenty four only	No	90120.00			As Above
5.00	300 x 300 x 300 mm	19636.00	Rs. Nineteen thousand six hundred thirty six only	No	98180.00			As Above
5.00	350 x 350 x 100 mm	18186.00	Rs. Eighteen thousand one hundred eighty six only	No	90930.00			As Above
5.00	350 x 350 x 150 mm	20260.00	Rs. Twenty thousand two hundred sixty only	No	101300.00			As Above
5.00	350 x 350 x 200 mm	21869.00	Rs. Twenty one thousand eight hundred sixty nine only	No	109345.00			As Above
5.00	350 x 350 x 300 mm	28201.00	Rs. Twenty eight thousand two hundred one only	No	141005.00			As Above
5.00	350 x 350 x 350 mm	30043.00	Rs. Thirty thousand forty three only	No	150215.00			As Above
5.00	400 x 400 x 100 mm	22676.00	Rs. Twenty two thousand six hundred seventy six only	No	113380.00			As Above
5.00	400 x 400 x 150 mm	26676.00	Rs. Twenty six thousand six hundred seventy six only	No	133380.00			As Above
5.00	400 x 400 x 200 mm	27508.00	Rs. Twenty seven thousand five hundred eight only	No	137540.00			As Above
5.00	400 x 400 x 250 mm	29812.00	Rs. Twenty nine thousand eight hundred twelve only	No	149060.00			As Above

5.00	400 x 400 x 300 mm	32461.00	Rs. Thirty two thousand four hundred sixty one only	No	162305.00			As Above
5.00	400 x 400 x 400 mm	38100.00	Rs. Thirty eight thousand one hundred only	No	190500.00			As Above
	Item No. 18 - Refilling							
623.30	Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 CM layers with all leads and lifts including consolidation, surcharging, etc.complete.	96.60	Rs. Ninety six & sixty paisa only	Cum	60210.51			As Above
	Item No. 19 - Desposing							
	Desposing the excavated with all labours, vehicle, fule, Charges all local taxes if any as per Engg. Incharge							
119.20	instructions within MBMC limit etc. Complete (R.A.)	378.05	Rs. Three hundred seventy eight & five piasa only	Cum	45064.60			As Above

Total
Rs. 29501685.45

I/we herby agree to execute the above work at % below/above/estimated cost.

Contractor/Agency

No. of Corrections

Executive Engineer

GENRAL CONDITIONS

**MIRA-BHAYANDAR MUNICIPAL CORPORATION
WATER SUPPLY DEPARTMENT**

GENRAL CONDITIONS

**MIRA-BHAYANDAR MUNICIPAL CORPORATION
WATER SUPPLY DEPARTMENT**

GENRAL CONDITIONS

1. SCOPE OF WORK

The offers are invited by MBMC is for Finalisation of PANEL OF CONTRACTORS & RATES for making Annual maintenance of C.I., D.I., & M.S. Pipeline at Prabhag Samiti No.01,02,03,04,05& 06 in MBMC area. MBMC's role to Finalise the Panel of Contractors at Lowest rate received. Agency has to work for Annual maintenance of C.I., D.I., & M.S. Pipeline at Prabhag Samiti No.01,02,03,04,05& 06 at the lowest rates received.

2. DEFINITIONS:

1.1 In the contract, the following terms shall be interpreted as indicated -

- a) "The Contract" means the agreement entered into between the owner and the contractor as recorded in the contract form signed by the parties, includes all attachments and appendices there to and all documents incorporated by references therein. Contract is the deed of contract together with all its original accompaniments and those later incorporated in it by internal consent.
- b) "The Contract Price" means the price payable to the contractor under the contract for the full and proper performance of its contractual obligations.
- c) "The Goods" means all of the equipments, machinery and/or other materials which the" contractor is required to 'supply to the owner under the contract.
- d) "Services" means services ancillary to the contract such as transportation and insurance and any other incidental services, such as Provision of Technical staff and other such obligations of the contractor covered under the contract.
- e) The "Contractor" means successful tenderer that is the tenderer whose tender has been accepted and who has been authorised to proceed with the work.

- f) "Client" means Mira Bhaindar Municipal Corporation.
- g) "MBMC" means Mira Bhaindar Municipal Corporation
- h) "Tender" means the proposal of the contractor submitted in prescribed form setting forth the prices for the goods to be supplied and other related services to be rendered and setting forth his acceptance of the terms and obligations of the conditions of contract and specifications.
- i) "Contract Time" means period specified in the document for the entire execution of contracted works and other services to be rendered commencing from the date of notification of award including monsoon period.
- j) "Month" means calendar months.
- k) "Site" means location at which the contractor will have to execute the contracted work.
- l) "The Engineer" shall mean the Executive Engineer in charge of the work.

3. SPECIFICATIONS:

The wording of items in Schedule - B shall be taken as guidelines for general provisions and coverage under the item. The detailed specification for relevant items shall be as per detailed specifications enclosed and as per P.W.D. Hand Book, Standard Specifications relevant and latest editions of I.S. & Green book of Maharashtra Jeevan Pradhikaran. The other standard, wherever quoted, shall be applicable.

4. LINE OUT:

All details and dimensions of existing structures, pipe line, etc. shall be obtained by the contractor before giving line out. The contractor shall himself carryout the line out of works in the presence of the representative of the MBMC, and the contractor shall be responsible for accuracy of it. He shall employ a qualified Engineer for the purpose as well as for supervision of works.

5. INTENT AND INTERPRETATION OF CONTRACT DOCUMENTS:

5.1 The contract documents are complementary and what is called for by one is as binding as if called for by all. Any work that may be reasonably inferred from the

drawings or specifications as being required to produce the intended result shall be provided by the contractor whether or not it is specifically called for, in schedule – B.

The contractor shall furnish and pay for all labour, supervision, materials, equipment, transportation, construction, equipment and machinery tools, appliances, water, fuel, power energy, light, heat, utilities, telephone, storage, protections, safety provisions, and all other facilities, services and acceptable execution, testing initial operation and completion of the work in accordance with the contract documents, ready for use and operation by the owner. The cost of all these arrangements shall be deemed to be included in the contract offer and no separate payment shall be admissible therefore.

5.2 INTERPRETATIONS:

Written clarifications or interpretations necessary for the proper execution or progress of the work, in the form of drawings or otherwise, will be issued with reasonable promptness by the Engineer and in accordance with any schedule agreed upon. Such clarifications or interpretations shall be consistent with or reasonably inferable from the intent of the contract documents and shall become a part thereof. Where, there is a discrepancy between the drawings and the specifications, the contractor shall obtain the "Engineer" Interpretation which shall be binding on the contractor.

5.3 DRAWING:

Figured dimensions on drawings shall govern over scaled dimensions and detailed drawings shall govern over general drawings.

5.3.1 SIGNED DRAWINGS:

Signed drawings alone shall not be deemed to be in order for work unless it is entered in the agreement or schedule for drawings under proper attestation of the contractor and the Engineer or unless it has been sent to the contractor by the Engineer with a covering letter confirming that the drawing is and authority for work in the contract.

5.3.2 TECHNICAL WORDS:

Work, materials or equipment described in works which so applied have a well known trade or technical meaning shall be deemed to refer to such recognized meanings.

6.0 LINE OUT OF THE WORK:

6.1 SURVEYS AND MEASUREMENTS:

The contractor shall carefully preserve all surveys as also setting out stakes, reference points, bench marks and monuments. Should any stakes, points or benches be removed or destroyed by any act of the contractor or his employees, they may be reset at the contractor's expense. Any expense incurred in replacing permanent monument which the contractor may have failed to preserve shall be borne by the contractor unless the removal of the monuments is required by the contract documents. The contractor shall supply without charge the requisite number of persons with the means and materials necessary for the purpose of working survey, setting out works, and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or materials.

6.2 CONTRACTOR'S VERIFICATION:

The contractor will establish at the work site a substantial B.M., and connect it to a permanent B.M. available in the area with known value. The contractor will then carry out necessary surveys and leveling, covering his work, in verification of the survey data on the working drawings furnished by the Engineer and he will be responsible for establishing the correct lines and levels and verification of the lines and level furnished on the working drawings.

If any error has erupted in the work due to non observance of this clause, the contractor will be responsible for the error and bear the cost of corrective work.

6.3 SITE OFFICE:

The Contractor shall construct a semi permanent nature site office if required with minimum six table, four almarie, twenty numbers of chairs and other facilities. The use of the site offices will be done by the departmental staff during their visits to site .

7. SECURITY DEPOSIT AND INDEMNITY BOND

7.1 SECURITY DEPOSIT:

The Security Deposit shall be returned to the contractor without any interest when the contractor ceases to be under any obligation under the contract. This shall be read with Clause No.20 of B-1 Form, Defect Liability Clause.

7.2 LOSS OR DAMAGE INDENITY BOND:

The Contractor shall be responsible during the progress as well as maintenances for any liability imposed by law for any damage to the work or any part thereof or to any of the materials or other things used in performing the work or for injury to any person or persons or for any property damaged in or outside the work limit. The Contractor shall indemnify and hold the owner and the Engineer, harmless against any and all liability, claims, loss or injury, including costs, expenses, and attorney's fees incurred in the defense of same, arising from any allegation whether groundless or not, of damage or injury to any person or property resulting from the performance of the work or from any material used in the work or from any condition of the work or work site, or from any cause whatsoever during the progress and maintenance of the work.

8. SUPERVISION AND SUPERINTENDENCE

8.1 CONTRACTOR'S SUPERVISION:

The Contractor shall supervise and direct the works efficiently and with his best skill and attention. He shall be solely responsible for means, methods, techniques, procedures and sequences of construction. The contractor shall co-ordinate all parts of the work and shall be responsible to see that the finished work complies fully with the contract documents, and such instructions and variation orders as the Engineer may issue during the progress of the works.

8.2 WORK ORDER BOOK:

a) The Contractor shall himself engage an authorised representative all the time on the work capable of managing and guiding the work and understanding the specifications and contract conditions. A qualified and experienced Engineer shall be provided by the Contractor as his representative for technical matters in case the Engineer-in-charge considers this as essential for the work and so he directs the contractor. He will take

orders as will be given by the Executive Engineer or his representative and shall be responsible for carrying them out. This representative shall not be changed without prior intimation to the Executive Engineer and his representative on the work site. The Engineer-in-charge has unquestionable right to ask for changes in the quality and strength of contractor's supervisory staff and to order removal from work of any of such staff. The contractor shall comply with such orders and effect replacements to the satisfaction of the Engineer-in-charge.

b) A work order book shall be maintained on site and it shall be the property of MBMC and the contractor shall promptly sign orders given therein by the Executive Engineer or his representative or his superior officer and comply with them. The compliance shall be reported by contractor to the Engineer in good time so that it can be checked. The blank work order book with machine numbered pages should be provided by the contractor and he will be allowed to copy out the instruction therein from time to time.

9. PROTECTION:

The contractor shall take all precautions and furnish and maintain protection to prevent damage, injury or loss to other persons who may be affected thereby, all the works and all materials and equipment to be incorporated therein whether in storage on or off the site, under the care, custody or control of the contractor or any of his sub-contractors and other improvements and property at the site or where work is to be performed including building, trees and plants,

pole lines, fences, guard, rails, guide posts, culvert and project, markers sign, structures, conduits, pipelines and improvements within or adjacent to streets, right of way, or easements, except those items required to be removed by the contractor in the contract documents. The contractors protection shall include all the safety precautions and other necessary forms of protection, and the notification of the owners of utilities and adjacent property.

The contractor shall protect adjoining site against structural, decorative and other damages that could be caused by the execution of works and make good at his cost any such damages that could be caused by the execution of works and make good at his cost any such damages.

10. UTILITIES AND SUB-STRUCTURES:

Before commencing any excavations, the contractor shall investigate, determine the actual locations, and protect the indicated utilities and structures, shall determine the existence, position and ownership of other utilities and substructures in the site or before the work is performed by communication with such property owners, search of records, or otherwise and shall protect all such utilities and substructures.

Except for those improvements and facilities require to be permanently removed by the contractor, the contractor shall make satisfactory and acceptable arrangements with the appropriate owners, and at his expense, shall repair and restore all improvements, structures, private and public roads, property, utilities and facilities disturbed, disconnected, or damaged as a result or consequence of his work or the operations of those for whom he is responsible or liable, including that caused by trespass of any of a them, with or without his knowledge or consent, or by the transporting of workmen, material or equipment to or from the site.

11. WORKMEN:

The contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the works any unfit person or anyone not skilled and experienced in the assigned task.

The Contractor shall in respect of labour employed by him comply with or cause to be complied with the provisions of various labour law and rules and regulations as applicable to them in regard to all matters provided therein and shall indemnify the owner in respect of all claims that may be made against the owner for non compliance thereof by the contractor.

In the event of the contractor committing a default or breach of any provisions of labour laws and rules and regulations the contractor shall without prejudice to any other liability under the acts pay the owner a sum as decided by the Engineer.

12.1 WORK DURING NIGHT OR ON SUNDAYS AND HOLIDAYS:

Unless otherwise provided, none of the permanent works shall be carried out during night, Sunday or authorised holidays without permission in writing. However, when

work is unavoidable or necessary for the safety of life, priority of works, the contractors shall take necessary action immediately and advice the Engineer accordingly.

12.2 WORKMANSHIP:

The quality of workmanship produced by skilled knowledgeable and experience workmen, machines and artisans shall be excellent. Particular attention shall be given to the strength appearance and finish of exposed work.

12.3 MATERIALS AND EQUIPMENT:

All materials and equipment incorporated in the work shall be new. Materials and equipment not covered by detailed requirements in the contract documents shall be of the best commercial quality suitable for the purpose intended and approved by the owner prior to use in the work.

13.1 OPTIONAL MATERIALS;

Only one brand, kind or make of material or equipment shall be used for each specific purpose throughout the works, notwithstanding that similar material or equipment of two or more manufactures or proprietary items may be specified for the same purpose.

14. LAWS AND REGULATIONS:

a) Government Law:

The contract documents shall be governed by the laws and bylaws of India, the State of Maharashtra and the local bodies in this region.

b) Resolving the disputes:

In case of disputes, between a Contractor and the field officers, regarding this tender, the Municipal Commissioner MBMC shall be the sole arbitrator and no external arbitrator shall be appointed.

15. PERMITS, FEES AND TAXES:

Unless otherwise provided in the contract documents, the contractor shall secure and pay for all permits, Govt. fees and licenses necessary for the execution and completion

of the works. The contractor shall pay all duties, including excise duty, sales tax, local taxes, income tax, octroi and other taxes and any other taxes and any other levies required by law including sales taxes properly assessed against his equipment or property used in connection with the work and clearance certificate shall be shown to the Engineer. If the contractor is entitled for any refund / exemption of above taxes, necessary certificate regarding the issue of materials for MBMC works will be issued by the Commissioner MBMC however, the MBMC authorities will not take any responsibility of refund/exemption of such taxes fees and in case of disputes between authority refunding and the contractor, the MBMC and its officers shall be indemnified by the Contractor. Any violation, in the legal provisions of taxes, duties, permits and fees, carried out by the contractor and detected subsequent shall be the sole responsibility of the contractor and his legal heirs.

16. BURIED AND CONCEALED WORK:

The contractor shall help in- recording the precise location of all piping, conduits, ducts, cables and like work that is buried, embedded in concrete or masonry, or concealed in wood or metal frame, walls and structures at the time such work is installed and prior to concealment. Should the contractor cover such work before such recording take place, he shall uncover the unrecorded work to the extent required by the Engineer and shall satisfactorily restore and reconstruct the removed work with no change in the contract price or the contract time.

17. WARNINGS AND BARRICADES:

The contractor shall provide and maintain barricades, guards, guard rails, temporary bridges and walkways, watchmen, headlights and danger signals illuminated from sunset to sunrise and all other necessary appliances and safeguards to protect the work, life property, the public, excavations, equipments and materials. Barricades shall be of substantial construction and shall be painted such as to increase their visibility at night. For any accident arising out of the negligence of above instructions the contractor shall be bound to bear the expenses of defense of every suit, action or other legal proceedings, at law, that may be brought by any person for injury sustained owing to negligence of the above precautions and to pay all damages and costs which may be

awarded in any such action or proceedings to any such person or which may with the consent of the contractor be paid in compromising any claim by any such person.

18. PRECAUTIONS WHILE WORKING IN THE VICINITY OF ROAD

- (a) When the work is required to be done along, below or near existing traffic road, the contractor(s) shall take steps as are necessary for the safety of the road, labour working at site. He/they will also be required to make program of his/their work so as not to interfere with the movement of road traffic. No extra payment shall be allowed for these precautions and also for crossing road required during the execution of the work. It should be ensured that the main traffic road is not disturbed.
- (b) In addition to the precautions taken by the contractor for the safety of the road and labour, it may be necessary to post flagmen in some locations as an additional safety measure. The contractor(s) shall be fully responsible for any damage to or trespass caused by his/their men to surrounding structure, MBMC bears no liability whatsoever on this account.
- (c) Instructions given by Road Authority regarding safety shall be strictly followed during the execution of work.
- (d) There may be some service lines such as electrical cables, MGL gas line, S&T cables, and water pipe lines, CC drains crossing above and below the ground levels. These should be supported as per the satisfaction of the site in charge of Concern Authority (Reliance Power/Tata Power/ MGL / Water supply Department of MBMC / PWD Department of MBMC) and after the completion of the work these to be restored in their original alignment. There should not be any damage to these service lines during execution. Contractor is entirely responsible for any damages.

19. TRAFFIC MANAGEMENT

The contractor has to plan his work including stacking of construction materials and placing of machinery such that it will in no way affect the

traffic on existing. A board of size 1.0 m x 1.80 m indicating name of the work, name of the owner i.e. MBMC, name of the consultant, Cost of the work, name of the contractor shall be displayed at suitable location and blinkers at night if necessary. Traffic diversion/caution boards of suitable size shall be provided as directed. All that is stated above is incidental to the work and no separate payment will be made to the contractor.

20. ENGINEER'S STATUS DURING CONSTRUCTION AUTHORITY OF THE ENGINEER:

The Engineer shall have the authority to enforce compliance with the contract documents. On all questions relating to quantities, the acceptability of materials, equipment, or works, the adequacy of the performance of the work and the interpretation of the drawings and specifications, the decision of the Engineer shall be final and binding and shall be precedent to any payment under the contract agreement unless otherwise provided in the contract documents. The Engineer shall have the authority to stop the work or any part thereof as may be necessary to ensure the proper execution of the work, disapprove or reject the works which is defective, to require the uncovering and inspection or testing of the works, to require reexamination of the works, to issue interpretations and clarifications, to order changes or alterations in the works and other authority as provided elsewhere in the contract document.

The Engineer shall not be liable for the results of any ruling, interpretation or decision rendered, or request, demand, instruction, or order issued by him in good faith. The contractor shall promptly comply with requests, demands, instructions and order from Engineer.

The whole of the works shall be under the directions of the Engineer, whose decision shall be final, conclusive and binding on all parties of the, contract, on all questions relating to the construction and meaning of plans, working drawings, sections and specifications connected with the work. The Engineer shall have the power and authority from time to time and at all times to make and issue such further instructions and directions as may appear to him necessary or proper for the guidance of the contractor and for good and sufficient execution of the works according to the terms of specifications. The contractor shall receive, execute, obey and be bound by the same

according to the true intent and meaning thereof; fully and effectually. Engineer may order any of the works contemplated thereby to be omitted, with or without the substitution of any other works in lieu thereof, or may order any works or any portion of works executed or partially executed, to be removed, changed or altered and if needful, may order that other works shall be substituted instead thereof and the difference of expenses occasioned by any such diminution or alteration so ordered and directed shall be deducted from or added to the amount of this contract.

In case the progress of the Contractor is found to be less than the programme given by him at any point of time and if the Engineer is convinced that the balance work cannot be executed within the balance period of time by the Contractor, a notice of 30 days will be issued to improve the progress. In case there is no improvement a further notice of seven days will be given and thereafter a part or whole of the work will be withdrawn from the Contractor and will be got done at the risk and cost of the Contractor. The right of Engineer in this respect shall be unquestionable in any court of law. On expiry of the seven days notice, as above, the Contractor shall remove his materials, men, equipments, plant and management from the site, within seven days so that the new agency can take over immediately. Failing to this, the Authority will remove the aforesaid things at the cost of the Contractor. This authority is in addition to the Clause 3 of the B-1 Form of the Contractor.

21. DEFECTS AND RECTIFICATION:

For period specified in the Clause 20 of the defect liability period for the individual type of work from the date of issuance of the completion certificate in accordance with para "Final Inspection and Acceptance" contractor shall remain liable for any of the works or parts thereof or equipment and fittings supplied which in the opinion of the Engineer fail to comply with the requirements of the contract or are in any way unsatisfactory or defective (fair wear and tear excepted). The process of the assembly commissioning of all sections of pipe lines, tested hydraulically in patches, will involve some additional measures such as shaft of suitable height, fixing of air valves at more number of places on the alignment and all such measures shall be done by the contractor at his cost. MBMC wants the results of completion of pipelines, included in the tender satisfactorily in time and no excuses or reasoning of the failures. Hence, the Contractor shall be conversant with the site limitations and restrictions of particular levels at the end and he should execute the work in accordance with exact

specifications and requirements. To the intent that the works and each part thereof shall at or as soon practicable after the expiry of the above period be taken over by the Engineer in the condition required by the contract to the satisfaction of the Engineer, the contractor shall finish the work (if any) outstanding at the date of completion as soon as may be practicable after such date and shall execute all such work of repair, amendment, reconstruction, rectification and making good of defects, imperfections, shrinkages or other faults as may during the period of maintenance or after its expiry be required of the contractor in writing by the Engineer as a result of an inspection made by or on behalf of the Engineer prior to the expiry of the period. All such work shall be carried out by the contractor at his own expenses if the necessity thereof shall in the opinion of the Engineer be due to the use of materials or to the neglect or failure on the part of the contractor to comply with any obligation expressed or implied on the contractor's part under the contract. If the contractor fails to do any such work as entitled to carry out, such work in which the contractor should have carried out at the contractor's own cost, the Engineer shall be entitled to recover from the contractor the cost thereof or may deduct the same from the moneys that become due to the contractor. Notwithstanding the aforesaid, if the contractor remains in default, one calendar month after the Engineer has given written instructions in writing, the Security Deposit shall become payable to the MBMC who will deduct the cost plus overhead expenses of such works as have been necessary to rectify the contractor's default and the balance, if any, shall be disbursed. The Contractor shall submit the operation and maintenance manual for the fruitful operation of the works. The Contractor will have a liberty to visit the operating works during the defect liability period and satisfy himself about the on-going operations in case he do not visit and a defect is observed then the Engineer's opinion shall be final and binding as to the application of defect liability.

22. RIGHT TO WITHHOLD:

The Engineer may refuse to approve any payment, or because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously approved and paid to such extent as may be necessary in the opinion of the Engineer to protect him from loss because (a) The work is defective, (b) Third party claims have been filed or there is reasonable evidence indicating probable filing of such claims, (c) of the Contractor's failure to make payment properly to sub-contractors or for labour, material or equipment (d) of damage to another Contractor, or

to the property of other caused by the Contractor, (e) of reasonable doubt that the work cannot be completed for the unpaid balance of the contractor price, (f) of reasonable indication that the work will not be completed within the contract time, (g) of the Contractor's neglect or unsatisfactory prosecution of the work including failure to clean up. Once the provisions of law that enables or require the Engineer to withhold such payments are removed, payment will be made for amounts withheld because of them to the extent the contractor is entitled to payment.

23. FINAL INSPECTION AND ACCEPTANCE:

Upon written notice from the contractor, that the entire work required by the contract documents is complete and that all submittals required by him are made, and after the Contractor has delivered the bonds, certificates of inspection, guarantees, warranties, releases and other documents, as required by the contract documents or by law, the Engineer will make a final inspection, and he will notify the Contractor in writing of any particulars in which this inspection reveals that the work is defective, and will also notify the Contractor writing of any deficiencies in the submittals and the documents required by him.

The contractor shall promptly make such corrections as are necessary to rectify all defects or deficiencies. After the Contractor has completed any such corrections to the satisfaction of the owner, the engineer will issue a written completion certificate of the work and file any notice and completion required by law or otherwise.

24. CONTINUING OBLIGATION OF THE CONTRACTOR:

The Contractor's obligation to perform and complete the work in accordance with the contract documents is and shall be absolute. Neither the observation during construction and final inspection of the work by the Engineer, nor any payment to the Contractor under the Contract documents, nor any use or occupancy of the work or any part thereof by the Engineer, nor any act of acceptance by the defective work by the Engineer shall constitute acceptance of work not in accordance with the contract documents.

25. INCOME TAX:

During the course of contract period the deduction of Income Tax will be made at 2% of the gross amount of each bill in excess of Rs.5000/- or as per the advice of the

Income tax authority. Presently 8% surcharge over the tax is being levied, which constitutes the overall percentage as 2.24%.

26. FORCE MAJEURE:

Neither party shall be liable to the other for any loss or damage occasioned by or arising out of the acts of God and in particular unprecedented floods, volcanic eruptions, earthquake or other conclusion of nature and other acts such as, but not restricted to, invasion, act of foreign countries, hostilities or warlike operations before or after declaration of war, rebellion, military or usurped power which prevent performance of the contract and which could not have been foreseen or avoided by a present person I such as Earthquake of magnitude more than for which the structures are designed.

27. WRITTEN NOTICE:

Written notice shall be deemed to have been duly served or delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known to him who gives the notice. The notice on the Fax Message / E-mail shall be deemed to have been duly served the address given in the contractor's tender on which all notices, letters and other communications to the contractor shall be mailed or delivered, except that said address may be changed by the Contractor by notifying the owner in writing. This shall not preclude the service of any notice, letter of other communication upon the Contractor personally.

28. USE OF COMPLETED PORTIONS:

The owner shall have the right, upon written notice to the Contractor, to take possession or occupancy of, and use any completed or partially completed portions of the work, notwithstanding that the time for completing the entire work or such portions may not have expired but such taking possession or occupancy or a waiver or acceptance of any work not completed in accordance with the contract documents.

29. CLEANING UP

The contractor shall at all times during the work keep the site and premises, adjoining property and public property free from accumulations of waste materials, rubbish, and

other debris resulting from the works, and at the completion of the work shall remove all waste materials, rubbish and debris from and about the site and premises as well as all tools, construction equipment and machinery and surplus materials, and shall leave the site and premises, clean, tidy and ready for occupancy by the owner. The Contractor shall restore to their original condition those portions of the site not designated for alteration by the contract documents. Paved ways, parking areas and roadways disturbed by the construction shall be redone by filling the excavation, if any, by sand compacted material and bringing it to its original shape as directed and approved by the Engineer. No waste material shall be buried or disposed off on the owner's property unless so approved in writing by the Engineer in charge. Before the Contractor applies for final inspection and acceptance of the work, all items of work shall be complete, ready to operate, and in a clean condition as determined by the Engineer.

30. OWNER'S RIGHT TO CLEAN UP:

If the Contractor fails to satisfactorily clean up or if a dispute arises between the Contractors or in several Contractors as to their responsibility or cleaning up, the Engineer may clean up and charge the cost thereof to the Contractor for his failure, or to the several contractors as the Engineer shall determine to be just.

31. FOSSILS ETC.

All fossils, coins, articles of value of antiquity and structures or other remains or things of geological or archaeological interest discovered on the site shall be deemed to be the property of the owner and the Contractor shall take reasonable precautions to prevent his workmen or any other person from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal acquaint the Engineer of such discovery and carry out at the expenses of the Engineer's order as to the disposal of the same.

32. LABOUR RULES:

If demanded by MBMC, the contractor will have to produce to the satisfaction of the accepting authority a valid and current licence issued in his favour under the provision

of Contract Labour (Regulation and Abolition) Act 1970, before starting the work, otherwise the Contractor shall have to face the further consequences.

The contractor shall have to comply with the Apprentices Act 1961, and rules and orders issued there under from time to time. If he fails to do so, his failure will be breach of contract and the Executive Engineer, may in his discretion, cancel the contract, the Contractor shall also be liable, for any pecuniary liability arising on account of any violation of the provisions of this act, by him.

33. STATUTORY INCREASE IN DUTIES, TAXES ETC:

All the taxes (except work contract tax) and duties levied by the State and Central Govt. and by Local Bodies shall be fully borne by the Contractor and shall not be reimbursed to him on any account.

34. INSPECTION, TESTING & FEES:

All materials and equipment required for the work under this contract irrespective whether specified or not, shall be tested at manufacturer's works laboratory and the Test Certificate thereof shall be furnished.

The material/equipment of which makes are not expressly specified in the tender shall be of a make approved by the Engineer-in-charge. The OAP for the material and equipment shall be got approved from the Engineer-in-charge before placing the orders and the testing shall be carried out as per approved OAP. The cost required for inspection including the departmental inspection and conveyance of the officers shall be borne by the Contractor, the cost of which IS deemed to have been included in the quoted cost.

35. MACHINERY REQUIRED:

All machinery required for erection/ execution purposes such as cranes, trucks etc. shall be arranged by the Contractor. Department shall not take any responsibility for providing such machinery even on rental basis. No concreting shall be permitted unless centering and reinforcement is approved by the Engineer-in-charge.

36. DISCREPANCIES AND OMISSIONS:

The tender drawings and specifications shall be considered as explanatory of each other and together shall form the technical requirements and stipulations of tender documents. Detailed drawings shall have preference over small scale drawings. Similarly, detailed specifications shall have preference over general specifications. Should any discrepancy arise as to the meaning, intent or interpretation of any specification or drawing the decision of the Engineer-in-charge shall be final and binding on the Contractor.

37. NO INTEREST ON DUES:

No interest shall be payable by the MBMC on amounts, due to contractors pending final settlement of claim. Further, no interest shall be payable by MBMC on any amount / payment.

38. CHANGE IN SITE:

No claims shall be paid on account of reasonable change in site or orientation as the circumstances may call for.

39. TOOLS AND PLANT:

All tools, instruments and machinery and all other materials (not included in the Material Schedule 'A') shall be acquired by the Contractor at his cost. It is however, open to the Engineer to lend or supply to the Contractor implements, machinery or other service not covered by the tender document which he can be and may consider desirable. For such tools, instruments, machinery and service provided, the Contractor will have to sign an agreement and pay Security Deposit and rental charges as may be fixed by the Engineer.

40. EXCAVATED MATERIALS:

All excavated stuff shall be MBMC property and shall be disposed off by the Contractor in a manner as directed by the Engineer.

41. If there is any dispute between the contractor and the Engineer in Charge, the contractor is not allowed to go for Arbitration and in such cases the decision of Commissioner (MBMC) will be final. Even if the Contractor files a suit in the court, the MBMC may allot the work to the other agency to avoid delay in work.

42. REFILLING PAYMENT:

Though the contractor is required to do refilling before hydraulic testing to avoid traffic hurdle, no payment for refilling of the trenches of pipeline shall be payable till satisfactorily hydraulic testing is given. Re-excavation required if any during testing shall be done by the contractor at his own cost.

43. EXTRA ITEMS:

It is binding on the contractor to carryout such extra works as will be occurred when the same can be conveniently carried out by the contractor in the opinion of the Engineer-in-charge as internal part of the main work in addition, alteration or legitimate and reasonable extension.

Extra charges of claims in respect of extra works shall not be allowed unless the work to which they relate are clearly without the spirit and meaning the specifications or unless such works are ordered in writing by Executive Engineer or his representative and claimed for in specified manner before the work is taken in hand.

ADDITIONAL GENRAL CONDITIONS

1. ACQUATANTANCE WITH SITE AND WORK CONDITIONS ETC.

The tenderer at his own expenses and prior to submitting the tender shall visit the installation and determine the extend characteristics and quality of the work required to be performed. The specification, description and drawing attached to the tender are indicative and guidance only. All time, matter and things omitted in the description are provided on the equipments are provided on the equipments are deemed to be included in the scope of contract for operation, maintenance and rutine rectification. In case of doubt about any item or data included in the tender or otherwise shall be got clarified by applying in writing to the Executive Engineer prior to data of submission of tender. The tenderer shall also examine the local conditions, facilities available in the locality, prevailing wages and other factors affecting cost and performance of work.

2. MATERIAL AND EQUIPMENT TO BE PROVIDED BY THE CONTRACTOR

All materials of construction/laying of pipe line shall be best quality and suitable for the intended. These shall be got approved by the Executive Engineer-in-charge before erection use. Unapproved material shall be removed from the site immediately.

Following materials, tools and equipments shall be kept with the contractor for maintenance and operation.

a. Cleaning

Cotton waste

- i) Degreasing chemical/agents
- ii) Bucket, plastic pipe etc.
- iii) Brushes

b. Tools

- i. Open ended spanner set
- ii. Ring spanner set
- iii. Normally required tools etc.
- iv. Pipe wrenches
- v. Box spanner etc.

- vi. Bearing puller
- vii. Fuse puller
- viii. Crippling tools
- ix. Bolt and nut spanner
- x. Great gun

c. Protection Equipment

- i. Hand Gloves (Suitable for use on 22 KV)
- ii. Boots/Shoes (Suitable for use on 22 KV)

d. Phone & Vehicle

- i. The contractor shall have mobile phone for communication of message at the time of emergency.

3. ELECTRICAL POWER SUPPLY

Electric power supply required by the contractor will be provided free of cost.

4. POWER OF ATTORNEY

In case of tenderer is a firm or a company it shall in its forwarding letter mention the names of partners and of the persons who would hold the power of attorney authorizing him to conduct the transaction on behalf of the firm or company and shall produce certified true copy of irrevocable power of attorney the tender and original shall be produced for verification on demand.

5. TENDER TO BE STRICTLY ACCORDING TO TENDER CONDITION

It should be clearly noted that the tender has to strictly comply with the condition and specifications laid down in the tender and no variation are permissible.

Deviations made by the tenderer submitting the tender without following above instruction would result in treating the tender as conditional tender and would not be binding on the Department to consider such conditional tender and is liable for rejection.

6. WORK ORDER BOOK

About half sheet size work order book shall be provided by the contractor and handed over to the department for maintaining a work site. This shall

be permanent record. The contractor or his resident engineer shall sign below the orders recorded by the Engineer-in-charge in token of having received them. He may take out a copy thereof if necessary. He will not record any remarks in the order book but may record and remarks in the order book he may take up the matter recorded thereon. He shall carry out the order promptly and report compliance.

7. DESCRIPANCIES AND OMISSIONS

The tender drawing and specifications shall be considered as explanatory of each and together shall from the technical requirements and stipulations of tender documents. Detailed drawing shall have preference over small scale drawings. Similarly in case of detailed specifications should any discrepancy arise as to the decision of the Engineer-in-charge shall be the final and binding on the contractor. The provision in the specification supersede those in the item of the schedule of there any variation.

8. ACCIDENT ON THE WORK.

The contractor shall be fully responsible for any accident that may occur t the labour on his work on duty and report the same to the Engineer-in-charge and concerned Government Labour Department Authority and shall pay all necessary compensation as per rules, failing which the same would be paid by the Mire-Bhayandar Municipal Corporation and recovered from the amount payable to the contractor.

9. RATES INCLUSIVE OF ALL SALES TAXES, DUTIES

The tendered rates shall be inclusive of all taxes duties and including local body tax ,insurance ,turnover tax ,labour welfare tax .

10.INTEREST CLAIMS

No interest shall be payable by the department on the amount due to the contractor pending final settlement of the claims.

11.TERMS OF PAYMENT

Payment shall be made on completion the works.

12.COMPLIANCE

The contractor shall be bound by all ordinances, acts, codes, rules, regulations, orders and decrease of which in any way affect the work or workmen engaged for the work. The contractor shall be deemed to have protected and indemnified the Mira-Bhayandar Municipal Corporation against any claim or liability arising from violation of above.

13.ACCOMMODATION

The Mira-Bhayandar Municipal Corporation does not take any responsibility to provide living accommodation. However, accommodation if available (the barters) the same will be given on rental basis as per terms and conditions of the Mira-Bhayandar Municipal Corporation.

14.MINIMUM STAFFING PATTERN

The minimum staffing pattern shall be as per the detailed specification.

15.SHIFT

A shift shall be of 8 hours duration. The contractor will have to operate the maintenance in the shift as instructed by the Engineer-in-charge. Shift duration timing will be informed to the contractor and he has to carry out the operation in that timing only.

16.STAFF

If any of the person working on the job is found to be incompetent, irregular, inefficient or does nit abbey instruction etc. then his presence will not be allowed and he should be immediately removed and the satisfaction of the Engineer-in-charge. The employee shall be provided with the specific uniform and identifying nameplate prominently displayed on his uniform. The contractor shall within 15 days of issue of work order train thee staff in fire fighting and treatment on electric etc.

17. The tender shall be economical sound to wait for payment. If the contractor harass for supply of material at site against payment of bill, the contractor will be black listed and no future tender will be issued to him.

18. DAMAGES TO UNDER / ABOVE GROUND UTILITY:

The distribution pipe line will be laid in the main areas of the Mira-Bhayander Municipal area. During the course of excavation and laying of the pipe line utmost care of existing main, electrical and telephone cables and private water connection shall be taken. Any damage to existing main, electrical and telephone cable and private water connection, etc accrue during the course of execution, same shall be restored at the cost the contractor. In case, the repair is done by respective Department/Owner, the cost of such repair will be recovered from the contractor.

SPECIFICATION

DETAILED ITEMWISE SPECIFICATIONS

ITEM NO. :- Supply of Sluice Valve

These specifications cover general provisions and requirements and are supplementary to the General Conditions of Contract.

PART -1:

GENERAL:

The Sluice Valves proposed to be procured through this tender are to be used for drinking water supply schemes under execution.

WORK UNDER THIS CONTRACT :

The works entitled manufacture, supply and delivery of Sluice Valves for distribution system shall comprise the manufacture, supply and delivery of the goods as mentioned in the Bill of Quantities.

a) Sluice Valves PN 1.0 of IS : 2906 : 1984 of various sizes, ranging from 100 mm to 350 mm. b) NRV Valves

NOTE :

The above goods to be used for conveyance of potable water at temperatures varying from 10 degree centigrade to 40 degree centigrade. The tender price shall include all labour and machinery and all materials necessary for the proper manufacture of the goods for tests at the contract, in accordance with the intent of the contract documents, as stated in the arrange independent test from Engineer-in-Charge for all the valves supplied under this contract and cost of such testing be deemed to be included in the offer quoted by the contractor. The contractor will have to produce necessary test certificate issued by the manufacturer regarding performance of satisfactory test.

INFORMATION GIVEN TO CONTRACTORS :

The following information as required vide Appendix - A of IS : 780 and Appendix - D of IS 2906 is furnished giving specific requirements of the supply.

- a) All sluice valves shall be with stainless steel spindles. The spindles shall be with square threads. The stainless steel will conform to IS: 7703: 1973. Welded or screwed collars on spindles shall not be permitted.
- b) All sluice valves shall be of non-rising spindle type.
- c) All sluice valves shall be tested for closed end condition only.
- d) All sluice valves shall be provided with caps.
- e) All sluice valves shall be installed in a vertical position on a horizontal pipeline.
- f) All valves shall be manually operated.
- g) No tailpiece or adapter is supplied with the valves.
- h) No bye-pass arrangements are provided.
- i) Approved makes with ISI marks acceptable under this contract:
- j) BSJ Shahu, Nagpur.
- k) Janta Mechanical Works, Mumbai.
- l) Yamuna Engg. Co., Vadodara.
- m) Kamala Valves, Hawrah.
- n) Shiva Engg. Works, Calcutta.
- o) Leader Engg. Works, Jallunder.
- p) Kirloskar Brothers, Pune.
- q) A.V. Engg. Works, Agra.
- r) Indian Valve & Engg. Pvt. Ltd. Nasik.
- s) Geeta Valve & Engg. Pvt. Ltd., Baroda.
- t) H. Sarkar & Co. Hawrah.
- u) Shiva-Durga, New Delhi.
- v) R.E.D. Multiples (Metal Cast) Pvt. Ltd., Mumbai.
- w) Other Agencies recently approved by MBMC.

PAYMENT CONDITION :

15% amount of this item will be withheld for hydraulic test and will be released after satisfactory hydraulic test.

ITEM NO. :- SPIGOT, SOCKETTED AND FLANGED C.I SPECIALS FOR C.I. PIPES.

Providing S/S and flanged specials required for C.I. Class-LA pipes.

Providing C.I. S/S and flanged specials suitable for C.I. pipes conforming to IS 1538-1976 and as amended from time to time including cost of material, tax (Central and local) insurance, railway freight, unloading from railway wagon, loading into trucks

and unloading at the store at site of work as directed by Engineer-in-Charge etc. complete.

Third party Inspection certificate approved by MBMC should be produced at the time of supply of specials. The test pressure for these specials must be confirmed to IS specifications.

This item will be measured and paid on kg. basis. The payment will be done only after the inspection certificate from Third is produced. 85% of the payment should be released after supplying specials @ site with 3rd party Inspection report. 15% payment will be release after satisfactory hydraulic testing completed.

ITEM NO. :- providing M. S. specials

Specifications for providing M. S. specials 10 mm thick required for all classes & all diameters.

Providing M. S. specials suitable for C.I. / D.I. pipe confirming to IS 1538-1976 / 9523-2000 & as amended from time to time including cost of materials taxes. (Central & local), insurance, Railway freight unloading from railway wagon, loading into trucks and unloading at the store.

MODE OF MEASUREMENT:

This item will be measured and paid on kg. basis. The payment will be done only after the inspection certificate from Third is produced. 85% of the payment should be released after supplying specials @ site with 3rd party Inspection report. 15% payment will be release after satisfactory hydraulic testing completed.

ITEM NO :- PROVIDING MECHANICAL AND JIFFY JOINTS& MECh Fitting.

As per description of item and directed by Engineer – in – charge.

MODE OF MEASUREMENT:

This item will be measured and paid on No. basis. The payment 85% of the payment should be released after supplying specials @ site .15% payment will be release after satisfactory hydraulic testing completed.

ITEM NO. :- EXCAVATION IN ALL TYPE OF STRATA / MATERIALS.

GENERAL:

The specifications contained in the standard specification volume IInd published by Public works and Housing Department. Government of Maharashtra Chapter Bd. A item No. 1 to 9 shall apply. In addition to above following specification shall apply. In case of any discrepancy between the two the below given specification shall govern.

SITE CLEARANCE :

The area to be excavated shall be cleared off all trees and bushes and rubbish and other objectionable materials removed and shall be burnt or disposed off as directed by the Engineer-in-charge. The cost of such clearing shall be deemed to have been included in the rate accepted for different items under excavation.

DEWATERING :

No distinction shall be made as to whether the materials being excavated is dry moist or wet. The item also includes bailing out of water by manually to keep the trenches reasonable dry for all further works of lowering, laying, jointing and testing of the pipeline till the completion of the work.

SHORING AND STRUTTING :

The items include all shoring and strutting that may be required. On no account the width of trenches more than these mentioned here in after shall be measured. If excavation width more than the specified is required for the purpose of keeping machinery stepping due to loose material or any other reasons the same shall be at the contractor's cost

LIGHTING. BARRICADING AND GUARDING :

The items of excavation are including necessary lighting at night at suitable intervals but not more than 15 meter along the excavated trenches and at all crossing and barricading the same by fencing so as to avoid any accident.

Chowkidars shall be employed at place where the trenches cross over any traffic road to caution the vehicles and pedestrians etc. The arrangement shall be maintained till completion of work and at cost of contractor.

ALIGNMENT AND LEVELS :

Before the trenches excavation is commenced sight rails shall be erected at every 30 meter and at all points of change of direction, gradient and at ends. The excavation work shall be preceded by a detailed survey along the alignment of the main to obtain ground levels at every 30 meters or less distance. Temporary benchmark shall be constructed at every 30 meters distance along the alignment and shall be maintained till the completion of work. All labour and materials required for the survey work of fixing bench mark etc. shall be provided by the contractor at his own cost for any mistakes in survey the contractor is fully responsible. He should not lay the pipes, unless the alignment is thoroughly checked by the Engineer-in-charge or his authorized representatives who is empowered to sign the work order book in taken of checking the exact grade and level of the trench excavation.

Excavation at random places shall be measured and arrangements made available to the MBMC Engineer for checking. Any non-technical practices during the excavation of the contracted work shall be viewed very seriously by the MBMC and a note to that effect will be recorded against the contractor in his name.

DEPTH AND GRADES OF TRENCHES :

The trenches shall be excavated to the required grades and depths and on the lines as shown on approved drawings as directed by the Engineer-in-Charge. The depth of excavation and the levels of the pipe inverts shall be checked by means of boning rods of suitable lengths. Additional depths if required to be excavated for pipes for sockets, collars, specials, joints and for any other working facility and shall not be measured and paid.

The contractor shall notify the Engineer when the trenches are ready for bedding so that the Engineer can inspect and record the depths. Only on explicit approval by Engineer, the bedding shall be provided by the contractor.

WIDTH OF TRENCHES :

The maximum width at top and bottom of the trenches admissible for payment shall be as per table A. Extra widths for pits at sockets, collars, specials, joints, and also for working liabilities shall neither be measured nor paid for. However, excavation required for providing and casting fixity block, thrust blocks, encasing etc. will be measured and paid for under relevant item of excavation.

For C.I./D.I. Pipes

Sr. No.	Dia of Pipe	Width of trench at bottom
i)	400 mm	1.00 m
ii)	350 mm	0.95 m
iii)	300 mm	0.90 m
iv)	250 mm	0.85 m
v)	200 mm	0.80 m
vi)	150 mm	0.75 m
vii)	100 mm	0.70 m

PRESSING AND CONSOLIDATING OF THE TRENCHES :

The bed of the trenches shall be well rammed before laying of the murrum or sand for bedding. Hollows, if any, shall be filled with murrum duly rammed and watered to required level and grade at cost of the contractor.

CLASSIFICATION OF MATERIALS IN TRENCHES :

This item includes excavation in soil, soft murrum, hard murrum, soft and hard rock of all types by manually/ by chiseling/ by mechanical or by any other means upto lift 3.00 M.

EXCAVATION IN MARSHY LAND :

The contractor shall excavate in marshy nature encountered, to lines levels, curves and grades as directed by Engineer-in-Charge. After completion of this excavation and before any further work is done, the Engineer will examine the sub-grade.

The contractor shall notify the Engineer before starting excavation to enable him to take cross sectional / L-sectional levels for purposes of measurement, before ground is disturbed. The contractor may be required to carry out excavation 3M deeper, then extra lift rate shall be payable to the contractor, basic rate of excavation being same.

- A The entire area within the limits of earthwork as indicated shall be constructed to the lines, grades, elevations, slopes, and cross sections indicated on the drawings with added allowance for the thickness of free draining fills or other special materials such as clay where required. Slopes and drainage features shall present a neat, uniform appearance upon completion of the work and shall be approved by the Engineer. The contractor shall not waste or otherwise dispose of suitable excavated materials. All excavation shall be performed under the limitations and requirements set out in (his specification pertaining to control of water content.

FOSSILS ETC. :

All fossils, relics, coins, minerals and any other items of archeological importance found in excavation or dismantling shall be the property of the MBMC and shall be handed over to the Engineer's representative. Should any structure be uncovered, the Engineer's instructions shall be obtained before its demolition or removal.

MODE OF MEASUREMENT AND PAYMENT :

The excavation shall be measured in Cubic Meters only. Dimensions shall be measured correct to two decimal of Meter and quantity shall be calculated to two places of Decimal of Cubic Meters.

ITEM NO. :- LOWERING, LAYING AND JOINTING C.I. & D.I. PIPES OF GIVEN DIAMETER AND CLASS.

- 1 Contractor shall convey them upto work site for use after checking and testing for soundness of the pipes and shall be held responsible for

replacement of such materials of cracked or damaged materials are in advertantly fixed and jointed.

- 2 The Department will issue pipes in available lengths and specials. Damages to departmental materials due to carelessness of the contractor during loading, unloading, transport, lowering, laying, cutting to required size, jointing, testing, etc. shall be at contractor's accounts
- 3 During laying the pipe line some time it may be necessary to cut the pipe to suit the site condition or to put in some special or valve or to have exact length of the section etc. The contractor at his cost shall do this cutting only. No claims for extra amount due to any particular type or individual length of cut pipes and specials being supplied or joints having been increased due to small lengths shall be entertained.
4. The payment for this item shall be admissible on the basis of actually laid at site including length occupied by all types of specials and incidental small pipe pieces or other types (e.g. shall C.I. pipes line).
- 5 All the pipes and specials and valves to be taken into use shall be cleaned and brushed clear of rust and painted at both the spigot and socket ends.
- 6 Before the pipes and specials are lowered and laid in trenches, the contractor shall see that the bedding is plane or the surface is brought to uniform grade and leveled with the help of cross sight rails and boning staff and approved in advance by the last 3 days by the Deputy Engineer
- 7 The contractor shall provided fix and maintain cross sight rails and boning staff whenever required until the time of completion without any extra claim for cost etc. and which shall be considered inclusive of the rates for excavation and lowering and laying.

- 8 The contractor shall provide temporary benchmarks if called upon at a minimum distance every 150 M without any claim for extra cost. These benchmarks shall be either of stone masonry or mass concrete not less than 0.03 cum.
- 9 The contractor shall provide ladder for inspection of works at least 2 Nos. at the time of inspection for all the trenches of depth greater than 1.2 M.
- 10 The pipes, specials and valves shall be lowered by means of ropes, reckles or pulley as ordered evenly and uniformly and shall be brought level with well-consolidated hard murum or wooden sleeper as ordered.
- 11 All the S & S pipes and specials shall be laid with sockets facing direction of flow, as per manual.
- 12 Materials to be used for jointing such as spun yam, etc. shall be first get approved in advance from the Sub-Divisional Officer.
- 13 No jointing operations shall be started unless the Sub-Divisional Officer approves the grade and levels.
14. The pipes shall be laid in a complete straight line with center line ranged accurately by mean of string stretched between marked centers in cross sight rails and no deviation will be permissible without the permission of the Deputy Engineer. For deviation proposed by the Department from marks on sight rails. The contractor shall postpone the work of jointing without claming extra cost. The spigot end of the pipe or special shall be inserted in socket and of the other pipe or special and shall touch squarely without any gap.

15. Under no circumstances, the C.I. & D.I. pipes and other water mains will be laid in black cotton soil or rock surface without murum cushioning.
16. The above murum cushioning of a depth of 150 mm thick or as specified shall always be provided in all formation within the rate of laying pipe line unless an item for murum bedding is provided for separately in the tender.
17. The murum bedding shall be of the full width of the trench. Murum bedding will be necessary in rock formation, boulder formation and soft soils and black cotton soil but not in murum formation itself.
18. No brickbats or hard stone metal bigger than 20 mm gauge shall be allowed beneath the pipe line directly in touch with the pipe as in the murum bedding.
19. All stakes such as electric wires, water and sewer mains, manhole, natural drainage, culverts, storm water drains, gutters, poles, etc. coming in the way shall carefully be looked after and any damage be prevented to the same. Any work of removing, repairing and reducing such structures or obstacles in the process of laying, jointing and testing pipe line etc. should be carried out by the contractor wherever directed, without any claims for extra to the satisfaction of the Engineer-in-charge. Contractor shall foresee all such situation and make necessary arrangement to overcome those in advance.
20. The contractor shall be allowed only 2% wastage and breakage in pipes brought by him for pipes issued by departmentally, the total length of pipes laid and that returned to stores in cracked or unused conditions shall coincide with total length is used. The

cost of pipes etc. cracked due to fault of contractor beyond the above permissible limit shall be recovered from him. All waste and broken pipe pieces shall be returned by the contractor to the store of issue at no extra cost. If wastage and broken pipe is not return to department recovery at the prevailing scrap rate is done through final bill. The contractor shall keep an up to date account of pipes, specials and valves etc. issued him free of cost showing quantity received vide unstamped receipt No. and date, quantity used giving chainages as and balance at hand and returned (supported by acknowledgements signed by the Sub-Divisional Officer) failing which the Engineer-in-charge shall reserve the right to keep final bill pending till this account is finalized and contractor shall not claim any compensation in that case for delay in settlement of final bill.

- 21 Pipes shall be laid in reasonably dry trenches. Under no circumstances pipes shall be laid in slushy, marshy or water logged and filled up or yielding strata before getting it inspected from Engineer — in — charge and providing proper foundations
- 22 Contractor shall make his own arrangements for obtaining permission for stacking of pipes etc. on the road from land Owners whether it is belonging to any other Government Department or Municipal or Local Bodies or Private Land Owners.
- 23 For crossing obstacles natural or built up such as culverts, drains, gutters, cables, pipe line, poles etc. contractor shall approach respective authorities obtain permission for crossing them immediately at the time limit of acceptance of the tender and

shall take into consideration all such difficulties for the time limit allowed for execution and completion of the work. Any such work left remaining to be carried out due to want of the tender without any claim for extra cost or compensation due to non receipt of permission or any other natural or unforced and until the date of completion of (he work shall be treated as incomplete. Contractor shall also not claim compensation if work is delayed on account of permission for road crossing etc. not being received in time.

- 24 Before the work of laying pipe line is started the contractor shall see that all pipes are stacked length wise above the tranche between road fencing in sufficient number and without causing any construction to the traffic.

Necessary road diversion as directed shall be provided without any extra claims by the contractor for excavation the roads till completion of work, so that the traffic shall not be hampered Necessary guide stones duly painted with white wash shall be provided on both sides of temporary diversions. Necessary sign boards, indicating diversions and road closed etc. shall be provided at prominent places along with red flags and red letters at night time and maintained till the crossing work is over and road opened for traffic. The diversion shall be removed after road surfaces are brought to original condition. Necessary storing planks for crossing the trenches shall be provided on the open trenches in the towns and wherever required without extra cost.

26. The contractor shall take utmost care in laying the pipe line along with roads and in towns in order to avoid accidents to human life and animal.

27 **JOINTING OF PIPES**

All the jointing work shall be carried out by the contractor after , giving written due intimation in advance at least for 4 days before jointing

operation starts and laid pipes are approved for grade and cleaned of all inside waste material such as mud etc. and in presence of responsible Government Servant not below the rank of Junior Engineer.

28. Unless otherwise mentioned in the wording of the item in Schedule 'B' of the tender all labour and materials required for jointing (depending upon the type of joint mentioned in item) such as lead, spun yarn, grease, oil, S.B.R. quality rubber rings and gaskets, cement sand, water, fire wood, nut-bolts, washers, rubber packing, RCC collars, etc. shall be produced and used by the contractor at his cost. All the materials to be used for jointing should be first got approved from the Deputy Engineer.
29. No extra claims or compensation will be admitted for items of laying pipes etc. If the pipes are required to be laid up to a depth not greater than 3 times the maximum depth shown in the sectioned longitudinal sectional drawings or estimate so also no compensation shall be paid if class of pipes to be laid is changed during execution.
30. If the lines are laid in separate detached sections and not continuous length due to any of the reasons such as non availability of specials or due to obstacles etc. contractor shall see that no end of any pipe length is kept open even temporarily and that all open ends are immediately covered up either by suitable blank flange or cap, plug or by means of a double layer gunny cloth tied properly by means of mild steel wires and without any claim for extra cost or compensation.
31. The contractor shall take utmost precautions to see that no extraneous matters such as lead, stones, brick bats or animals such as rats, reptiles are allowed any access into the pipe line and in case of their existence being detected in the pipe line, the contractor shall remove them by means of rodding etc. to the

complete satisfaction of the Sub-Divisional Officer, without any claim for extra cost.

32. No extra cost will be allowed to fixing of C.I. specials and other unless provided for separately in the tender. So also no extra cost will be paid for cutting the pipes and specials as and where required for negotiation of bend or fixing valve, branch tee or achieving exact length of the line etc. The cutting operation shall be carried out preferably by means of standard pipe cutter or hacksaw unless cutting by chisel and hammer is allowed by the Engineer — in — charge. The end of pipe to be used for gasket joint shall be chamfered by means of file and made perfectly true or like original chamfered and if portion of pipe or specials is damaged rendered use less due to careless cutting of the contractor the cost of the damaged portion as decided by the Executive Engineer will be recovered from the contractor.

33. If necessary the contractor shall have to carry out the work of laying pipes by keeping gaps here and there if some pipes, specials and valves to be supplied by the Department as per Schedule 'A' would not be made available in time and the contractor shall not claim any compensation for being required to lay the pipe line in gaps and for excavating gap portion if it gets refilled etc.

Insertion of gaskets shall be done by proper application of a thin film of lubricant (Vegetable oil only) to the butt seating inside the socket. The gasket shall be wiped clean, fixed and then the socket with the bulb towards the back of the socket. The groove in the socket must be located on the retaining board in the socket and retaining hole of the gasket firmly bedded in the seating. Contractor shall ensure to the satisfaction of the Sub-Divisional Officer that the gasket fits evenly around the full circumference removing any bulges which would prevent the proper entry of the spigot and for large diameter this operation should be assisted by forming a second loop in the

gasket opposite to the first and then pressing the loops flat one after the other.

The thin film of lubricant (Vegetable oil only) shall be applied to the inside surface of gasket which will be in contact with the entering spigot. A thin film of lubricant shall be also applied to the outside surface of the entering spigot for a distance of 25 mm from spigot end. The pipeline to be jointed should be supported centrally by the tackle used for laying and balance just clear of the trench bottom. The spigot of the pipe must be aligned and entered carefully into the adjacent socket until it makes contact with the gasket. Final assembly of the joint is completed from this position.

The spigot end of the entering pipe shall be compressed until it reaches the bottom of the -socket. If the assembly is not completed with reasonable force, the spigot end shall be removed and the position of the gasket examined and then the assembly is refitted properly to the satisfaction of the Sub-Divisional Engineer. The work shall generally be carried out as per instructions given in manufacturer's pamphlets. All the tools and tackles required for jointing, such as rack and layer 3 mm dia, 5 m long wire rope with thimble, hook and rope adjuster should be procured by the contractor at his own cost.

The item includes all other necessary materials including rings, etc. and labour.

HYDRAULIC TESTING

The pipeline and valves should be tested hydraulically upto the required pressure as per IS satisfactorily and all the leakages if any should be repaired at the time of hydraulic testing. The 10% amount of the lowering, laying and jointing of pipeline shall be released after satisfactory hydraulic testing. Contractor should make his own arrangements at his own cost for water for hydraulic testing of pipeline. He should not rely upon completion of any other sub-works for such testing.

MODE OF MEASUREMENT

The item will be measured and paid on the Running Meter basis. The 10% payment will be withheld till satisfactory hydraulic testing is given.

ITEM NO. :- FIXING OF SLUICE VALVES.

Unless otherwise specifically mentioned in the tender items the required sluice valves, scour valves, etc. shall be supplied by the MBMC and Air valves are to be supplied by the Contractor. The materials supplied shall be flanged as per requirement. The valves are to be carted to the site from supply place, lowered in the trenches and jointed to the pipeline as directed with cost of all jointing materials, such as lead, rope, rubber packing, nuts-bolts, fire wood, etc. and the labour cost, which is included in the tender items. The joints may be either flanged or S/S lead joints depending upon the nature of valves supplied and contractor shall have no extra claims for any particular type of joint required to be done. The required number of jointing for fixing these valves is included in the tender item. If there is delay in supply of these materials by the MBMC on account of their non-availability, no claims for any compensation shall be entertained.

MODE OF MEASUREMENT

The measurement will be per number of valves and Air valves. 85% amount as per tender rate will be paid on Supply of Kinetic Air valves with third party inspection certificate. Balance 15% amount of Air will be retained till satisfactory hydraulic testing.

ITEM NO. :- B.B. MASONRY CHAMBER.

Providing and constructing B.B. masonry chamber of internal size 2.00 x 2.00 x 1.20 m depth or as size as per Schedule 'B'

The work is to be carried out as per type design or drawing of the department and as per detailed description of the item in Schedule 'B' of the tender, sizes

of chamber mentioned in the item are the clear internal dimensions of the chamber after completion of plastering.

Unless otherwise mentioned in the wording of item in Schedule 'B' of the tender the rate for this item shall include following allied works.

- 1) The cost of extra excavation in all types of strata which is in addition to the line trench, refilling the sides and disposing off surplus stuff.

Excavation covered by pipeline trenches coming under M.H. chambers shall not be admissible for payment This cost is included in the rate of B. B. masonry chamber itself.

- 2) Providing and casting at site 15 cm thick bed concrete, in C.C. M-100 below external size of complete chamber.
- 3) Providing B B. masonry side walls in 225 mm thick in CM 1:6.
- 4) Providing 20 mm thick plaster in CM 1:3 from inside.
- 5) Providing cement plaster 20 mm thick in CM 1:3 from outside at least upto 30 cm below ground level.
- 6) Providing top coping 15 cms thick RCC M-150 or 15 cm thick RCC slab as per requirement with smooth finishing to surface.
- 7) Providing and fixing in position CI manhole frame cover of 40 Kg with looking arrangement.
- 8) Unless otherwise directed by the Department the finished top of the chamber constructed on road surface and shall not cause hindrance to traffic.

MODE OF MEASUREMENTS

This item will be measured and paid as per unit basis.

ITEM NO.:- PROVIDING AND PLACING PCC M-15 GRADE

- a) The specification contained in the Standard Specification volume II published by Public Works and Housing Department, Govt. of Maharashtra, Chapter Bd-F-1 to F-2 and Bd-E.1 shall apply.
In case of any discrepancy between the two. The below given specifications shall govern.
- b) This work shall be done in accordance with IS:456:2000 (Revised).
- c) Proper curing be done for 21 days.
- d) Reinforcement shall be paid separately under Item of Schedule 'B'.
- e) The payment is on Cubic meter basis excluding cost of reinforcement.
- f) The measurement shall be measured correct upto two decimal of meter and calculations for volume shall be calculated correct upto two decimal of Cubic meter.
- g) Item of concrete includes Thrust Blocks, Anchor Block, Encasement etc. of mass or reinforcement concrete shall be provided at places as mentioned under relevant items of Schedule-B or as directed by the Engineer-in-Charge.

NOTE:

If contractor desires to execute ready mix concrete for speedy progress, ready mix concrete will be allowed but no extra payment therefore will be permissible.

TEST PROCEDURE (15:516:1959 CLAUSE 5.5)

Specimen stored in water shall be tested immediately on removal (mm water and while those are still in the wet condition. Surface water and grit shall be wiped off the specimens and any projecting fins removed. Specimen, when received dry, shall be kept in water for 24 hours before taken for testing. The dimensions of the specimen to the nearest 0.2 mm and also weight shall be noted before testing.

Requirement of Materials

1. Cement shall be Ordinary Portland Cement

The weight of ordinary Portland cement shall be taken as 1440 Kg per Cum., (90 lbs per cubic foot). The measurement of proportion of cement should normally be on the basis of weight and whole bags, each undisturbed and sealed 50 Kg bag being considered equivalent to 35 litres (1.2 Cft.) in volume. When part bag is required, cement shall be taken by weight. Care should be taken to see that each bag contains full quantity of cement.

1.1 Tests

When tests are considered necessary, they shall be carried out as indicated in IS:269. The contractor should ensure that the cement is of sound and required quality before using.

2 Storage

Cement required for use shall be as fresh as possible and stored on planks raised 15 to 20 cms (about 6" to 8") above the floor and stacked 30 cm (about 12") away from the walls in suitable closed weather proof buildings at the work site or at the selected approved site, in such a manner as to prevent deterioration by dampness or moist atmosphere or intrusion of foreign matter. Cement shall be stored in such a way as to allow the removal and use of cement in chronological order of receipt, i.e. first received being first used. Not more than 15 bags shall stacked vertically in one pile and maximum width of the piles should not be more than 3 meter (10 approx.).

2.1 Any cement, which has deteriorated, baked or which has been damages shall not be used. Cement concerning which there is doubt shall not be used pending testing and satisfactory results. Cement that is condemned shall be immediately removed from the work site. When temporarily stored in the open for use within 48 hours it shall be kept on a platform of planks about 15 cm to 20 cm (about 6" to 8") above

ground and covered with tarpaulin Ordinary cement stored for more than 2 months from the date of receipt from the factory shall be subjected to test and used only if found satisfactory. Different kinds or brands of cement of the same brand from different mills should be stored in separate groups and should not be mixed during use except when directed in writing by the Engineer. Cement shall be kept in a store under double locking arrangement so that it can be taken out or fresh stock admitted with the knowledge of supervising staff of the Department. A board indicating stock and daily transaction of cement shall be kept in each room of the cement bag shall be maintained by the contractor in the Performa approved by the Engineer. This shall be kept in the store for verification by the supervising departmental staff.

- 2.2 The cement shall not be stored for unduly long periods. It should not be handled in such a way as to impair its strength or useful characteristics.

3.0 Water

- 3.1.1 Water for mixing cement/lime mortar or cement lime concrete Water for mixing cement/lime mortar or concrete shall not be salty or brackish and shall be clean, reasonably clear and free from objectionable quantities of silt and tracers of oil, acid injurious alkali, salts, organic matter and other deterious material which will either weaken the mortar or concrete or cause efflorescence or attach the steel in RCC. Water shall be obtained from sources approved by the Engineer.

Sources of water shall be maintained at such depth and the water shall be withdrawn in such a manner as to exclude silt, mud, grass or other foreign material Container for transport, storage and handling of water shall be clean. If required by the Engineer, it shall be tested by comparison with distilled water. Comparison shall be made by means of standard cement tests for soundness, time of setting and mortar strength as specified in IS: 269 (latest edition). Any indication of

unsoundness change in time of setting by 30 minutes or more, or prepared with the water sample when compared with the results obtained with mortar prepared with distilled water shall be sufficient cause for rejection of water tested. Seawater shall not be used. Water fit for drinking will generally be found suitable for mixing cement/lime mortar or concrete.

- 3.2 Water for curing cement/lime mortar or concrete should not be too acidic or too alkaline. It should have a pH value ranging between 4.5 to 8.5. It shall be free of element, which significantly affect the hydration reaction or otherwise interfere with the hardening of mortar or concrete during curing or those, which produce objectionable stains or other unsightly deposits on concrete or mortar surface. Hard and bitter water containing more than 100 ppm, of sulphates shall not be used for curing purpose.

Seawater and water containing over 3 percent of chloride salts should not be used for curing reinforced concrete work.

Potable water will be generally be found suitable for curing cement/lime mortar or concrete.

4.0 Fine Aggregate

General

All fine aggregate shall conform to IS:383 (latest edition) and relevant portion of IS:515 (latest edition) directed by the Engineer.

Sand for use in concrete work shall be natural sand or crushed stone screening. Sand shall be clean well graded, hard, strong durable and gritty particles free from injurious amounts of dust, clay, kankar, nodules, soft or flaky. Particles. Shale, alkali, salt organic matter, loam, mica or there deterious substances and shall be approved by the Engineer. The maximum size of particles shall be limited to 5 mm (about 3/16"). Where best trap sand available in the region contains murum or late rite particle, such particles may be allowed up to 5 per cent. Zeolite crystals may also be permitted upto 4 percent of clay, dust or silt it shall be washed. When the quality of fine aggregate is doubtful,

it shall be tested for clay, organic impurities and other detritus substances as laid down in IS:383 (latest edition). It shall not contain deteriorious materials in such quantity as to reduce the strength of durability of the mortar or concrete or to attack the reinforcement in the case of reinforced concrete work. Sea sand shall not be used.

The fine aggregate for concrete shall be graded within limits given in IS:383 (latest edition).The fineness modules may range between 2.6 to 3.6.If substitution of certain quantity of stone screenings will improve the quality of concrete, the Engineer may allow it.

The fine aggregate for cement mortar for masonry and first coat of plaster should generally satisfy the following grading.

I. S. Sieve	<i>Percentage by weight passing sieve</i>	
480		100
240	80	95
120	70	90
60	40	85
30	05	50
15	00	10

The fineness modulus shall not exceed 3.00

4.1 Gradations

The gradation of materials from any one source shall not vary in composition beyond the range of values that governs, in selecting sources of supply. For determining the degree of uniformity, determination of fitness modulus shall be made upon representative samples furnished by the contractor from such sources as he proposes to use. Fine aggregate from any one source having a variation in fineness modulus greater than + 0.20 from the average fineness modulus of the representative samples submitted by the contractor shall be rejected or may be accepted subject to such changes in the proportion of aggregate as the Engineer may direct.

4.2 Storage

The fine aggregate should be stacked carefully on a clean, hard surface so that it will not mixed up with deteriorious foreign materials. Sand shall not be stacked in high conical heaps so that segregation of heavier particles by sliding down may be prevented. It shall be placed in layers not thicker than those resulting from lorry loads dumped on the same.

4.3 Royalty

The contractor shall be responsible for observing the laws, rules and regulations imposed under the minor minerals act and such other laws and rules prescribed by Govt. Department such as Forest and Revenue any by competent Local authorities. Royalty etc. payable for securing the materials shall be paid by the contractor subject to general conditions of contract. Where rules permit refund of Royalty for use of the material in Government work the Engineer will pass a certificate for the quantity so used.

5.0 Coarse Aggregate

Coarse aggregate shall consist of crushed or broken stones and be hard, strong, dense, durable, clear or proper gradation and free from skin and coating likely to prevent proper adhesion of mortar. The aggregate shall generally be cubical in shape and as far as possible flurly, elongated pieces shall be avoided. It shall generally comply with the provision of IS:383 and IS:515 (latest edition). Unless special stones of particular quarries are mentioned in the special provisions, aggregates shall be broken from the best trap/granite stones in that order available in the region and approved by the Engineer, stones shall have no deleterious grading may be permitted to be substituted for same proportion of metal without price adjustment if it is shown that thereby strength of concrete is increased and workability improved.

The maximum size of the aggregate may be upto 80mm (about 3") and well graded between the sizes 5 mm to 80 mm (about 3/16" to 3") in

such proportions as to give maximum density to the concrete. The maximum size should be as large as possible within the above limit but should not exceed 1/4 of the minimum thickness of the member provided, however, this size presents no difficulty in the case of RCC to surround the reinforcement thoroughly and fill up the corners of the form work satisfactorily. In the case of general concrete work, a maximum size of 40 mm (about 1 1/2") is used and in RCC work a maximum size of 20 mm (about 1 1/4") will be found satisfactory, but it should be restricted to 6 mm (about 1/4") less than the minimum lateral clear distance between bars or 6 mm (about 1/4") less than the cover, whichever is smaller.

The crushing strength of aggregate will be such as to allow the concrete in which it is used to build up the specified strength of concrete.

Approximate range, in grading of coarse aggregate may be as required. Grading tests shall be in the beginning and at change of surface of machinery or type of metal. Where required by the Engineer, tests indicated in IS:368 and IS:456 (latest edition) shall be got carried out in an approved laboratory at the contractor's cost to show the acceptability of the material.

Coarse aggregate of a porous nature where absorption of water after 24 hours immersion in water, is more than 5 percent by weight, shall not be used.

Limit of deleterious substances shall not exceed those prescribed in IS:515 (latest edition).

5.1 Storage

The aggregate of different sizes shall be stored separately and handled in such manner as to prevent intermixing of different, sizes of aggregate required separately for gracing purposes. No foreign matter shall be allowed to be mixed up with aggregate. If covered with dust etc. they shall be washed clean before use.

5.2 Royalty etc.

The contractor shall be responsible for observing the laws, rules and regulations imposed under the minor minerals act and such other laws and rules prescribed by Govt. Department such as Forest and Revenue any by competent Local authorities Royalty etc. payable for securing the materials shall be paid by the contractor subject to general conditions of contract.

Where rules permit of Royalty for use of material in Government work, the Engineer will pass a certificate for the quantity so used.

The contractor shall be entirely responsible for operating existing quarries or opening new quarries including removal of over burden and shall bear all costs pertaining to them.

The contractor shall be responsible for securing the written consent of the land owners for opening new quarries or working old ones, and for payment of all compensation, royalty etc. samples of coarse aggregate required for the work shall be got approved by the Engineer both regarding quality and grading and shall be kept in the Engineer's office. The coarse aggregate to be used shall conform to those samples.

6.0 Mixing

For all important works concrete shall be mixed in a mechanical mixer at the site of work. Care shall be taken to see that the mixer and other accessories are in first to class working condition and maintained so throughout the construction. Mixing shall be continued till there is uniform colour is obtained and each individual particle of the coarse aggregate shall show a complete coating of mortar containing its proportionate amount of cement. In no case mixing shall be done for less than 1 1/2 minutes.

- 6.1 When hand mixing is permitted by the Engineer it shall be done on a smooth watertight platform large enough to allow efficient turning over of the ingredient of concrete before and after adding water. Mixing platform shall be so arranged that no foreign materials shall be get mixed water shall flow out.

- 6.2.1 The cement in required number of bags shall be placed in a uniform layer on top of the measured quantity of fine aggregate required, also spread in a layer of uniform depth in the mixing platform. Dry sand and cement shall then be mixed thoroughly by turning over to get a mixture of uniform colour enough water then be added gradually through a rose and the mass turned over till a mortar of required consistency is obtained. The measured quantity of coarse aggregate shall then be placed on the mixing platform and wetted and the mortar added and the entire mass turned and returned until all the particles of the coarse aggregate are fully covered with mortar and the mixture is of a uniform colour and required consistency. In hand mixing quantity of cement shall be increased by 5% above the specified.
- 6.3 Concrete shall have a consistency such that it will be workable in the required position and in the case of RCC flow around reinforcing steel also.
- 6.4 For vibrated concrete, slump shall range between 2.5 cm to 5 cm (about 1" to 2"). For hand tamped concrete, slump shall range between 8 cm to 13 cm (3" to 5") according to the type and nature of the concrete item. The slump shall be the latest permitted by workability. The slump shall be determined as detailed in relevant IS code provisions and maintained throughout the concreting operation of a member.

The concrete shall be placed in its final position and rammed, vibrated and finished within 30 minutes of adding water to cement. Retempering or remixing of partially hardened Concrete shall not be permitted. Mixing shall be done only by mechanical mixer.

6.5 Transporting

The concrete shall be handled from the place of mixing to the final position as quickly as practicable by methods, which will prevent segregation and loss of ingredients. In no case shall the operation take more than 15 minutes.

6.6 Placing

The concrete shall be placed into its final position, compacted and finished within 30 minutes of mixing the water and before setting commences. The method of placing shall be such as to avoid segregation. Placing shall be done in balanced manner to avoid eccentric loads of formwork.

As far as practicable the concrete for particular portion shall be done in one continuous operation. The construction joints when required shall made only where located on the plans or shown in the pouring schedule unless otherwise approved by the Engineer. The joint shall be vertical and shall be made by placing a bulk head at the joint. Before commencing subsequent concreting, all loose particles, laitance etc. shall be removed and the surface shall then be covered by thick cement slurry as part of placement. Care shall be taken during the placing not to disturb the forms or the reinforcement. Concrete compacted manually, shall preferably be laid in layers of 15 cm to 20 cm (about 6" to 8") the layers being decided by the time lapse between the successive layers. The time of laying one layer shall not exceed 30 minutes. The successive layers shall commence within 30 minutes of laying first layer.

When work is to be resumed on a surface, which has hardened, such a surface shall be roughened and scrubbed with brushes to remove laitance, care being taken to avoid dislodgement of coarse aggregate, swept clean thoroughly wetted and covered with 6 mm (about 1") thick mortar layer composed of cement and sand in the same proportion as the cement and sand in the concrete, immediately before the commencement of concrete for securing good bond.

The concrete shall be normally laid in the dry. If the area is under water, it shall be pumped dry and kept so while placing concrete and till it sets. Where it is necessary to deposit concrete under water, it shall be done as per relevant IS code provisions (latest edition). No extra payment will be made for the special arrangements, plants, etc. need for the purpose or for the additional 10% cement required to be added.

7.0 Compacting

The concrete shall be thoroughly compacted during depositing to get a dense concrete and thoroughly worked into the edges and corners of the form work as also along its faces and around reinforcement in the case of RCC by means of suitable tools such as spades and rods to get a good case finished without honey combing. Concrete shall not be disturbed once it is set.

For important or big works where stiffer mix with less slump is adopted, use of mechanical vibrators is essential. The vibrators shall have not less than 3600 and preferably about 5000 impulses per minute and shall be worked at an interval of about 60 cm (about 2'). It shall be worked in one place for only such time as will allow formation of dense concrete without sinking and segregation of the coarse aggregate over vibration shall be avoided. Vibration shall be added by spreading and rodding, Compaction shall necessarily be done by mechanical vibrators. No hand compaction will be permitted except (I) to supplement vibration near the edge and faces of forms, to fill the corners completely and to prevent honey combing or (ii) in members where vibration is not possible nor desirable in the opinion of the Engineer.

8.0 Curing

The contractor shall be initially protected for damage on account of impact, undue pressure, excessive heat or sun, rains etc. and covered with wet of stacking, Hessians or similar absorbent material soon after the initial set. After the final set, the concrete shall be kept continuously

wet preferably by ponding water for period of not less than 14 days from the date of placement. On Sunday, holidays and days of cessation of work, arrangement shall be made to keep the concrete continuously watered. If the contractor fails to water the concrete continuously, the Engineer may provide labour, materials, and equipments required for watering and recover the costs from the contractor. When atmospheric temperature exceeds 40°C (104°F) following precautions should be taken.

- 1 Stacking aggregate under shade and keeping them moist.
- 2 Using cold water.
- 3 Reduce the time between mixing and placing to the minimum.
- 4 Cooling formwork by drinking water
- 5 Starting curing before concrete dries out.
- 6 Restricting concreting to morning and evenings.

9.0 Finishing

Immediately after the removal of forms and undulations, depressions, cavities, honey combing broken edges or corners, high spots and other defects shall be made good and finished with cement mortar 1:2. But the necessity of such finishing must be exceptional and the total surface requiring finishing shall not exceed 1% on an average. If the initial experience shows that this percentage is exceeded the method of working itself should be changed to get the required cast finish. Where the concrete surface is to receive plaster, the surface shall be roughened immediately after removal of forms and within a day thereof to secure a bond for the plaster. The rate for concrete is inclusive of this roughening and finishing. Concrete after finishing shall be cured for the full period.

10 Retempering

Concrete shall be mixed only in such quantities as are required for immediate use and any concrete which has developed initial set shall not be re-tempered, remixed but shall be destroyed or thrown away.

Item to include

1. All labour, all materials, use of equipment tools and plant, installing and removal of scaffolding, false work and forms and bracing necessary for the satisfactory completion of the item except reinforcement steel.
2. Providing cement concrete of specified proportion including transporting, placing and compacting, curing, finishing to the dimension and shape shown on the plans or as ordered by the Engineer.
3. Compensation for injury to person and damages to existing work or property.

Mode of Measurement and Payment

The contract rate shall be for unit of one cubic meter of concrete. The concrete shall be measured for its length, breadth and depth, limiting dimensions to those specified on the plan or as ordered by the Engineer. No deduction shall be made for reinforcement in concrete in RCC work. Individual dimension shall be measures correct -to the cm And Quantities shall be worked cut correct up to three places of decimals of a cubic meter.

ITEM NO. :- CUTTING AND CHAMPHERING.

As per description of item and directed by Engineer – in – charge.

Mode of Measurement

This item will be measured and paid on number basis.

DECLARATION

DECLARATION

I hereby declare that I have made myself thoroughly conversant with the local conditions regarding all materials and other expenses such as cylinder, transportation, vehicles, fuel cost, octroi, availability of water etc. and labour on which I have based my rates for this work. The specifications and requirements for this work have been carefully studied and understood by me before submitting the tender. I undertake to use only the best materials, to be approved by the Engineer-in-charge of the work or his duly authorized representative before starting the work and also to abide by his decision.

I hereby undertake to pay the labour engaged on the work as per minimum wages Act 1984 applicable to the zone concerned or any other as applicable.

Contractor's Signature