

## SECTION 7: SCHEDULES

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## PREAMBLE

Bidders are required to provide full and complete information in the requested format in the following Schedules. All Schedules are required to be completed, but Bidders should not necessarily restrict themselves to using the space that is provided; Bidders will be responsible to provide additional sheets/pages and/or supplementary information wherever required.

In the event that any particular Schedule or item in the Schedule is not applicable, the same should be clearly indicated. The information provided shall be used for evaluation of the Technical Proposals to assess the overall responsiveness of the Bid to the terms and conditions of bidding, the qualifications of the Bidder pursuant to the requirements of Clause 5 of Section 1, Instructions to Bidders, and the suitability and conformity of the offer to the requirements of Section 4, Employer's Requirements.

However, the Employer wishes to clarify that whatever technical specifications are proposed or considered by the Bidder, all equipment which is to be provided by the successful bidder shall conform in all respects to the specifications of the tender documents, or better, and shall be subject to the approval of the Employer's Representative. No claim for additional payments shall be entertained during the course of the approval process or thereafter on this account.

Wherever the Employer has allowed an alternative (option) to be provided, as described in Section 4, Employer's Requirements, the Bidder shall clearly describe, in these Schedules, the option that he is offering. The Bidder shall be wholly responsible to ensure that his offer is complete in all respects, and that all related Plant, equipment and Works which are required to be provided, and which are deemed to be necessary by the Employer, are incorporated into his offer.

It is expected that the Bidder shall quote for supply of equipment of best makes which conform to the highest international standards. In its offer, the Bidder should only consider makes from reputed manufacturers of equipment corresponding to the state-of-the-art technology and to the latest international / Indian standards.

Acceptance of the Bidder's proposal for the purposes of bid evaluation should not be construed as approval by the Employer. All details will subsequently be subject to approval of the Employer's Representative during execution of the Works based upon the detailed designs / drawings / data-sheets / specifications / manufacturer's credentials, details of Sub-contractors, agreements with Sub-contractors, necessary resources in terms of personnel, plant and equipment, construction methodology, work plan, safety plan, procurement plan, QA/QC plan, financing plan, etc., that are required to be submitted by the successful bidder in conformity with the terms and conditions of the Contract for independent assessment and approval by the Employer's Representative before execution.

**The Bidder shall note that, pursuant to Sub-Clause 21.2 of Section 1, Instructions to Bidders, he is required to affix his signature on all pages of this Section 7, Schedules.**

**Schedule I****Statement of Compliance with the Bidding Documents**

Bidder shall provide a complete statement of any proposed deviations from the Conditions of Contract that are stipulated in the various Sections in Volume 1, General Requirements, giving reference to the Section Number and Clause Number, along with a description of the proposed deviation and the reason for proposing such deviation.

<b>Section &amp; Clause Number</b>	<b>As Mentioned in Bid Document</b>	<b>As Proposed by the Bidder</b>	<b>Reasons for Deviation</b>

The Bidder hereby certifies that the above mentioned deviations are the only deviations proposed to the various Sections of Volume 1, General Requirements, and that he agrees with all remaining conditions.

## Schedule II

## Statement of Deviations from the Technical Specifications

The Bidder shall describe all proposed deviations from the technical specifications set out under Section 4, Employer's Requirements, and in the Standard Specifications (Civil Works), clause by clause, in this Schedule. The Bidder should note that the specifications given in the Bid Document are the minimum acceptable, and that it is free to quote standards that are better / higher than the ones referred to in the Bid Document.

Sub-Section Number	Title of Sub-section	Clause No.	Specification as per Bid Document	Deviation & Specifications Proposed	Reasons for Deviation
<b>Section 4.0: Employer's Requirements</b>					
4.1	General Requirements				
4.2	Scope of Work				
4.3	General specification for civil works				
4.4	Special specifications for sewerage system				
4.5	Mechanical specification				
4.6	Electrical Specifications				
4.7	Valves				
4.8	Pumping Stations Mechanical				
4.9	Pumping Stations Electrical Equipment				
4.10	Instrumentation, Automation and Control System				
4.11	Sewage Treatment Plant				
4.12	Quality Assurance and Quality Control				

4.13	Erection, Testing, Trial Run, Commissioning and Tests After Completion				
4.14	Operation and Maintenance				
4.15	Environmental and Social Requirement				
<b>Section 9.0 Drawings</b>					

The Bidder hereby certifies that the above mentioned deviations are the only deviations from the technical specifications set forth under Section 4, Employer's Requirements, and the Standard Specifications (Civil Works), and that he accepts all the remaining technical requirements of the Bid Document.

**Schedule III****Technical Parameters Proposed by the Bidder**

The Bidder shall complete the following Schedules in their entirety to demonstrate their relevant experience and compliance with the technical requirements of the Project in sufficient detail so as to enable the Employer to determine the Bidder's responsiveness to the technical requirements of the MBMC Underground Sewerage Scheme Project.

**Part 1: Mechanical Equipment****Raw/Influent Pumps**

The following Table gives the design duty conditions that are expected to be encountered during operation of the pumping station for the 15 year period from 2008 to 2022. The Bidder shall complete the Table by filling up column numbers 4, 5, 6, 7, 8 and 9 with specific reference to the characteristics of the pumps that he is offering, including their guaranteed efficiencies at the average duty point conditions for each year of operation.

Zone No	Flow	Total Head	Bidder's Offer.		
			Quarter Capacity ( 1/4 <sup>th</sup> of Flow)	Half capacity ( ½ Of Flow)	Full Capacity
	Cum/hr	m			
1	583	18			
2	333	18			
3	708	18			
4	500	18			
5	292	18			
6a	542	18			
6b	292	18			
6c	458	18			
7	500	18			
8	375	18			

**Relevant Experience**

Bidder shall provide particulars of similar types of pumps of equal or higher capacity, of the offered make, that have been installed and commissioned elsewhere and have performed satisfactorily for more than 5000 hrs as on the date of submission of the Bid.

<b>Location</b>			
<b>Project</b>			

<b>Client:</b> Contact person Address Telephone No. Email ID			
<b>Make</b>			
<b>Type</b>			
<b>Model No.</b>			
<b>Quantity</b>			
<b>Capacity (Cum/hr)</b>			
<b>Head (MWC)</b>			
<b>Speed (RPM)</b>			
<b>Length of column pipe</b>			
<b>No. of hours of operation</b> as on the date of submission of the Bid			

### Pump Schedule

Bidder shall provide the following data on the pumps that are being offered:

Description	Unit	Particulars		
Make				
Model No.				
Column pipe dia.(750mm max)	mm			
Delivery elbow dia.	mm			
Suspension length excluding strainer	mm			
Weight	Kg			
Dynamic load of pump set	Kg			
Guaranteed Performance		With Impellers for		
		Final Duty	Intermediate Duty	Initial Duty
Capacity	Cum/hr			
Total head (Bowl head - losses in column pipe, elbow-station losses)	MWC			
Losses in column pipe and elbow	MWC			
Station losses	MWC			
Bowl head	MWC			
Bowl efficiency	%			
Power input to bowl	kW			
Speed at 50 Hz	RPM			
Losses in transmission shaft	kW			
Thrust bearing losses	kW			
Power input to pump at duty point condition	kW			
Maximum power input within working range	kW			

Maximum power input to pump from shutoff to run off	kW			
Thrust bearing cooling water requirement, if any	M <sup>3</sup> /hr			
Line shaft bearing lubrication water requirement	M <sup>3</sup> /hr			
Any other important technical parameter	-			



Description	Particulars
Drawings / Graphs to be enclosed with Bid <ul style="list-style-type: none"> <li>Pump performance curves (head, power and efficiency, submergence vs flow) covering complete range of operation for final, intermediate &amp; initial duty points.</li> </ul>	Yes/No
<ul style="list-style-type: none"> <li>Pump Q-H curves superimposed on the system resistance for various combinations of pumping</li> </ul>	Yes/No
<ul style="list-style-type: none"> <li>Dimensional general arrangement drawing of pump and motor</li> </ul>	Yes/No
<ul style="list-style-type: none"> <li>Detailed cross-section of pump with materials of construction</li> </ul>	Yes/No
<ul style="list-style-type: none"> <li>Detailed calculation of column pipe losses, elbow losses and station losses.</li> </ul>	Yes/No

### Lubricating / Cooling Water System

General		RWPS	
		Lubricating	Bearing Cooling (If required)
Make			
Model No.			
Capacity	cu.m/hr		
Total Head	M		
Efficiency	%		
Motor Rating	KW		
Any other technical parameter			

Bidder guarantees that the performance of each pump set shall comply with the figures given above and that the pumps will operate satisfactorily throughout the duty range.

Description	Particulars
Drawings / Graphs to be enclosed with Bid <ul style="list-style-type: none"> <li>• Pump performance curves (head, power and efficiency, NPSH vs flow) covering complete range of operation for final, intermediate &amp; initial duty points.</li> </ul>	Yes/No
<ul style="list-style-type: none"> <li>• Pump Q-H curves superimposed on the system resistance for various combinations of pumping</li> </ul>	Yes/No
<ul style="list-style-type: none"> <li>• Pump torque-speed characteristic curve</li> </ul>	
<ul style="list-style-type: none"> <li>• Dimensional general arrangement drawing of pump and motor</li> </ul>	Yes/No
<ul style="list-style-type: none"> <li>• Detailed cross-section of pump with materials of construction</li> </ul>	Yes/No
<ul style="list-style-type: none"> <li>• Detailed calculation of station losses.</li> </ul>	Yes/No

Bidder guarantees that the performance of each pump set shall comply with the figures given above and that the pumps will operate satisfactorily throughout their entire operating range.

## Part 2: Sewage Treatment Plant

### A) Layout Plan

The Bidder is required to submit a block layout plan of treatment Scheme showing the location of various units of the Sewerage Treatment Plant and pumping station, electrical units, boundary walls and internal roadways, etc. The Bidder shall show the space reserved for the Phase-II and Phase-III expansions of the treatment plant, pump stations and other units.

The block plan should show following details:

- Individual Units/ Buildings
- Roads
- Site Drainage
- Compound Wall & Gate
- Landscaping & Gardening

### B) Check List

The Bidder shall submit following information:

1	Block layout plan provided	Yes/No
2	List of units provided	
3	Type of Primary & secondary treatment technology provided with details	
4	Type of tertiary provided	

## Description of Proposed Sewage Treatment Plants

The Bidder shall describe the proposed Sewage treatment method, expected results and requirements for operations and maintenance in sufficient detail for each sewer zone so that the Employer can assess the suitability of the Bidder's Proposal. The Bidder should provide the detailed technical parameters adopted for the option of treatment design (if other than conventional).

## **Proposed Layout of Sewage Treatment Plant, Pumping station and Campus**

Bidder shall show all major components and dimensions, including provisions for future expansions.

**Part 3: Collection System with RCC Pipeline and Specials****Bidders shall submit the following details**

Sl. No.	Technical Schedule For Pipes	Bidder's Proposal
<b>MS Pipe</b>		
1	Proposed Type Of Pipe	
2	Proposed Supplier(s)	
3	Any special technique in lowering/Laying	

**Schedule IV****Personnel**

Bidders shall provide the names of suitably qualified key personnel who meet the requirements specified in Section 4, Employer's Requirements, in the following Form PER-1.

Data on the experience of each candidate should be supplied using the Resume format (Form PER-2) provided on the following page.

The proposed Mobilization/Deployment Schedule for all such key personnel shall be provided in the format provided in Form PER-3, indicating the proposed date of mobilization/ deployment and the total duration of their respective services.

**Form PER-1**

1.	Title of position*
	Name
2.	Title of position*
	Name
3.	Title of position*
	Name
4.	Title of position*
	Name
5.	Title of position*
	Name
6.	Title of position*
	Name
	Title of position*
	Name
	Title of position*
	Name

\*As listed in Section 4, Employer's Requirements

**Resume of Proposed Personnel**

**Form PER-2**

<b>Position:</b>			
<b>Responsibilities:</b>			
<b>Personnel information</b>	<b>Name</b>	<b>Date of birth</b>	<b>Nationality</b>
	<b>Professional qualifications</b>		
<b>Present employment</b>	<b>Name of employer</b>		
	<b>Address of employer</b>		
	<b>Telephone</b>	<b>Contact (manager / personnel officer)</b>	
	<b>Fax</b>	<b>E-mail</b>	
	<b>Job title</b>	<b>Years with present employer</b>	

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

<b>From</b>	<b>To</b>	<b>Company / Project / Position / Relevant Technical and Management Experience</b>





**Mobilization/Deployment of Proposed Personnel**

Bidder shall provide the proposed mobilization schedule for each of the key personnel in a bar-chart form, clearly showing the proposed date of mobilization, duration of services, and date of demobilization.

**Form PER-3**

Sl. No.	Position/Designation	Deployment Schedule (in Months from the Commencement Date)											
		1	2	3	4	5	6	7	---	---	30		

(Note: Bidders should provide the above schedule on a separate sheet showing all months from Month 1 to Month 30 inclusive for the Works Contract Period, and a similar, but suitably modified, format for the Operations and Maintenance Contract Period.)



**Schedule V****Site Organization**

Bidder shall describe the roles and responsibilities of each of the personnel proposed under the preceding Schedule IV, and shall describe the roles, relationships and division of responsibilities between the site management and the representative head/branch office that will be responsible for the Project. In particular, the Bidder shall provide details of the technical and financial responsibility and authority of the Project Manager who will be responsible for the day-to-day operations at the Site.

The Bidder shall provide a preliminary organization chart which indicates the relationship between the site management and the representative head/branch office, the direct on-site works operations, the sub-contractors and suppliers, and the Employer's Representative and supervising Engineers.

Details shall be furnished separately for the design and construction phase, and for the operations and maintenance phase.

## Schedule VI

**Contractor's Plant and Construction Equipment**

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key plant and construction equipment listed in Section 4, Employer's Requirements. A separate Form (Form EQP-1) shall be prepared for each item of plant and/or equipment listed, or for alternative equipment proposed by the Bidder.

The overall requirements and mobilization/deployment schedule for each major item of plant and equipment (such as Plant & Equipment to be used for the Pipe Manufacturing Process, Coating Process, Internal Lining Process, Welding Process during manufacturing and Welding Process for jointing, excavators, concrete batching plants, hot mix plants, etc.,) shall be summarized in the format (Form EQP-2) provided on the following page.

**Form EQP-1**

<b>Item of Plant/Equipment</b>	
<b>Equipment Information</b>	<b>Name of manufacturer</b>
	<b>Capacity</b>
	<b>Model and power rating</b>
	<b>Year of manufacture</b>
<b>Current Status</b>	<b>Current location</b>
	<b>Details of current commitments</b>
<b>Source</b>	<b>Indicate source of the equipment</b> <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured

The following information is not required to be provided for the above plant/equipment owned by the Bidder.

<b>Owner</b>	<b>Name of owner</b>	
	<b>Address of owner</b>	
	<b>Telephone</b>	<b>Contact name and title</b>
	<b>Fax</b>	<b>Telex</b>
<b>Agreements</b>	<b>Details of rental / lease / manufacture agreements specific to the project</b>	

## Deployment Schedule of Major Items of Constructional Plant and Equipment

Bidder shall provide the proposed mobilization/deployment schedule for each major item of constructional plant and equipment described in Form EQP-1 in a bar-chart form, clearly showing the proposed date of mobilization to the Site, duration of deployment, and date of removal from the Site.

### Form EQP-2

Sl. No.	Name of Plant/Equipment (Type, Make, Model)	No. of Items	Deployment Schedule (in Months from the Commencement Date)																			
			1	2	3	4	5	6	7	---	---	30										
A)	For collection system																					
B)	For Sewage Treatment Plant,																					
C)	For Pumping stations																					
D)	For Other works like SCADA , Environment planning, Public sensitization																					
E)	For Roads & Miscellaneous Civil Works																					

(Note: Bidders should provide the above schedule on a separate sheet showing all months from Month 1 to Month 30 inclusive for the Works Contract Period, and a similar, but suitably modified, format for the Operations and Maintenance Contract Period.)

**Schedule VII****Method Statement**

The Bidder shall provide a comprehensive statement of the methods that it proposes to adopt for completing the Works under this MBMC Underground Sewerage Scheme Project, including descriptions of its proposed work methods, scheduling, mobilization of labor force and resources, quality assurance and quality control programs, etc., in order to demonstrate its overall understanding of requirements for successful completion of the Contract within the stipulated time period, and to demonstrate the Bidder's capability with respect to its construction methodology, proper planning of activities, procurement and deployment of necessary resources.

The Bidder should pay particular attention to describing how he proposes to providing and laying of the RCC pipes , Construction of pumping station , Construction of STP, including providing details on the proposed execution process, the number and types of plants he proposes to use/establish, their production capacity, testing facilities, QA/QC procedures to be used to ensure the quality of the pipes and specials, storage requirements and facilities for the raw materials and finished products, etc.

Similarly, the Bidder should provide full details on his proposed procurement methods for major items of pipe ,plant, equipment and materials proposed to be incorporated into the Permanent Works, including design of the plant and equipment, sources of materials, placing of orders, times required for manufacture, tests to be conducted at the supplier's/manufacturer's plant, pre-delivery inspections and testing, delivery, storage, installation, etc.

The Bidder's attention is drawn to the requirements set out in Section 4, Employer's Requirements, and the Bidder is requested to describe how it proposes to achieve the Milestone Targets that have been established to ensure that pro-rata progress is maintained on all sub-components of the Works throughout the execution period.

Details shall be furnished separately for the design and construction phase, and for the operations and maintenance phase.

**Schedule VIII****Construction Schedule**

The Bidder shall submit his proposed construction program in sufficient detail so as to demonstrate: the order in which he proposes to carry out the Works (including each stage of design, procurement, manufacture, pre-delivery inspection and testing, delivery to Site, construction, erection, testing and commissioning); all major events and activities in the production of Construction Documents; the periods for the design reviews and approvals and for any other submissions, approvals and consents specified in the Employer's Requirements; the sequence of all tests specified in the Contract; etc.

The Bidder should pay particular attention to ensuring that the proposed schedule for procurement , laying of pipe(s) and execution of STP , Pumping station and specials is integrated with the equipment mobilization/deployment schedule (Schedule VIII), the procurement schedule for supply and delivery of the raw materials (pipe , pumps , as per Schedule XII) and the proposed works program for laying, jointing and testing of the pipes.

Similarly, the Bidder should pay particular attention to demonstrating how his proposed program for supply of major items of plant and equipment to be incorporated into the Permanent Works is to be managed to satisfy the requirements of the Contract, including the time required for design, placing of confirmed orders, manufacturing, pre-delivery inspections and tests, delivery to the Site, storage, installation, etc.

Such construction program shall be developed on a commercially available project management software (such as Primavera, MS Project or equivalent) showing level-3 activities, together with bar charts and CPM diagrams which clearly illustrate the critical path, and the resources required to be provided by the Contractor to achieve the desired results.

The Bidder's attention is drawn to the requirements set out in Section 4, Employer's Requirements, and the Bidder is required to clearly demonstrate how he proposes to meet the Milestone Targets that have been established to ensure that pro-rata progress is maintained on all sub-components of the Works throughout the execution period.

Details shall be furnished separately for the design and construction phase, and for the operations and maintenance phase.

## Schedule IX

### Procurement Schedule for Plant and Equipment to be incorporated into the Permanent Works

Bidder shall provide the proposed procurement schedule for the major plant and equipment which is required to be incorporated into the Permanent Works in the following Form PEQ-1, clearly showing the total estimated quantities and the proposed quantities to be procured and delivered to the site each month. Bidders should ensure that the proposed procurement schedule is integrated with the requirements of the bidding documents, and matches with proposals described in the preceding Method Statement (Schedule IX) and Construction Schedule (Schedule X).

The Bidder should pay particular attention to ensuring that the times required for design, placing of orders, manufacturer and testing, delivery, etc., are properly allowed for while preparing their procurement schedules.

## Form PEQ-1

Sl. No.	Type of Plant and Equipment	Total Qty. Req'd.	Procurement Schedule (in Months from the Commencement Date)																		
			1	2	3	4	5	6	7	---	---	30									
<b>A)</b>	<b>Execution of Collection system</b>																				
<b>B)</b>	<b>Sewage Treatment Plant, Pump Stations</b>																				
<b>C)</b>	<b>Roads &amp; Miscellaneous Civil Works</b>																				
<b>D)</b>	<b>Other works like implementation of SCADA</b>																				

(Note: Bidders should provide the above schedule on a separate sheet showing all months from Month 1 to Month 30 inclusive for the Works Contract Period, and a similar, but suitably modified, format for the Operations and Maintenance Contract Period.)

## Schedule X

## Procurement Schedule for Major Construction Materials

Bidder shall provide the proposed procurement schedule for the major construction materials (such as pipes pumps, cement, steel reinforcement, shuttering, MS Plates/coil, PE tapes for coating, electrodes for welding, etc.) required for the Works in the following Form MTL-1, clearly showing the total estimated quantities and the proposed quantities to be procured and delivered to the site each month. Bidders should ensure that the proposed procurement schedule is integrated with the requirements of the bidding documents, and matches with proposals described in the preceding Method Statement (Schedule IX) and Construction Schedule (Schedule X).

## Form MTL-1

Sl. No.	Type of Construction Material	Total Qty. Req'd.	Procurement Schedule (in Months from the Commencement Date)																		
			1	2	3	4	5	6	7	---	---	30									
A)	For collection system																				
B)	For Sewage Treatment Plant,																				
C)	For Pumping stations																				
D)	For Other works like SCADA , Environment planning, Public sensitization																				
E)	For Roads & Miscellaneous Civil Works																				

(Note: Bidders should provide the above schedule on a separate sheet showing all months from Month 1 to Month 30 inclusive for the Works Contract Period, and a similar, but suitably modified, format for the Operations and Maintenance Contract Period.)



## Schedule XI

### Subcontracting

#### Schedule of Subcontractors

The Bidder shall enter in this Schedule a list of the sub-components and approximate value (in terms of percentage) of the work for which he proposes to use subcontractors, together with the names and addresses of the proposed subcontractors including specialist subcontractors. The Bidder shall also enter a statement of similar works previously executed by the proposed subcontractors, including description, location and value of work, year completed, and name and address of the Employer/ Employer's Representative. Notwithstanding such information the Bidder, if awarded the contract, shall remain entirely and solely responsible for the satisfactory completion of the Works.

Components Proposed to be Executed through Subcontracts	Approximate Value (% only)	Name and Address of Proposed Subcontractor	Whether Specialist Sub-contractor or Not	Statement of Similar Works Executed within last 10 years (Documentary Proof to be Enclosed)

## Schedule XII

**Manufacturers, Suppliers and Vendors**

The Bidder shall provide details on the proposed manufacturers / vendors / suppliers of major items of pipes , valves cement, Sewage treatment plant ,materials, plant and equipment (such as Valves ,cement, steel reinforcement, shuttering, MS Plates/coil, PE tapes for coating, electrodes for welding, etc.) that are to be incorporated into the Permanent Works.

Sl. No.	Description of Item (Material / Plant / Equipment)	Name and Address of Manufacturer/Supplier/Vendor	Year of Establishment/ Incorporation	ISO Certified
<b>A)</b>	For collection system			
				Yes/No
				Yes/No
				Yes/No
<b>B)</b>	For Sewage Treatment Plant,			
				Yes/No
				Yes/No
				Yes/No
<b>C)</b>	For Pumping stations			
				Yes/No
				Yes/No
				Yes/No
<b>D)</b>	For Other works like SCADA , Environment planning, Public sensitization			
				Yes/No
				Yes/No
				Yes/No
<b>E)</b>	For Roads & Miscellaneous Civil Works			
				Yes/No
				Yes/No
				Yes/No

**Schedule XIII****Quality Assurance and Quality Control Plan**

The Bidder shall provide his proposed Quality Assurance and Quality Control (QAQC) Plan which describes the type, frequency and procedure of tests to be done on sites; type, frequency and procedure of tests to be done in pipe manufacturing units at site, if applicable; type, frequency and procedure of tests to be done at manufacturers' locations outside the sites; all parameters to be measured in these tests; permissible limits of such parameters; details of laboratories to be established at sites; details of testing equipments & machines and their calibration schedules; details of the Bidder's internal systems for assuring quality control at the manufacturers' outside the sites; details of qualifications and experience of the Quality Control professionals to be deployed for the entire project; and the systems of Quality Audit to be instituted for systematic and professional management as well as adherence with the highest standards of quality of all construction works.

The Bidder shall provide separate descriptions of its proposed QA/QC plan during the design and construction phase, and the subsequent operations and maintenance phase.

The Bidder shall also provide copies of the company's standard rules and regulations regarding quality assurance and quality control procedures for works in general and works of a similar nature.

**Schedule XIV****Safety Plan**

The Bidder shall describe his proposed Safety Plan which shall be developed to ensure zero fatal accidents and zero hazardous incidents/occurrences in all construction works, including descriptions of the company's standard policies and procedures regarding its site organization and procedures, methods and frequency of conducting safety audits at the Site(s), record keeping and reporting, providing safety training for its personnel, issue and mandatory use of safety equipment, details of the qualifications and experience of the Bidder's safety officers to be deployed at the Site(s), etc.

The Bidder shall provide separate descriptions of its proposed safety plan during the design and construction phase, and the subsequent operations and maintenance phase.

The Bidder shall also provide copies of the company's standard rules and regulations regarding safety procedures.

**Schedule XV****Environmental Quality Management Plan**

The Bidder shall provide details of its proposed environmental management plan in sufficient detail so as to demonstrate the procedures that will be used to ensure that the environmental concerns and requirements as set forth in Section 2 , Employer's Requirements, are satisfactorily met.

The Bidder shall provide separate descriptions of its proposals for minimizing any adverse environmental impacts/effects during the design and construction phase, and the subsequent operations and maintenance phase.

Schedule XVI

**Schedule of Recommended Consumables ,Spare Parts and Tools**

The Employer has, in other Sections of this bid document, provided lists of mandatory spare parts that the Bidder will be required to supply, and which will form a part of the Bidder’s quotation under the Schedule of Prices. The purpose of providing this list of recommended spare parts and tools is to provide the Bidder with an opportunity to indicate what additional spare parts and/or specialized tools it recommends be procured in order to ensure satisfactory and uninterrupted operation of the plant and facilities to be constructed under this MBMC Underground Sewerage Scheme Project.

The Bidder shall provide an un-priced list of the recommended spare parts and tools for each type of plant and Equipment intended for use in the permanent works and also the details of the sources of the spare parts and tools, to the extent practicable. The costs of the recommended spare parts and tools are to be provided in Section 5B, Financial Proposal, but will not be considered during bid evaluation. The Bidder shall note, however, that the Employer will not be under any obligation to purchase any or all of the recommended spare parts or tools, and that selection of the type and/or quantity of any of the recommended spare parts or tools will be at the Employer’s sole option.

Sl. No.	Description of the Item(s)	Quantity

