SECTION 5B: FORM OF PRICE PROPOSAL, APPENDIX TO PRICE PROPOSAL, SCHEDULE OF PRICES AND SCHEDULE OF PAYMENTS

Preamble

This Volume 4, Price Proposal, is comprised of three parts – the Section 5B, Form of Price Proposal, Appendix to Price Proposal, Schedule of Prices and Schedules of Payments. All three portions of this volume should be carefully read and thoroughly understood in the context of all the various conditions of Contract before the Bid Schedules are filled in by the Bidder. Section 4, Employer's Requirements, describes the scope of the works that are to be taken up under the Contract, and the items listed in the Schedule of Prices conform to these Works.

Attention of the bidders is drawn to the requirements set out in Sub-Clause 15.1 of Section 1, Instructions to Bidders, and to the "Completeness of Offer" requirements of Section 4, Employer's Requirements, which stipulate that the costs quoted in the Price Proposal shall include all costs for the entire facilities on a "single point responsibility" basis such that the total bid price covers all the Contractor's obligations in respect of the design, manufacture, including procurement and subcontracting (if any), delivery, construction, installation and completion of the facilities, as well as operation and maintenance of the facilities for the specified period, all in consonance with the general philosophy delineated in the Employer's Requirements. The rates quoted by the Bidder shall cover all work described in, or to be implied from, the descriptions provided in Section 4.

Bidders are requested to quote prices against every item described in the Schedule of Prices provided in this Volume. If any item listed in the Schedule is not applicable to the Bidder's proposal, then the Bidder is requested to insert the words "NOT APPLICABLE" in the appropriate location. In the event that any part of the Schedule has not been filled out, the cost of doing the work described in that part will be deemed to have been included in other parts, and that the total bid price covers all the Contractor's obligations mentioned in or to be reasonably inferred from the bidding documents in respect of the design, manufacture, supply, delivery, construction, installation, testing and completion of the facilities, including operation and maintenance for the specified period, training of the Employer's personnel, and all other things required as per the Contract.

The Bidder's attention is directed to the fact that the Form of Technical Proposal and Appendix to Technical Proposal contained in Section 5A are designed to be complementary to the Form of Price Proposal and Appendix to Price Proposal contained in this Section 5B, as well as with the Schedules contained in Section 7.

All of these referenced Forms, Appendices and Schedules will form a part of the Contract with the successful Bidder.

In the event that the Bidder discovers any discrepancies or contradictions in these Sections, the Bidder is requested to bring such discrepancies to the notice of the Employer before the Bids are submitted so that any necessary clarifications or addenda can be issued to all Bidders.



The Bidder's attention is directed to the fact that it is responsible to submit, as a part of its Price Proposal, all information and supporting documentation that is required to be submitted in accordance with the instructions given in Section 1, Instructions to Bidders. For the Bidder's convenience, the following checklist provides a summary of the information that is required to be provided as a part of the Price Proposal; however, this checklist does not necessarily include all items that are required to be submitted, and the Bidder will be fully responsible to ensure that its proposal complies in all respects with the requirements of these bidding documents.

Checklist of Documents Comprising the Bid (Price Proposal)					
Reference Sub- Clause No.	- Required Submittals (Original and One Copy)				
(Section 1) 13.3 & 21.2	Volume 4, Price Proposal (Signed on All Pages)				
13.3 (i)	Signed Bid Form for Price Proposal				
13.3 (ii)	Signed Appendix to Price Proposal				
13.3 (iii)	Completed Schedules of Prices: Sections 1, 2, 3, 4, 5, and 6				
13.3 (v)	Any other information/data required to be submitted				
21.3	Any alterations or corrections made in the Schedules are to be initialed by the person or persons signing the Bid				
21.4	Bidder to provide information on any commissions or gratuities, paid or to be paid, as desired in the Form of Price Proposal				



FORM OF PRICE PROPOSAL

Name of Contract:Underground Sewerage Scheme for MBMCContract No:MBMC/MC/83/2008-2009

To: The Commissioner, Mira Bhayandar Municipal Corporation, Bhayandar (West) – 401 101 Tal. Dist. Thane, Maharashtra

Gentlemen:

We have examined the Conditions of Contract, Employers Requirements, Schedules, Addenda Nos. ______ and the matters set out in the Appendix hereto. We have understood and checked these documents and have not found any errors in them. We accordingly offer to design, execute and complete and operate and maintain the said Works and remedy any defects, fit its for purpose in conformity with these documents and the enclosed proposal. I/ We hereby tender for the execution for the Mira-Bhayandar Municipal Corporation, Bhayandar (herein before and herein after referred to as MBMC of the work specified in the under written memorandum with in the time specified in such memorandum at percent _____% below/above (in words

). The above amounts are in accordance with the Price Schedules herewith and are made part of this bid. [*The following sentence is for Joint Ventures only*] We hereby confirm that all partners in the Joint Venture are jointly and severally liable for execution of the Contract in accordance with the terms and conditions of the Contract.

The estimated, rates entered in schedule "B" (memorandum showing items if 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 here of and clause 123 of the annexed . I/We hereby tender for the execution, for the Mira-Bhayandar Municipal Corporation, Bhayandar (herein before and herein after referred to as MBMC of the work specified in the under conditions of contract and agree that when materials for work provided by City Engineer, MBMC such materials and rates to be paid for them shall be as provided in schedule "A" hereto in figures as well as words.

We confirm our agreement with the appointment of the State's Standing Committee for Settlement of Disputes, or as may otherwise be agreed during the clarification meetings of the Technical Proposal, as the Dispute Adjudication Board for this Contract.

We agree to abide by this Bid until *[insert the date 180 days after the date of submission* of the Technical *Proposal]* ______, 2009, and it shall remain binding upon us and may be accepted at any time before that date. We acknowledge that the Appendix to Price Proposal and Appendix to Technical Proposal form part of our Bid.

If our Bid is accepted, we will provide the specified Performance Security and Domestic Preference Security (if applicable), commence the Works as soon as reasonably possible after receiving the Employer's Representative's notice to commence, and complete the Works in accordance with the above-named document within the time stated in the Appendix to Technical Proposal.

Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Yours faithfully

Signature	in the capacity	duly authorized
to sign bids for and on behalf of		·
Address:		
Date:	, 2008	St. Association
Mine Dheusender Musicinal Comparation		Due= 2 == 40

APPENDIX TO PRICE PROPOSAL

	With the exception of the items for which the Emperted, the following information must be complete	
1.1.32	Employer's name and address:	Mira Bhayandar Municipal Corporation Bhayandar (West) – 401 101 Tal. Dist. Thane, Maharashtra
1.1.36	Employer's Representative's name and address:	Tandon & Associates 3,Rohit Apartment ,82 Kalina, Santacruz Mumbai 400029
1.1.70	Parts of the Works that shall be designated a Section for the purposes of the Contract:	Public Works Department Mira Bhayandar Municipal Corporation, Bhayandar (West) – 401 101 Tal. Dist. Thane, Maharashtra
1.1.78	Time for Completion of Design-Build:	30 months
1.3	Address of Employer for communications:	Executive Engineer Public Works Department Mira Bhayandar Municipal Corporation, Bhayandar (West) – 401 101 Tal. Dist. Thane, Maharashtra
1.3	Address of Employer's Representative for communications :	Tandon & Associates 3,Rohit Apartment ,82 Kalina, Santacruz Mumbai 400029
1.4	Address of Contractor for communications :	
1.5	Contract shall be governed by the law of:	India
1.6	Ruling language:	Marathi
1.4	Language for communications:	English
2.1	After receiving the Letter of Acceptance, the Contractor shall be given right of access to all or part of the Site within:	30 Days
		86 A 55 0 C

4.2	Performance Security (as pere Accepted Contract Amount in		
	P	ercent:	4 %
	C	Currency:	Indian Rupees
4.2	Reduction in Performance Sec the Retention Period:	curity at the end of	80% of performance security
5.1	Period for notification of errors defects is:	s, faults and other	24 months
5.2	Contractor's Documents requi	ring approval:	Design of all components
			Work methodology
			Work schedules
			Project Monitoring
			As Built Drawings
			O & M Manual
6.5	Normal working hours on the	Site:	7 am to 7 pm
8.2	Period of the Operation Service:		10 years
9.2	Time for Completion of Desigr	n-Build:	30 months
9.2	Time for Completion of each S	Section:	
	Se	ection	Collection system
	Tir	me for Completion	30 months
	Se	ection	Pumping Station
	Tir	me for Completion	30 months
	Se	ection	Sewage Treatment plant
	Tir	me for Completion	30 months
9.6	Delay damages (percent of final Contract Price per day of delay):		Rs. 714286
9.6	Maximum amount of delay dat final Contract Price):	mages (percent of	2%
10.6a	Maximum compensation paya	ble by Contractor:	2%
10.6b	Maximum compensation payable by Employer:		2%

10.7	Performance damages:		
		Failure:	Collection system
		Damages:	5% of the value of relevant item
		Failure:	Pumping Station
		Damages:	5% of the value of relevant item
		Failure:	Sewage Treatment plant
		Damages:	5% of the value of relevant item
10.7	Rights of Employer if failure than 84 days:	continues for more	Foreclosure of contract & imposition of penalties.
10.7	Minimum production output	s required:	80% of prescribed standards
13.5	Percentage rate to be appli Sums:	ed to Provisional	85% of the bill amount
14.2	Amount of Advance Payme Accepted Contract Amount		5%
14.2	Currencies of payment if different to the currencies quoted in the Contract:		Not applicable
14.2	Percentage deductions for the repayment of the Advance Payment:		8.33%
14.3	Percentage of Retention:		2%
14.3	Limit of Retention Money:		1% of final contract price
14.6(b)(i)	Plant and Materials for pay	ment when shipped:	Not applicable
14.6(c)(i)	Plant and Materials for pays to the Site:	ment when delivered	85% of the item rate put in tender
14.7(b)	Minimum Amount of Interim	Payment Certificate:	50%
14.9	Financing charges for delayed payment (percent points above discount rate):		50 Basis point above prevailing PLR of SBI
14.17	Currencies for payment of Contract Price:		Indian Rupees
14.17	Proportions of Local and Foreign Currencies are:		
		Local	100%
		Foreign	Not applicable
14.17	Rate of Exchange	<u> </u>	Not applicable
14.17	Payment of damages shall be:		CONTRACTOR DE CO

Cu	urrency	Indian Rupees
Pr	oportion	100%
Cı	urrency	Not applicable
Pr	oportion	Not applicable
Amount of Maintenance Reter	ntion Fund:	5%
Operation of forces of nature allocated to the Contractor:		Earthquake resistance for seismic Zone III Flooding as per Rainfall intensity prescribed in CPHEEO Manual
Total liability of the Contractor	shall not exceed:	10% of the value of Item
Permitted deductible limits:		Actual premium as prescribed in the contractor's all risks insurance policy and workmen's compensation insurance policy shall be with the Government of Maharashtra insurance fund only
Additional sum to be insured:		15%
Additional sum to be insured:		Not applicable
Employer's Risks to be insured if different to Sub- Clause 17.1:		Not applicable
Exceptional Risks to be insured if different to Sub-Clause 18.1:		Not applicable
Insurance of Contractor's Equipment (amount required):		10%
Amount of professional liability insurance required:		10%
Period for which professional liability insurance required:		60 months
Amount of insurance required for injury to persons and damage to property:		5%
Other insurances required from (give details):	m the Contractor	Not applicable
Amount of fire extended cover insurance required:		20%
	Image: second	Contractor: Total liability of the Contractor shall not exceed: Permitted deductible limits: Additional sum to be insured: Additional sum to be insured: Additional sum to be insured: Employer's Risks to be insured if different to Sub- Clause 17.1: Exceptional Risks to be insured if different to Sub-Clause 18.1: Insurance of Contractor's Equipment (amount required): Amount of professional liability insurance required: Period for which professional liability insurance required: Amount of insurance required for injury to persons and damage to property: Other insurances required from the Contractor (give details): Amount of fire extended cover insurance

Price Variation Clause

ACCOMPANIMENT TO THE GOVERNMENT, RESOLUTION PUBLIC WORKS DEPARTMENT NO. CAT/06/04/148, DATED 16-5-2005.

If during the operative period of the Contract as defined in condition (i) below, there shall be any variation, in the Consumer Price Index (New Series) for Industrial Workers for Mumbai center as per the Labour Gazette published by the Commissioner of the Labour, Government of Maharashtra and/or in the whole-sale Price Index for all commodities prepared by the Office of Economic Adviser, Ministry of Industry, Government of India, or in the price of petrol / oil and lubricants and major construction materials like bitumen, cement, steel, various types of metal pipes etc. then subject to the other conditions mentioned below, price adjustment on account of

- (I) Labour Component
- (2) Material Component
- (3) Petrol, oil and Lubricants Component
- (4) HYSD & Mild Steel Component
- (5) Cement Component

Calculated as per the formula hereinafter appearing shall be made. Apart from these, no other adjustments shall be made to the contract price for any reasons whatsoever. Component percentages as given below are as the total cost of work put to tender. Total of Labour, Material & POL components shall be 100 and other components shall be as per actual.

Collection system

1. Labour Component - K1	(70%)
2: Material Component - K2	(27%)
3. POL Component - K3	(03%)
4. HYSD & Mild Steel Component	Actual
5. Cement Component	Actual

RCC works

1. Labour Component - K1	(40%)
2: Material Component - K2	(55%)
3. POL Component - K3	(05%)
4. HYSD & Mild Steel Component	Actual
5. Cement Component	Actual

<u>Note:</u> - If Cement, Steel, Bitumen, C.L and D.I. Pipes are supplied on Schedule 'A', then respective component shall not be considered. Also if particular component is not relevant same shall be deleted

1. Formula for Labour Component:

$$\mathbf{V}_1 = 0.85 \mathbf{P} \left(\frac{\mathbf{K}_1}{100} \ \mathbf{x} \ \frac{\mathbf{L}_1 - \mathbf{L}_0}{\mathbf{L}_0} \right)$$

Where,

 V_1 = Amount of price variation in Rupee to be Allowed for Labour Component.

P = Cost of work done during the quarter under Consideration minus

The cost of Cement, HYSD and Mild Steel, bitumen, C.I. and D. I. Pipes Calculated at the basic star rates as applicable for the tender, consumed during the quarter under consideration.

- K_1 = Percentage of labour component as indicated above.
- L₀ = Basic consumer price index for Mumbai center shall be average consumer Price index for the quarter preceding the month in which the last date Prescribed for the of tender, falls.

 L_1 = Average consumer price index for Mumbai center for the quarter under Consideration.

2. Formula for the Materials Component:

$$V_2 = 0.85P\left(\frac{K_2}{100} \times \frac{M_1 - M_0}{M_0}\right)$$

Where,

- V₂ = Amount of price variation in Rupees to be Allowed for Materials Component.
- P = same as worked out for Labour Component.
- K₂ = Percentage of material component as indicated above.
- M₀ = Basic wholesale price index shall be average wholesale price index for the quarter preceding the month in which the last date prescribed for the receipt of tender falls
- M_1 = Average wholesale price index during the quarter under consideration.



The star rates are given as below

Cement	:	Rs. 5,000/- per M.T.
H.Y.S.D. Steel	:	Rs, 48.360/-per M.T.
Mild Steel	:	Rs. 48,360/- per M.T.
Bitumen 30/40 in bull	k :	Rs.37,883/- per M.T.
Bitumen 60/70 in bull	k :	Rs.35,656/- per M.T.

3. Formula for Petrol, oil and Lubricants Component.

$$\mathbf{V}_3 = 0.85 \mathbf{P} \left(\frac{\mathbf{K}_3}{100} \ \mathbf{x} \ \frac{\mathbf{P}_1 - \mathbf{P}_0}{\mathbf{P}_0} \right)$$

Where,

- V₃ = Amount of price variation in Rupees to be Allowed for POL Component.
- P = same as worked out for Labour Component.
- K₃ = Percentage of Petrol, -oil and Lubricants Component.
- P₀ = Average price of HSD at Mumbai during the quarter preceding the month in which the last date prescribed for the receipt of tender falls
- P₁ = Average of price of HSD at Mumbai during the quarter under consideration.

4. Formula for HYSD & Mild Steel Component.

$$\mathbf{V}_5 = \frac{\mathbf{S}_0 \quad \mathbf{I}_1 - \mathbf{SI}_0}{\mathbf{SI}_0} \mathbf{x} \mathbf{T}$$

Where,

- V_5 = Amount of price variation in Rupees to be Allowed for HYSD/ Mild Steel, component.
- S₀ = Basic rate of HYSO/ Mild Steel in rupees per metric tonne as considered for working out value of P
- SI_1 = Average Steel Index as per RBI Bulletin during the quarter under consideration.
- SI₀ = Average of Steel Index as per RBI Bulletin for the quarter preceding the month in which the last date prescribed for receipt of tender, falls

T = Tonnage of steel used in the permanent works for the quarter under consideration.

5. Formula for Cement Component.

$$V_6 = \frac{C_0 (\Gamma_1 - CI_0)}{CI_0} x T$$

 V_6 = Amount of price escalation in Rupees to be allowed for cement component.

 C_0 = Basic rate of cement in rupees per metric ton as considered for working out value of P.

- Cl₁ = Average cement Index published in the RBI bulletin for the quarter under consideration.
- Cl₀ = Average of cement Index published in the RBI bulletin for the quarter preceding the month in which to the last date prescribed for receipt of tender, falls

T = Tonnage of cement used in the permanent works for the quarter under consideration.

The following conditions shall prevail:

- i) The operative period of the Contract shall mean the period commencing from the date of work order issued to the Contractor and ending on the date on which the time allowed for the completion of the works specified in the Contract for work expires, taking into consideration the extension of time, if any, for completion of the Work granted by the Engineer under the relevant clause of the Conditions of Contract in cases other than those where such extension is necessitated on account of default of the Contractor. The decision of the Engineer as regards the operative period of the Contract shall be final and binding on the Contractor. Where any compensation for *liquidated* damages is levied on the Contractor provisions, the price adjustment amount for the balance of work from the date of levy of such compensation shall be worked out by pegging the indices L1, M1, C1, P1, B1, SI1 and CI1 to the levels corresponding to the date from which such compensation is levied.
- ii) This price variation clause shall be applicable to all contracts in B1/B2 & C from but shall not apply to piece works. The price variation shall be detem1ined during each quarter as per formula given above in this clause.
- iii) The price variation under this Clause shall not be' payable for the extra items required, to be executed during the completion of the work and also on the excess quantities of items payable under the provisions of Clause 38/37 of the contract from B1/B2 respectively. Since the rates payable for-extra items or the extra quantities under Clause 38/37 are to be fixed as per current DSR or as mutually agreed to yearly revision till completion of such work. in other wards, when the completion / execution of extra items as well as extra quantities under Clause 38/37 of he contract from B1/B2 extends beyond the operative date of the DSR prevalent at that time on year to year basis or revised in accordance with mutual agreement thereon, as provided for in the Contract, whichever is less.

- iv) This clause is operative both ways, i.e. if the price variation as calculated above is on the plus side, payment on account of the price variation shall be allowed to the contractor and if it is on the negative side, the Government shall be entitled to recover the same from the Contractor and the amount shall be deductibles from any amounts due and payable under the contract.
- v) To the extent that full compensation for any rise or fall in costs to the Contractor is not entirely covered by the provision of this or other clauses in the contract, the unit rate and prices included, in the contract shall be deemed to include amounts to cover the contingency of such other actual rise or fall in costs.

Initials of Signatory of Bid _____



SCHEDULES OF PRICES

Index to Schedules

<u>Schedule No.</u>	Particulars	
	Preamble	
Schedule 1:	Sewage Collection and conveyance system	
Schedule 2:	Sewage Pumping stations and treatment Plants	
Schedule 3:	Treated Sewage Outfalls	
Schedule 4:	Miscellaneous Items	
Schedule 5:	Estimate Summary	
Schedule 6:	Operation and Maintenance	
Schedule 7:	Grand Summary	
Schedule 8:	Payment Schedule	

Note: The Bidder shall sign all the Schedules of Prices and submit as a part of the Price Proposal. All works, goods and services supplied from within India should be denominated in Indian Rupees only.



Preamble to the Schedule of Prices

1. Scope

- 1.1 The Contract is a single point responsibility contract to provide a collection, conveyance and treatment system for sewage from Mira Bhayandar city in the stipulated quantities and of the stipulated quality, including but not limited to design, manufacture, including procurement and subcontracting (if any), delivery, construction, installation and completion of the facilities, as well as operation and maintenance of the facilities for the specified period, all in consonance with the general philosophy delineated in the Employer's Requirements. All works essential to arrive to the goal are part of the contract. The specifications and the price schedules endeavor to cover all the essential features of the Contract. However, if any items are missing and have not been included in the schedules and are essential for satisfactory completion of the Works and their subsequent operation and maintenance, such work will be deemed to have been included as a part of the Contract Price under the prices quoted for other items.
- 1.2 The Bidder is required to acquaint himself about the site conditions, access to the Site, and availability of sites for his constructional plant and equipment. The successful bidder will be required to provide suitable access to the work sites and arrange for pipe manufacturing facilities, materials storage sites, etc., within the quoted prices.

2. Schedules

- 2.1 The Schedule of Prices is divided into four Schedules (Schedules 1 to 4) for convenience, while Schedule 5 summarizes the totals of the first three Schedules.
- 2.2 Schedule 6 presents the Bidder's estimate of the payment requirements after the Commencement Date and is to be prepared in consonance with the Work Plan.
- 2.3 The quantities provided in the Schedule of Prices represent the Employer's "best estimates" of the scope of the work required to be taken up, and will be used for bid evaluation purposes. Nevertheless, quantities that are provided for item rate work may be subject to change during execution of the Contract, and payment will be made for the work actually executed at the quoted rates. No variation in rates will be considered, irrespective of whether the estimated quantities increase or decrease during implementation.
- 2.4 Each item is to be individually priced in ink and no column in the Schedule of Prices shall be left blank. Any item in the Schedule of Prices which it is not applicable to the bidder's proposal should be left unpriced and marked as "NOT APPLICABLE" in the appropriate location.
- 2.5 Nomenclature of Items in Schedules:
 - 2.5.1 The prices of various items of work are to be quoted either as Item Rates or as Lump Sums (LS), as deemed suitable and as set out in the Schedules.
 - 2.5.2 Items for which prices are to be quoted on an item rate basis shall be paid on measurement in the units as prescribed for the work actually carried out.



- 2.5.3 Items for which prices are to be quoted on a LS basis are to be carried out in full as per the details provided in the nomenclature, as specified elsewhere in the document, and as per normal and good engineering practice to ensure its completeness and functionality. This will also include all necessary finishing and site clearance.
- 2.5.4 The Bidder is advised to examine all instructions, forms, terms, specifications and other information in the bidding documents and consider and evaluate fully the price implications therein contained before filling the lump sum prices.
- 2.5.5 The schedules do not generally give a full description of the plant and equipment to be supplied and the services to be performed under each item. Bidders shall be deemed to have read the Employer's Requirements and other sections of the bidding documents and reviewed the drawings to ascertain the full scope of the requirements included in each item prior to filling in the rates and prices.
- 2.5.6 Any minor items that are not specifically mentioned in the schedule or specifications, but which are required to be carried out for satisfactory completion of the item as per good engineering practice, shall be deemed to form a part of the scope of the relevant item. The tendered rates and prices shall be deemed to include for the full scope as aforesaid, including overheads and profit.
- 2.5.7 Sundry and miscellaneous works are required to be done to complete the work under any particular schedule or part thereof. The Bidder is required to include the costs of all such work in his tendered prices for the relevant item(s), and the Employer will not be liable for any additional costs that may be incurred for satisfactory completion of the work.
- 2.5.8 In order to facilitate progress payments, the Lump Sum items may be split into further sub-heads during execution, with appropriate prices assigned to each of the sub-heads so that their total equals the agreed price. The successful bidder will have to make the proposal during or before the initial stage of starting the relevant work, and the cost breakdown will be applicable after approval of the Employer's Representative.
- 2.5.9 The Bidder is advised to cover all taxes and duties applicable under the taxes and duties column, excluding Service Taxes (if any) which will be paid extra by the Employer. For all other prices, where a break up is not asked, the rates shall include all taxes and duties, etc., that may have to be borne by the successful bidder.
- 2.5.10 The Bidder shall be deemed to have included in his tendered prices provisions for all things necessary for completing the item in accordance with the specifications and terms of the biddings documents, including but not limited to site clearance, maintenance, provisions and removal of all temporary works of whatsoever nature required for construction including temporary accesses, diverting water, pumping, dewatering, etc., and site restoration and cleanup upon completion The prices shall also be deemed to include any works and setting out that may be required to be carried out for laying out of all the works involved, liaison with the State Electricity Board and other Government/ Regulatory bodies for obtaining clearances/ approval, and co-ordination among various Government/ Regulatory bodies.

3. Measurements

- 3.1. Measurements for the various items of work will be carried out as per the stipulations in Section 4, Employer's Requirements, Maharashtra Jeevan Pradhikaran(MJP) Standard Specifications (Civil Works), BIS, and standard engineering practices.
- 3.2. The length of pipes and fittings for purposes of measurement will be as measured along the centerline.
- 3.3. Earth work in trenches for laying and jointing of pipe line shall be carried out and paid for based on profiles and neat-line trench dimensions as approved by the Employer's Representative on the basis of the soil encountered and depth required. No extra payment will be made for any extra excavation beyond the approved neat line trench dimensions, including any over-break of rock during blasting, and the Contractor will have to make any

such over-break good with approved compacted material at his own cost. However, if the actual excavation is less then the approved profile, payment shall be restricted to the actual quantity of excavation.

4 Payment Schedule

A tentative payment schedule is presented here. The schedule may be revised and finalized appropriately as agreed mutually at the time of execution . For pumping station and sewage treatment plant, contractor shall submit the proportion of Civil and Mechanical works so as to arrive at agreeable payment schedule.

COLLECTION SYSTE PIPE LINE TEM

Sr. No	Unit and Stage of Construction	Percent of cost of unit
1	Supply	85
2	Lowering laying	10
3	Testing/commissioning	5

Sr. No	Unit and Stage of Construction	Percent of cost of unit
1	Approval of design and drawings	2
2	Excavation	10
3	Completion of PCC + RCC raft	16
4	Completion of 50% RCC works	30
5	Completion of 100% RCC works	24
6	Entire completion of civil works	8
7	On successful completion of performance run	10

PUMPING STATIONS AND STP's For Civil Works

For Mechanical / Electrical / Instrumentation / FRP and PVC Items / Interconnecting piping

Sr. No	Unit and Stage of Construction	Percent of cost of unit
1	Approval of design and drawings	5
2	On receipt of equipment / material on site	60
3	On erection / installation	25
4	Testing, commissioning and successful completion and acceptance of performance guarantee test	10

