



# TENDER DOCUMENT FOR SEWERAGE WORKS OF NAGAR PALIKA PARISHAD BETUL

## AMRUT 2.0

*Directorate Urban Administration & Development, M.P., Bhopal*

**Palika Bhawan, Shivaji Nagar, Bhopal – 462016**

**OFFICE OF THE NAGAR PAALIKA PARISHAD BETUL**

**APPENDIX**

**TENDER DOCUMENT**

**(FORM 'F' LUMP SUM TENDER FOR SEWERAGE RELATED WORKS)**

**NIT Number and Date : 2 2 6 1 Dated 02/06/2026**

**Agreement Number and Date : \_\_\_\_\_**

**NAME OF WORK : SEWERAGE PROJECT OF NAGAR PALIKA  
PARISHAD BETUL UNDER AMRUT 2.0**

**Name of the Employer : \_\_\_\_\_**

**Name of the Contractor : \_\_\_\_\_**

**Probable Amount of Contract**

**(Rs. In Figure) : Rs. 8538.38 Lakh**

**(Rs. In Words) : Rupees Eighty Five Crore Thirty Eight Lakh Thirty Eight  
Thousand only**

**Contract Amount**

**(Rs. In Figure) : \_\_\_\_\_**

**(Rs. In Words) : \_\_\_\_\_**

**Stipulated Period of Completion: 24 months including rainy season**

## Table of Contents

Section No	Particulars	Page No
Section 1	NIT	04
Section 2	Instructions to Bidders (ITB)	07
	Bid Data Sheet	15
	<b>Annexure-A to M1</b>	
	Annexure - A- Key Dates	17
	Annexure –B- Affidavit	18
	Annexure –C- Pre-Qualification Criteria	19
	Annexure –D- Special Eligibility Criteria	20
	Annexure –E- Specifications	21
	Annexure –F- Procedure for participating in E-tendering	22
	Annexure –G- Joint Venture	24
	Annexure –H- Organizational Details	26
	Annexure –I- Technical Proposal	27
	Annexure –J- Financial Bid	36
	Annexure –K- Materials to be issued by department	37
	Annexure –L- Letter of Acceptance (LOA)	38
	Annexure –M- Performance Security	39
	Annexure-M1-Format of BG Confirmation to Bank	40
Section 3	<b>Table of Clauses</b>	
	Part-I General Conditions of Contract (GCC)	41
	Contract Data	55
	Annexure-N to W	
	Annexure –N- Drawings	58
	Annexure –O- Detail of milestones	59
	Annexure –P- Compensation of Delay	60
	Annexure –Q- List of Equipment for Quality Control Lab	61
	Annexure –R- Price Adjustment	62
	Annexure –S- Bank Guarantee form for Mobilization Machinery Advance	66
	Annexure –T- Bank Guarantee Form for Secured Advance	67
	Annexure –U- Physical Completion Certificate	68
	Annexure –V- Final Completion Certificate	69
	Annexure –W- Salient Features of Labour laws	70
	Part-II Special Conditions of Contract (SCC)	76
Section 4	Price Break-up Schedule	81
Section 5	Agreement Form	86
Section 6	<b>Annexure - X to Z</b>	
	Annexure –X- Billing Break-Up	87
	Annexure –Y- Estimate for Operation and Maintenance	88
	Annexure – Z- Operation and Maintenance (Service Level Agreement)	94

**OFFICE OF THE OFFICE OF THE NAGAR PALIKA PARISHAD BETUL (M.P.)****(SECOND CALL)****Section – 1****Notice Inviting e-Tenders**

NIT No. 2261

Date: 02.06.2026

Online Lump sum bid for the following AMRUT 2.0 works are invited from registered contractors and firms of repute fulfilling eligibility criteria:

S. No.	Name of Work	ProbableAmount of Contract (In Lakh)	Completion Period (in months)
1	<p>Survey, Soil investigation, Design, Construction and commissioning of Sewerage System in NAGAR PALIKA PARISHAD BETUL area including.</p> <ol style="list-style-type: none"><li>1. Providing, laying, jointing, testing and commissioning of sewerage pipeline including construction of manholes and sewer appurtenances with road restoration works complete</li><li>2. Providing house sewer chambers and laterals for connecting sewer to consumer sewer lines.</li><li>3. Providing House Sewer Connection for approximately 17655 Nos including construction of collecting chamber, Public toilets, and institutions etc.</li><li>4. Design, construction, testing and commissioning of 3 Nos Intermediate Sewage Pumping station IPS-1 of capacity of 4.97 MLD, IPS-2- 5.38 MLD and IPS-3 - 4.03 MLD with pumping systems including all necessary civil, electromechanical and instrumentation works complete for successful completion of the project.</li><li>5. Design, construction, testing and commissioning of 1 no. Sewage Treatment Plant (STP) of capacity 16.0 MLD with main pumping station (MPS) including all necessary civil, electromechanical and instrumentation works complete for successful completion of the project.</li><li>6. Supply installation testing commissioning of complete Electromechanical system. which includes but not limited to suitable rating of Transformer, DG Set, substation, HT &amp; LT transmission line, All pump motor set, all HT (VCB Panel), LT panels, all VFD's &amp; starter panels, APFC panels, EOT &amp; mechanical cranes, all pipes and fittings, all valves (mechanical and motorized), earthing, cable tray arrangement etc. in line with CPHEEO requirement, complete in all respect. for intermediate pumping station and Sewage treatment plants.</li><li>7. Preparation of maps of proposed sewerage network and property connection to be laid under the contract with GIS mapping.</li><li>8. Supply installation testing and commissioning of PLC- SCADA and OCMS for monitoring and controlling of sewerage system as per requirement of NGT guideline and PCB norms.</li><li>9. Supply installation testing commissioning of complete instrumentation system applicable for STP area and IPS area as per CPHEEO manual and system requirement.</li><li>10. Operation and Maintenance of the scheme for 5 years and 5 years defect liability after successful commissioning of scope of complete works.</li></ol>	Rs. 8538.38	24 months including rainy season

1. Interested Bidder can view the NIT on website, [www.mptenders.gov.in](http://www.mptenders.gov.in) and [www.mpurban.gov.in](http://www.mpurban.gov.in)
2. The Bid Document can be purchased only Online from 10:30 Hrs of 03/06/2026 to 17:30 Hrs of 03/07/2026
3. Amendment to NIT, if any, would be published on website only, and not in Newspaper.
4. GST shall be payable as per Govt. rules.

The initial period of 5 year after the issuance of completion or commissioning certificate shall be treated as Defect Liability Period (DLP). During Defect Liability Period Contractor shall Operate and Maintain the proposed Scheme.

The payment against the O&M shall be made every year on satisfactory upkeep and running of the system at percentage rate of the sanctioned Bid cost with an increment of 6 % every succeeding year.

Chief Municipal Officer  
**NAGAR PALIKA PARISHAD BETUL**

## Notice Inviting e-Tenders

### **OFFICE OF THE NAGAR PALIKA PARISHAD BETUL DISTT BETUL**

NIT No. 2261

Date: 02.06.2026

Online Lumpsum bids for the following works under “**AMRUT 2.0**” (Estimated on UADD SOR w.e.f 02/08/2021 with latest amendment) are invited from registered contractors and firms of repute fulfilling eligibility criteria

S.No.	Name of Work	Probable amount of contract (Rs. In Lakh)	Earnest Money Deposit (EMD) (In Rs)	Cost of Bid Document (In Rs)	Time of Completion
1.0	<p>Survey, Soil investigation, Design, Construction and commissioning of Sewerage System in NAGAR PALIKA PARISHAD BETUL area including.</p> <ol style="list-style-type: none"> <li>1. Providing, laying, jointing, testing and commissioning of sewerage pipeline including construction of manholes and sewer appurtenances with road restoration works complete</li> <li>2. Providing house sewer chambers and laterals for connecting sewer to consumer sewer lines.</li> <li>3. Providing House Sewer Connection for approximately 17655 Nos including construction of collecting chamber, Public toilets, and institutions etc.</li> <li>4. Design, construction, testing and commissioning of 3 Nos Intermediate Sewage Pumping station IPS-1 of capacity of 4.97 MLD, IPS-2-- 5.38 MLD and IPS-3 --4.03 MLD with pumping systems including all necessary civil, electromechanical and instrumentation works complete for successful completion of the project.</li> <li>5. Design, construction, testing and commissioning of 1 no. Sewage Treatment Plant (STP) of capacity 16.0 MLD with main pumping station (MPS) including all necessary civil, electromechanical and instrumentation works complete for successful completion of the project.</li> <li>6. Supply installation testing commissioning of complete Electromechanical system which includes but not limited to suitable rating of Transformer, DG Set, substation, HT &amp; LT transmission line, All pump motor set, all HT (VCB Panel), LT panels, all VFD's &amp; starter panels, APFC panels, EOT &amp; mechanical cranes, all pipes and fittings, all valves (mechanical and motorized), earthing, cable tray arrangement etc. in line with CPHEEO requirement, complete in all respect. for intermediate pumping station and Sewage</li> </ol>	8538.38	42,69,195/-	50,000/-	24 months including rainy season.

	<p>treatment plants.</p> <p>7. Preparation of maps of proposed sewerage network and property connection to be laid under the contract with GIS mapping.</p> <p>8. Supply installation testing and commissioning of PLC- SCADA and OCEMS for monitoring and controlling of sewerage system as per requirement of NGT guideline and PCB norms.</p> <p>9. Supply installation testing commissioning of complete instrumentation system applicable for STP area and IPS area as per CPHEEO manual and system requirement.</p> <p>10. Operation and Maintenance of the scheme for 5 years and 5 years defect liability after successful commissioning of scope of complete works.</p>				
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1. All details relating to the Bid Document(s) can be viewed and downloaded from the website.
2. Bid document can be purchased after making online payment of portal fees through Credit/Debit/CashCard/internet banking.
3. At the time of submission of the Bid the eligible bidder shall be required to:
  - i) Pay the cost of Bid Document;
  - ii) Deposit the Earnest Money;
  - iii) Submit an affidavit.

Details can be seen in the Bid Data Sheet

**4. ELIGIBILITY FOR BIDDERS:**

- (a) At the time of submission of the Bid, the bidder should have valid registration with the Government of Madhya Pradesh, PWD. However, such bidders who are not registered with the Government of Madhya Pradesh and are eligible for registration can also submit their bids after having applied for registration with Government of Madhya Pradesh, PWD. However, such bidders who are not registered with the Government of Madhya Pradesh and are registered with Central Government, other State Governments, and PSUs are also eligible for submission of Bids.
- (b) The bidder shall be required to have valid registration with MPPWD in at the time of signing of the agreement.
- (c) Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of the earnest money deposit (EMD).

5. **Pre-qualification** – Prequalification conditions, wherever applicable, are given in the Bid Data Sheet.
6. **Special Eligibility** - Special Eligibility Conditions, if any, are given in the Bid Data Sheet.
7. The Bid Document can be Purchased Only Online from **10.30 Hrs 03.06.2026 to 17.30 Hrs 03.07.2026**. Other key dates may be seen in Bid data sheet.
8. Amendment to NIT, if any, would be published on website only, and not in Newspaper.
9. GST shall be payable as per Govt. rules.
10. The initial period of five years after completion shall be treated as Defect Liability Period (DLP). During DLP period bidder shall operate and maintain the proposed scheme. The payment against the O&M shall be made

every year on satisfactory upkeep and running of the system at percentage rate of the sanctioned Bid cost with an increment of 6 % every succeeding year as mentioned in Annexure -Y.

Chief Municipal Officer  
**NAGAR PALIKA PARISHAD BETUL**



**SECTION 2**  
**INSTRUCTIONS TO BIDDERS (ITB)**

**A. GENERAL**

**1. SCOPE OF BID**

The detailed scope of work, hereinafter referred to as "Work" is "Survey and Investigation, Preparation of detailed Design and Construction drawing, Construction and Commissioning of waste water collection (sewerage networks), treatment and disposal system (Sewerage Project) and its operation and maintenance **for the proposed** sewerage system of NAGAR PALIKA PARISHAD BETUL for a period of 10 years after successful completion of construction work. The initial period of **five** years after completion shall be treated as Defect Liability Period (DLP). A brief description of project is as given below,

**Background**

Betul city is a district headquarter located in the vicinity of Satpura Range of Madhya Pradesh.

- Population (as per 2011 census) is 103330
- The estimated population for the year 2055 is 183045
- The present number of households in NAGAR PALIKA PARISHAD BETUL is about 17655 Nos.
- The NAGAR PALIKA PARISHAD BETUL has under execution water supply project and the water @ 135 litres per capita per day (Lpcd) will be available for next 30 years' period.
- Base year- 2025
- Intermediate year -2040
- Design year- 2055

With the water availability of ensured @ 135 lpcd it is very important to have an integrated sewerage system in town for collection, treatment and safe disposal of generated waste water.

**Project**

NAGAR PALIKA PARISHAD BETUL wants to execute Sewerage Scheme for its 33 wards municipality area under **AMRUT 2.0**. The major works considered in the tender are listed below.

- i) Providing, laying and jointing of sewerage network of DWC-HDPE pipeline 200mm to 300 mm diameter and RCC NP4 pipeline of 350mm to 800mm diameter. The total length of sewerage network is 162 Km and households connections of about 17655 Nos.
- ii) Providing house sewer chambers and laterals for connecting households of consumers to sewer lines.
- iii) Providing house sewerage connections.
- iv) Design, construction, testing and commissioning of 3 Nos Intermediate Sewage Pumping Station (IPS) of followings. **The civil works shall be constructed for 30 years period and all mechanical & electrical components including pumping machineries shall be provided for 15 years period.**
  1. IPS-1 of 4.97 MLD capacity,
  2. IPS-2 of 5.38 MLD capacity and
  3. IPS-3 of 4.03 MLD capacity
- v) Design, construction, testing and commissioning of 1 no. Sewage Treatment Plant of 16 MLD capacity
- vi) **PLC- SCADA & Automation** works like Online Continuous monitoring System (OCMS) as per CPCB latest guidelines & for monitoring & controlling of sewerage system.
- vii) Construction of Intermediate pumping station and sewerage treatment plant. **Supply installation testing commissioning of complete Electromechanical system which includes but not limited to suitable rating of Transformer, DG Set, substation, HT & LT transmission line, All pump motor set, all HT (VCB Panel), LT panels, all VFD's & starter panels, APFC panels, EOT & mechanical cranes, all pipes and fittings, all valves (mechanical and motorized), earthing, cable tray arrangement etc in line with CPHEEO requirement, complete in all respect. for intermediate pumping station and Sewage treatment plants.**

- viii) Operation and maintenance (O&M) for the proposed works sewerage system for a period of **five** years after completion of construction work. The payment against the O&M shall be made every year on satisfactory upkeep and running of the system at percentage of the sanctioned Bid cost with an increment of 6 % every succeeding year as mentioned in **Annexure –Y**.
- ix) **Supply installation testing commissioning of complete instrumentation system applicable for STP area and IPS area as per CPHEEO manual and system requirement.**
- x) Providing and laying of HT feeder connection for intermediate pumping station and Sewage treatment plants.**
- xi) Submission of plan for reuse of treated water

This tender hereby is being invited for the execution of works for the sewerage scheme to fulfill for probable population of town in *year 2040 / 2055*. Therefore, the bidder shall examine the detail design and drawing as per DPR and shall revalidate the same, as may be required for preparation of detailed construction drawing as per actual working conditions including minimum obstruction to existing utilities, road ways and railways.

On successful completion of the project as per best engineering practices the bidder shall operate and maintain the proposed works (Proposed components) system in Amrut 2.0 scheme (including proposed components) system for **next five years**. Therefore, bidder shall adopt the best design practice to develop the construction drawings and shall carryout quality construction for timely implementation of the works.

The work shall have to be executed in accordance with the drawings (prepared by contractor & approved by the competent authority), technical specifications specified in the bid data / contract data and shall have to meet high standards of workmanship, safety and security of workmen and works.

The Bidder is required to revalidate the available survey, design and estimation data and accordingly prepare construction details including drawings and take approval of all detailed designs and construction drawings for all components of the projects from the office of Chief Engineer / Engineer-in-Chief, Directorate, Urban Administration and Development, Bhopal.

The Detailed Project Report (DPR) for the work is available for viewing by the Bidder. However, it is clarified that the data and detailing of project in the DPR could be taken as base data only. The bidder is required to make his own assessment of work before bidding & the bidder shall not be entitled for any claim on account of any change in works due to design to complete the work as per the scope of work.

The essence of this sewerage project shall be,

- a) The collection of sewage including household connections to achieve the desired flow in the sewer lines for generating self-cleansing velocity in sewer lines as per CPHEEO Manual.
- b) Treatment of the sewage to prevailing standards as per latest NGT norms so that the treated water may be reused /disposed of as per accepted practices.
- c) Reconstruction of roads as directed by engineer-in-charge.

Therefore,

- i) Bidder shall carryout detail survey of proposed network, assessment of existing site conditions and sewerage network (if available) and soil investigations (including soil test) as may be required for preparation of detail designs and drawings. If any area is left out in the existing network, then contractor has to consider it while designing the network. Left out connections in the existing network will have to be taken into account.
- ii) The bidder by the completion of construction shall ensure household, public toilets and institutional connections (Hospitals, Schools, and Colleges etc). It shall be the responsibility of the bidder to ensure that sewage connection shall be made for every individual households (all waste water outlets i.e. waste water generated from toilets, washroom and kitchen including outlet of septic tank if any) so as to collect the raw sewage. For making the individual sewage connection, due considerations shall be given to access to the household and accordingly side lanes and back lanes are to be identified and used. Existing useful sewer lines, if found, shall also be suitably integrated with the proposed sewerage system.

Contractor shall ensure that all waste water generated from the proposed area shall be tapped & get treated.

- iii) As far as possible the entire system shall be designed and operated on the principles of gravity flow. The **Price Breakup Schedule** attached with the present invitation is based on detailed survey, investigation, tentative designing, and estimation as given in the detailed Project Report. The Bidder shall examine the Design, DPR and its contents. For achieving the desired parameters and desired deliverables, the Bidder shall carry out necessary survey and investigations and would prepare the detail designs and drawings etc. as may be required for collection of sewage including pumping stations or other structures as required on best engineering practices. The Bidder shall also prepare detailed construction drawings as per actual working conditions including usage of back lanes and side lanes and minimum obstruction to existing utilities, roadways, and railways.
- iv) The Bidder shall make its own choice for process of Sewage Treatment but the technology for Sewage Treatment should be proven technology for last 5 years in India for a capacity not less than 30 % the capacity of treatment proposed in the technical qualification criteria and this experience should be fulfilled by the technology provider. The proposed technology for the biological treatment in the proposed Sewage treatment plant should be based on,
  - a. The availability of land already identified by the Municipality/Municipal Council.
  - b. Effluent characteristics should meet the standards set out by NGT, MoEF and CPCB for discharging the treated water in inland water resources or disposal on land.
  - c. Reuse of the treated water in community purposes like gardening and fire-fighting etc. Also use for irrigation and industrial purposes should be explored.

The Detailed Project Report (DPR) for the work is available for viewing by the Bidder. However, it is clarified that the data and detailing of project in the DPR could be taken as base data only. The bidder is required to make his own assessment of work before bidding & the bidder shall not be entitled for any claim on account of any deficiency / discrepancy in the data /information available in DPR.

- v) **NAGAR PALIKA PARISHAD BETUL** shall make available the right of way and the land area allocated i.e. Nagpur Naka Road 7000 sqm for setting up of sewage treatment plant (STP) and 120 sqm for each Intermediate sewage pumping station (IPS) and all the appurtenant structures.  
The bidders design shall aim at optimizing the land requirement. This shall also include of modules of the treatment process and the modular approval to capacity addition if it is adopted in the proposal. The bidder shall visit the proposed location shown in DPR and make the proposal according. If there is any changes in location **NAGAR PALIKA PARISHAD BETUL** will not pay any extra cost.
- vi) Power consumption shall not exceed as provided in tender document. If contractor feels to raise query related to power consumption, then he can raise query at the time of pre-bid meeting with supporting documents. The Bidder shall further provide the proposal for improving efficiency in terms of lower power consumption. The Bidder shall ensure necessary measures as given in annexure Y for improving efficiency in terms of optimum power consumption

## **2. General Quality of Work:**

The work shall have to be executed in accordance with the drawings prepared by Contractor and approved by the competent authority, technical specifications specified in the Bid Data Sheet/Contract Data, and shall have to meet standards of workmanship, safety and security of workmen and works.

## **3. PROCEDURE FOR PARTICIPATION IN E-TENDERING**

The procedure for participation in e-tendering is given in the Bid Data Sheet.

## **4. ONE BID PER BIDDER**

- 4.1 The bidder can be an individual entity or a jointly (if permitted as per Bid Data sheet). In case the J.V. is permitted, the requirement of joint venture shall be as per the Bid Data Sheet.

- 4.2 No bidder shall be entitled to submit more than one bid whether jointly or severally. If he does so, all bids wherein the bidder has participated shall stand disqualified.
- 4.3 In case of Bid submitted by the Joint Venture all the members should be essentially registered with the Centralized MPPWD, Government of Madhya Pradesh.
- 4.4 For Electrical works successful bidder shall employ 'A' Class registered Electrical Contractor for Electrical Works.

**5. Cost of Bidding**

The bidder shall bear all costs associated with the preparation and submission of his bid, and no claim whatsoever for the same shall lie on the **NAGAR PALIKA PARISHAD BETUL**.

**6. Site Visit and examination of works**

The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility. All/any information that may be necessary for preparing / submission of the bid and entering into a contract for construction of the work. All costs shall have to be borne by the bidder.

**B. BID DOCUMENTS**

**7. CONTENT OF BID DOCUMENTS**

The Bid Document comprises of the following documents:

1. NIT with all amendments.
2. Instructions to Bidders,
3. Conditions of Contract:
  - i. Part I General Conditions of Contract and Contract Data; and
  - ii. Part II Special Conditions of Contract.
4. Specifications
5. Drawings
  - 5.1 Project Location map
  - 5.2 Concept map and location of SPS/MPS
  - 5.3 Location/ Coordinates for STP's
  - 5.4 Typical arrangement drawing of Precast Manhole
  - 5.5 Typical arrangement drawing of Cast in situ Manhole
  - 5.6 Typical details of SFRC Manhole frame and cover
  - 5.7 Typical details of House Connection for sewerage System
  - 5.8 Typical arrangement drawing of SPS/PS
  - 5.9 Typical arrangement drawing of Manhole
  - 5.10 Process flow diagram for STP
  - 5.11 Sewer Network drawing of City/Catchment
6. Price Breakup Schedule (Estimated cost breakup)
7. Billing Breakup (Payment Schedule)
8. Technical and Financial Bid
9. Letter of Acceptance
10. Agreement and
11. Any other document(s), as specified.

8. The bidder is expected to carefully examine all instructions, conditions of contract, the contract data, forms, terms and specifications, estimated cost Breakup Schedule, forms and drawings in the Bid Document. Bidder shall be solely responsible for any implication in case of failure to do so.

**9. Pre-Bid Meeting**

Wherever the Bid Data Sheet provides for pre-bid meeting:

- 9.1 Details of venue, date and time would be mentioned in the Bid Data Sheet. Any change in the schedule of pre-bid meeting would be communicated on the website only, and intimation to bidders would not be given separately.
- 9.2 Any prospective bidder may raise his queries and/or seek clarifications in writing before or during the pre-bid meeting. The purpose of such meeting is to clarify issues and answer questions on any matter that may be raised at that stage. The Employer shall give all such clarifications as are necessary for understanding of scope of work.
- 9.3 The Minutes of the pre-bid meeting including the summary of the questions raised and the responses will be uploaded on the website.
- 9.4 Pursuant to the pre-bid meeting if the Employer deems it necessary to amend or modify the Bid Document, it shall be done by issuing amendment online only (on website).

**10. Amendment of Bid Documents**

- 10.1 Before the deadline for submission of bids, the Employer may amend or modify the Bid Documents by publication of the same on the website.
- 10.2 All amendments shall form part of the Bid Document.
- 10.3 The Employer may, at its discretion, extend the last date for submission of bids by publication of the same on the website.

**C. PREPARATION OF BID**

11. The bidders have to prepare their bids online, encrypt their Bid Data in the Bid Forms and submit Bid Seals (Hashes) of all the envelopes and documents related to the Bid required to be uploaded as per the time schedule mentioned in the key dates of the Notice Inviting e-Tenders after signing of the same by the Digital Signature of their authorized representative.

**12. DOCUMENTS COMPRISING THE BID**

The bid submitted online by the bidder shall be in the following parts:

**Part 1** – This shall be known as **Envelope A** and would apply for all bids. **Envelope A** shall contain the following as per details given in the Bid Data Sheet:

- i) Payment of the cost of Bid Document.
- ii) Earnest Money Deposit (EMD) and
- iii) An affidavit duly notarized.

**Part 2** – This shall be known as **Envelope B** and required to be submitted only in works where pre-qualification conditions and/or special eligibility conditions are stipulated in the Bid Data Sheet. Online **Envelope B** shall contain a self-certified sheet duly supported by documents to demonstrate fulfillment of pre-qualification conditions, Joint venture details, Registration number or proof of application for registration, organizational details and special eligibility criteria in format given in the Bid Data sheet.

**Part 3** – This shall be known as **Envelope C** and would apply to all bids. **Envelope C** shall contain financial offer in the format generated on portal at the time of bid submission.

**13. LANGUAGE**

The bid as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer shall be in English or Hindi. Supporting documents and printed literature that are part of the Bid may

be in another language provided they are accompanied by an accurate translation of the relevant passages in English. In such case, for the purposes of interpretation of the bid, such translation shall govern.

#### **14. TECHNICAL PROPOSAL**

14.1 Only, in case of bids with pre-qualification conditions defined in the Bid data sheet, the Technical Proposal shall comprise of formats and requirements given in the Bid Data Sheet.

14.2 All the documents / information enclosed with the technical proposals should be self-attested and certified by the Bidder. The Bidder shall be liable for forfeiture of his earnest money deposit, if any document / information are found **false/ fake/ untrue** before acceptance of Bid. If it is found after acceptance of the Bid, the sanctioning authority may at his discretion forfeit his performance security/guarantee, security deposit, enlistment deposit and take any other suitable action.

#### **15. FINANCIAL BID**

- i. The bidder shall have to quote rate in format referred in Bid Data sheet, as per the bid amount, overall amount would be arrived at in relation to the NIT amount. The overall amount would apply to the cost of various component of works.
- ii. Bid offer shall be quoted in figures as well as in words. If any difference in figures and words is found, lower of the two shall be taken as valid and correct.
- iii. The bidder shall have to quote rate inclusive of all duties, taxes, royalties and other levies, except Goods and Service Tax (GST) which will be paid separately to the contractor with each RA Bill at the time of Payment. The Employer shall not be liable for any duties taxes, royalties and levies (except GST).
- iv. The material along with the units and rates, which shall be issued, if any, by the department to the contractor, is mentioned in the Bid Data Sheet.

#### **16. PERIOD OF VALIDITY OF BIDS**

The bids shall remain valid for a period specified in Bid Data Sheet after the date of “close for bidding” as prescribed by the Employer. The validity of the bid can be extended by mutual consent in writing.

#### **17. EARNEST MONEY DEPOSIT (EMD)**

- 17.1 The Bidder shall furnish, as part of the Bid, Earnest Money Deposit (EMD), of the amount specified in the Bid Data Sheet.
- 17.2 The EMD/ Bid Security shall be submitted only online using options available in the tender portal within the specified time limit. Bidders are advised to process it well in advance, no claim shall be entertained due to delay in online transactions via payment gateway/ banking portal.
- 17.3 Bid not accompanied by EMD shall be liable for rejection as non-responsive.
- 17.4 EMD of bidders whose bids are not accepted will be returned within ten working days of the decision on the bid.
- 17.5 EMD of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the Bank Guarantee of required value for Performance Security.
- 17.6 Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of the earnest money deposit.

#### **D. SUBMISSION OF BID**

- 18 The bidder is required to submit digitally signed bid i.e., Envelop A, B and C online only, No physical submission of the bid will be accepted except in exceptional cases under clause 19.7

## **E. OPENING AND EVALUATION OF BID**

### **19 PROCEDURE**

- 19.1 Envelope 'A' shall be opened first online at the time and date notified and its contents shall be checked. In cases where Envelope 'A' does not contain all requisite documents, such bid shall be treated as non-responsive, and Envelope B and /or C of such bid shall not be opened.
- 19.2 Wherever Envelope 'B' (Technical Bid) is required to be submitted, the same shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Envelope 'B'. Envelope 'C' (Financial Bid) of bidders who are not qualified in Technical Bid (Envelope 'B') shall not be opened.
- 19.3 Envelope 'C' (Financial Bid) of the qualified bidders shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Envelope 'C'.
- 19.4 After opening Envelope 'C' all responsive bids shall be compared to determine the lowest evaluated bid.
- 19.5 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all the bids at any time prior to contract award, without incurring any liability. In all such cases reasons shall be recorded.
- 19.6 The Employer reserves the right of accepting the bid for the whole work or for a distinct part of it.
- 19.7 "In exceptional case, if physical submission of certain documents is found essential, then expressed prior permission must be obtained in writing by the tender issuing authority from an authority, as authorized by the State Government. In such a case, such documents are required to be submitted physically at the place and date specified in the Bid Data Sheet. In case of any mismatch in the documents submitted in the physical form and that uploaded online, or if the contractor fails to submit the document physically, the bid shall be liable for rejection as non-responsive."
- 19.8 During Bid evaluation, the employer or its representative may at its discretion ask the bidder for a clarification of its Bid. The request for clarification and the response shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted.

### **20. Confidentiality**

- 20.1 Information relating to examination, evaluation, comparison and recommendation of contract award shall not be disclosed to bidders or any other person not officially concerned with such process until final decision on the bid.
- 20.2 Any attempt by a bidder to influence the Employer in the evaluation of the bids or contract award decisions may result in the rejection of its bid.

## **F. AWARD OF CONTRACT**

### **21. Award of Contract**

The Employer shall notify the successful bidder by issuing a 'Letter of Acceptance' that his bid has been accepted. The original copy of affidavit will have to be submitted by the successful bidder at the time of signing of the contract

### **22. Performance Security and Additional Performance Security**

- 22.1 Prior to signing of the Contract, the bidder to whom LOA has been issued shall have to furnish Performance Security (3% of the Contract Amount, Valid up to 3 months from the date of issuance of Completion Certificate

after finalization of delay Analysis, subjected to submission of BG for DLP Period) and Additional Performance Security of Schedule Commercial Bank of the amount, form, and duration, etc. as specified in the bid data sheet.

- 22.2** If the Bid, which results in the lowest evaluated bid price, is seriously unbalanced in the opinion of the employer, the employer after evaluation, taking into consideration the schedule of the estimated contract price may require Additional Performance Security from the successful bidder for such unbalanced bid price. Additional performance security as mentioned in the Bid Data Sheet shall be levied in case the bidder gives an unbalanced bid.

### **23. Signing of Contract Agreement**

- 23.1 The successful bidder shall have to furnish Performance security and sign the contract agreement within 15 days of issue of LOA.
- 23.2 The signing of contract agreement shall be reckoned as intimation to commencement of work. No separate work order shall be issued by the Employer to the contractor for commencement of work.
- 23.3 In the event of failure of the successful bidder to submit Performance Security and additional performance security (if any) or sign the Contract Agreement, his EMD shall stand forfeited without prejudice to the right of the employer for taking action against the bidder.

- 23.4 The bidder shall produce original copies of the work order, agreement, completion certificate, and all other relevant documents submitted at the time of bid submission for verification of the eligibility criteria.

Failing which, penal action as per the applicable tender conditions and provisions of law shall be initiated against the bidder, including rejection/disqualification of the bid and any other action deemed appropriate by the Employer.

### **24. CORRUPT PRACTICES**

The Employer requires that bidders observe the highest standard of ethics during the procurement and execution of contracts. In pursuance of this policy, the Employer:

- i. may reject the bid for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract; and
- ii. may debar the bidder if he is being blacklisted by any Department of State Government or Government of India for non-performance / substandard execution or any other reason what so ever in similar type of works.
- iii. may debar the bidder declaring ineligible, either indefinitely or for a stated period of time, to participate in bids, if it at any time determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing, a contract.

For the purposes of this provision, the terms set forth above are defined as follows:

- a. "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
- b. "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- c. "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- d. "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

### **E. HISTORY OF LITIGATION AND CRIMINAL RECORD**

The bidder must provide accurate information on any litigation, criminal proceeding or arbitration resulting from contracts (or otherwise) completed or under execution by him over the last 10 years. A history of arbitration awards against the applicant or any partner of the Joint Venture must be furnished.



In case the bidder has not provided such information and it comes to the notice of the employer, the tender will be rejected at whatsoever stage. In such cases, all the losses that will arise out of this issue will be recovered from the bidder/contractor and he will not have any defence.

Even though the bidder meets the criteria, it shall be disqualified, if it has made misleading or false representation in the form, statements and attachments submitted and/ or record of poor performance such as abandoning the work, not properly completing the contract, inordinate delays in completion, or financial failures etc.

If at any stage of tender evaluation or after award of the contract, it is found that the bidder has:

- Submitted false, misleading, or incomplete information, or
- Suppressed material facts, or
- Has a record of poor performance, including abandonment of work, inordinate delays, non-completion of contracts, or financial failure, then the bidder shall be disqualified / contract shall be terminated, even if otherwise meeting qualification criteria.

Note : History of Litigation and Criminal Record to be filled by the bidder (Refer annexure B1)

**[End of ITB]**

## Bid Data Sheet

### General

S.No.	Particulars	Data	
1	Office inviting Tender	Chief Municipal Officer , <b>NAGAR PALIKA PARISHAD BETUL</b>	
2	NIT No	<b>2261</b>	
3	Date of NIT	02/06/2026	
4	Bid document download available from date & time	From 03.06.2026 10:30 Hrs.	To 03.07.2026 17:30 Hrs.
5	Website link	<a href="http://www.mptenders.gov.in">www.mptenders.gov.in</a> <a href="http://www.mpurban.gov.in">www.mpurban.gov.in</a>	

### For Section 1 - NIT

Clause reference	Particulars	Data	
1	Portal fees	As Applicable	
2	Cost of bid document	<b>Rs. 50,000/- (Payment to be made through online)</b>	
	Cost of bid document payable to	Chief Municipal Officer, <b>Nagar Palika Parishad Betul</b>	
	Cost of bid document in favor of	Chief Municipal Officer, <b>Nagar Palika Parishad Betul</b>	
3	Affidavit	Annexure B	
4	Pre-qualifications required	Yes	
	If Yes, details	Annexure C	
5	Special Eligibility	Yes	
	If Yes, details	Annexure D	
6	Key Dates	Annexure A	

### For Section 2 – ITB

Clause reference	Particulars	Data	
1	Name of work	Sewerage Project <b>of Nagar Palika Parishad Betul</b>	
2	Specifications	Annexure E	
3	Procedure for participation in e-tendering	Annexure F	
4	Whether Joint-venture is allowed	Yes	
	If yes, requirement for Joint venture	Annexure G	
5	Pre bid meeting to held	Yes	
	If Yes, Date, Time & Place	Date: 25/06/2026 Time from: 12.00 Hrs. Place: The Office of the Executive Engineer mata mandir Bhopal	

6	<b>Envelope - A</b> containing: (i) Cost of Bid Document (Payment to be made through online) (ii) EMD (Payment to be made through online) (iii) An affidavit duly notarized as per Annexure-B	Online only
7	Envelope-B Technical Proposal	i. Annexure – I and ii. Annexure – I (Format I-1 to I-5) iii. Registration number or proof of application for registration and organizational details as per Annexure 'H'. iv. Joint venture agreement if any v. Special eligibility criteria vi. An affidavit duly notarized as per Annexure –B1
8	Envelope-C Financial Bid	Annexure – J
9	Materials to be issued by the department	Annexure – K (Not applicable)
10	Period of Validity of Bid	180 Days
11	Earnest Money Deposit	Rs 42,69,195/-
12	Forms of Earnest Money Deposit	<b>(Payment to be made through online)</b>
13	EMD valid for a period of	Not less than 180 days
14	Payment must be drawn in favor of	Chief Municipal Officer, <b>Nagar Palika Parishad Betul</b>
15	Letter of Acceptance (LOA)	Annexure L
16	Amount of Performance Security	<b>1) For Capex Cost</b> - 3% of the Contract Amount, Valid up to 3 months from the date of issuance of Completion Certificate after finalization of delay Analysis, subjected to submission of BG for O&M Period. <b>2) For O&amp;M</b> - 10% of O&M amount valid up to 3 months beyond O&M period.
17	Additional Performance Security, if Any	For Unworkable Rates :- Performance Security to be deposited (@ equal to: (a) If rates are below 10% and up to 20% value equal to the percentage below 10% of probable amount of contract (PAC). (b) If rates are below 20% - as per (a) and twice the value below 20% of probable amount of contract (PAC).
18	Performance security in the format	Annexure M
19	Performance security in favor of	Chief Municipal Officer, <b>Nagar Palika Parishad Betul</b>

20	Performance security valid up to	<p><b>Capital cost:</b> Valid up to 3 months from the date of issuance of Completion Certificate after finalization of delay Analysis, subjected to submission of BG for O&amp;M Period.</p> <p><b>O&amp;M :</b> Valid up to 3 months beyond O&amp;M period.</p>
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(See clause 1, 7 of Section 1 NIT)

**Key Dates**

S.No	Works Department Stage	Bidder's Stage	Start		Expiry		Envelopes
			Date	Time	Date	Time	
1		Purchase of Tender-Online	03/06/2026	10.30	03/07/2026	17.30	
2		Bid Submission- Online	03/06/2026	10.35	03/07/2026	17.30	
3	Mandatory submission Open (Envelope -A)		03/07/2026				Envelope A
4	Technical proposal open (PQ Envelope-B)		03/07/2026				Envelope B
5	Financial Bid Open (Envelope C)		To be notified				Envelope C

**|| AFFIDAVIT ||**  
**(To be contained in Envelope A)**  
**(On Non Judicial Stamp of Rs. 200.00)**

I/we \_\_\_\_\_ who is / are \_\_\_\_\_ (status in the firm / company) and competent for submission of the affidavit on behalf of M/s. \_\_\_\_\_ (contractor) does solemnly affirm an oath and state that:

I/we are fully satisfied for the correctness of the certificates/records submitted in support of the following information in bid documents which are being submitted in response to notice inviting e-tender No. \_\_\_\_\_ for \_\_\_\_\_ (name of work) dated \_\_\_\_\_ issued by the \_\_\_\_\_ (name of the ULB).

I/we are fully responsible for the correctness of following self-certified information/ documents and certificates:

1. That the self-certified information/digitally signed documents given in the bid document are fully true and authentic.
2. That:
  - a. Earnest money deposit, cost of bid document and other relevant documents provided are authentic.
  - b. Information regarding financial qualification and annual turn-over, submitted online is correct.
  - c. Information regarding various technical qualifications submitted online is correct.
3. No close relative of the undersigned and our firm/company is working in the department.

OR

Following close relatives are working in the department:

Name \_\_\_\_\_ Post \_\_\_\_\_ Present Posting \_\_\_\_\_

**Signature with Seal of the Deponent (bidder)**

I/ We, \_\_\_\_\_ above deponent do hereby certify that the facts mentioned in above paras 1 to 3 are correct to the best of my knowledge and belief. In the event of any information is found to be incorrect/untrue or found violated, then without giving any prior notice our bid shall be liable for rejection or termination of contract, without prejudice to any other rights of remedy including the forfeiture of the bid security/performance security.

Verified today \_\_\_\_\_ (dated) at \_\_\_\_\_ (place).

**Signature with Seal of the Deponent (bidder)**

**Note: Affidavit duly notarized in original shall be submitted by the successful bidder at the time of agreement.**

**Annexure – B1**

**|| AFFIDAVIT ||**  
**(To be contained in Envelope B)**  
**(On Non Judicial Stamp of Rs. 500.00)**

**Litigation Disclosure, Misrepresentation & Disqualification**

The Bidder shall furnish complete and accurate details of all litigation, criminal proceedings, and arbitration cases arising out of contracts (or otherwise), whether completed or ongoing, during the last ten (10) years.

The Bidder shall also disclose all arbitration awards passed against it or any partner in case of a Joint Venture.

If the Bidder fails to disclose such information or submits incomplete/incorrect information, and the same comes to notice at any stage, the Bid shall be rejected or the Contract shall be terminated, as applicable.

Even if the Bidder meets the qualification criteria, it shall be disqualified if at any stage (during evaluation or after award): (a) False or misleading information is submitted, (b) Material facts are suppressed, or (c) The Bidder has a record of poor performance such as abandonment of work, inordinate delay, non-completion, or financial failure.

In such cases, the Employer shall be entitled to reject the Bid / terminate the Contract and recover all losses/damages from the Bidder/Contractor as per Clause 24 – Recovery from Contractor of GCC.

The Bidder/Contractor shall have no claim or defence against such action.

**Format for Litigation Disclosure**

Name of Bidder: \_\_\_\_\_

Name of Work: \_\_\_\_\_

Tender ID: \_\_\_\_\_

S. No.	Client/Authority	Nature of Case	Contract Name & Value (□)	Year	Status	Outcome/Award (□)	Remarks
<b>To be filled by bidder</b>							

**Declaration**

I/We hereby declare that the information furnished above is true, complete, and correct. No material information has been concealed. In case any information is found false or misleading, the Employer shall have the right to reject the bid / terminate the contract and recover losses as per tender conditions.

Signature of Authorized Signatory: \_\_\_\_\_

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Date: \_\_\_\_\_

Seal of Bidder

**Note: Affidavit duly notarized in original shall be submitted by the successful bidder at the time of agreement.**

## PRE-QUALIFICATIONS CRITERIA

### A. Financial

- i. Experience of having successfully executed,
  - a) Three similar works each costing not less than the amount equal to 20% of the probable amount of contract during the last 10 (ten) years; or
  - b) Two similar works each costing not less than the amount equal to 30% of the probable amount of contract during the last 10 (ten) years; or
  - c) One similar work of aggregate cost not less than the amount equal to 50% of the probable amount of contract during the last 10 (ten) years;

**Note: For evaluation of above mentioned financial Similar Work Criteria, only the CAPEX value of the executed work shall be considered. Operation & Maintenance (O&M) cost, if any, shall not be considered for qualification purposes**

In case of Sewerage related works similar works shall mean work related to sewerage project comprising of components mentioned in the scope of work i.e.

- i. Providing, laying, jointing of **sewer pipeline of any material or nature like gravity, pumping main and Construction of Sewer Appurtenances** including House service Connections and should be commissioned.  
**OR**
- ii. Construction of **Sewage Treatment Plants (STP) /Common Effluent Treatment plants (CETP)/ Effluent Treatment plants (ETP)** commissioned and having performance as per NGT norms.
- ii. Average annual construction turnover on the construction works not less than 50% of the probable amount of contract for any 3 financial years out of last 5 financial years.
- iii. The bidder shall have positive Net worth as per the audited balance sheets for any 3 financial years out of last 5 financial years.
- iv. Bid-Capacity – Bidder shall be allotted work up to his available Bid capacity, which shall be worked out as given in format I-2 of Annexure-I.

### B. Physical

- (I) **PHYSICAL QUALIFICATIONS FOR THE WORK IN CASE OF SEWERAGE RELATED WORKS SHALL BE AS BELOW.**

Minimum Physical Requirement		
S. No.	Item of Work	Quantity
I	II	III
1	For Construction of STP	The Bidder has the experience in construction of successfully STPs (achieving effluent parameters as BOD< 10 mg/l, COD < 50 mg/l and TSS < 20 mg/l, TN < 10 mg/l, TP < 1 mg/l and Fecal Coliform 230 MPN/100 ML) as per following criteria for the last 10 years preceding the month of publication of NIT



		1. ONE STP of 50 % capacity proposed in this tender (Each) <b>OR</b> 2. TWO STPs of 30 % capacity proposed in this tender (Each) <b>OR</b> 3. THREE STPs of 20 % capacity proposed in this tender (Each)
2	<b>For operating and maintenance</b>	The Bidder has the experience in operating and maintain successfully STPs (achieving effluent parameters as BOD < 10 mg/l, COD < 50 mg/l and TSS < 20 mg/l, TN < 10 mg/l , TP < 1 mg/l and Fecal Coliform 230 MPN/100 ML ) as per following criteria during 1 year over the last 10 years preceding the month of publication of NIT 1. ONE STP of 50 % capacity proposed in this tender (Each) <b>OR</b> 2. TWO STPs of 30 % capacity proposed in this tender (Each) <b>OR</b> 3. THREE STPs of 20 % capacity proposed in this tender (Each)
3	<b>For Sewerage Network</b>	The bidder has the experience in construction and commissioning successfully sewerage network over the last 10 years preceding the month of publication of NIT 1. One work of length – 50 % capacity proposed in this tender (Each) <b>OR</b> 2. Two work of length – 30 % capacity proposed in this tender (Each) <b>OR</b> 3. Three work of length- 20 % capacity proposed in this tender (Each)

**Note:**

- The experience of a subcontractor shall be considered for the main contractor, subject to submission of a certificate issued by the principal employer of the main contractor.
- Experience in works executed for Central Government / State Government / PSUs shall only be considered.
- Experience Certificate (s) for fulfillment of work experience criterion should be issued by an authority not below the rank of Executive Engineer.
- The certificate of successful completion of a project/work shall comprise the following two parts and shall be deemed incomplete in the absence of either part:
  - Part 1:** Indicating the financial value of the work executed, with CAPEX value and applicable taxes mentioned separately.
  - Part 2:** Certifying the functional completion of the said project.
- Technology provider cannot participate directly in the bidding as a main bidder or JV partner Otherwise his bid will be rejected.
- Successfully executed shall mean substantially completed, i.e., all head works have been completed, and where House Service Connections (HSCs) are part of the scope of work, at least 75% of HSCs must be completed, along with commissioning of the project.

7. If the bidder has completed a project in JV, then JV partner can claim full experience of the similar work provided JV member share should not be less than 75%.

8. Work Completion Certificates shall be considered for works completed within the last ten (10) years, counted up to the date of issue of the Notice Inviting Tender (NIT).

**9. Definition of Substantially Completed Works:**

a. Substantially completed works shall mean that all head works of the project/works have been completed and commissioned. Further, if House Service Connections (HSCs) are part of the tender scope, a minimum of 75% HSCs must be completed in that project / works for it to qualify.

10. If it is found that the bidder or his associates have been penalized, by means of debarment / termination of the project by any state / central Government department, then such bid / bidder and its associate shall liable to be disqualified.

## **SPECIAL ELIGIBILITY CRITERIA**

**Bidder shall submit technology Tie-up agreement for Sewerage Treatment Plant  
as mentioned below:**

For Sewage treatment plant Bidder has to submit a Technology Tie-up Agreement with a technology provider for biological treatment section proposed by him under this project. The technology provider should have provided technology and core equipment for Sewage Treatment plant in last 7 years for at least one Sewage Treatment Plant running successfully for minimum of 5 years at present in India or a Country with similar weather conditions having **capacity 50% or more** of the capacity of Sewage Treatment plants proposed in the project on the same technology and achieving the outlet parameters as per the latest standards set out by NGT.

**Note: Bidder has to submit employer certificate mentioning the date of trial and run completion and start of operational and maintenance period along with lab reports.**

## **Specifications**

**(Enclose at the end of the Tender Document)**

**(However, the following clauses shall be taken in consideration while designing of the STP.)**

1. For all screens, grit mechanism, sludge dewatering unit and agitator/mixers, all the wetted parts shall be in SS 304 as minimum only.
2. Pumps used for sewage application should have impeller in SS 316 (CF8M), shaft shall be in SS 410, pump casing shall be in CI FG 260 as per IS210 and RPM shall not exceed 1500 RPM.
3. Chlorination system if proposed by the contractor for disinfection shall have 100% standby chlorinator, auto changeover of toner, leak absorption system, including Caustic tank, recirculation pumps, blowers, FRP half hoods etc. Complete chlorination system should be supplied by the chlorinator vendor.
4. UV, if proposed by the contractor for disinfection should have valid certification or relevant Indian certification. UV should be designed for maximum 60–65% UV transmittance.
5. In case of SBR technology is proposed, minimum two basins should be provided up to 25 MLD only. More than 25 MLD and up to 65 MLD, minimum four basin should be provided. More than 65 MLD and up to 145 MLD, minimum six basin should be provided.
6. Design of SBR process should be according to the type of SBR be as per CPHEEO manual, Chapter 5, Table no. 5.56 i.e. for continuous flow & Intermittent decant type related design parameters should be followed and for intermittent flow and intermittent decant type related design. Parameters should be followed. If other process technology other than SBR is proposed, then the same shall be as per the CPHEEO manual guidelines only.
7. For SBR process, floating type/Rope driven/valve type/vacuum type/flexible hose and connecting type decanters shall not be acceptable. SBR decanter should be in SS304 or higher grade of stainless steel. Maximum weir loading rate for SBR decanters shall not exceed 140 -180 m<sup>3</sup>/hr/meter.
8. Only fine bubble type PU/EPDM membrane diffusers should be used with only top half perforated portion shall be considered for design.
9. Aeration grid shall be fixed type. MOC of the grid shall be UPVC with SS304 supports.
10. Sludge dewatering system shall be designed for maximum of 18 hours of operations per day.

## Procedure for participation in e-Tendering

### 1. Registration of Bidders on e-Tendering System

All the PWD registered bidders are already registered on the new e-procurement portal [www.mptenders.gov.in](http://www.mptenders.gov.in). The user id will be the contractor ID provided to them from MP Online. The password for the new portal has been sent to the bidders registered email ID. For more details may contact M/s Tata consultancy Services Corporate Block, 5<sup>th</sup> floor, and DB city Bhopal-462011, email id: [eproc\\_helpdesk@mpsdc.gov.in](mailto:eproc_helpdesk@mpsdc.gov.in). Helpdesk phone numbers are available on website.

### 2. Digital Certificate:

The bids submitted online should be signed electronically with a class III Digital Certificate to establish the identity of the bidder submitting the bid online. The bidders may obtain class III Certificate issued by an approved certifying Authority authorized by the controller of certifying Authorities, government of India. A class III digital Certificate is issued upon receipt of the required proofs along with an application. Only upon the receipt of the required documents, a digital certificate can be issued. For details please visit [cca.gov.in](http://cca.gov.in).

#### Note:

- i. It may take upto 7 working days for issuance of class III digital certificate; hence the bidders are advised to obtain the certificate at the earliest. Those bidders who already have valid class III digital certificate need not obtain another Digital Certificate for the same.

The bidders may obtain more information and the APPLICATION FORM REQUIRED TO BE SUBMITTED FOR THE ISSUANCE OF DIGITAL CERTIFICATE FROM [cca.gov.in](http://cca.gov.in).

- ii. Bids can be submitted till bid submission end date. Bidder will require digital signature while bid submission. The digital certificate issued to the authorized user of a partnership firm/Private limited company/Public Limited Company and user for online bidding will be considered as equivalent to a no-objection certificate/power of attorney to that user.

In case of Partnership firm, majority of the partners have to authorize a specific individual through authority letter signed by majority of partners of the firm.

In case of Private Limited company, Public Limited Company, the Managing Director has to authorize a specific individual through Authority Letter. Unless the certificate is revoked, it will be assumed to represent adequate authority of the specific individual to bid on behalf of the organization for online bids as per Information Technology Act 2000. This Authorized User will be required to obtain a digital certificate. The Digital Signature executed through the use of the responsibility of Management/Partners of the concerned firm to inform the Certifying Authority, if the authorized user changes, and apply for a fresh Digital Certificate for the new Authorized user.

### 3. Set Up of Bidder's Computer System:

In order for a bidder to operate on the e-tendering System, the Computer system of the bidder is required to be set up for Operating System, Internet Connectivity, Utilities, Fonts, etc. The details are available at <https://www.mptenders.gov.in>.

**4. Key Dates:**

The bidders are strictly advised to follow the time schedule (Key dates) of the bid of their side for tasks and responsibilities to participate in the bid, as all the stages of each bid are locked before the start time and date and after the end time and date for the relevant stage if the bid as set by the Department.

**5. Preparation and Submission of Bids**

The bidders have to prepare their online, encrypt their bid data in the Bid forms and submit Bid of all the envelopes and documents related to the Bid required to be uploaded as per the time schedule mentioned in the key dates of the notice inviting e- Tenders after signing of the same by the Digital Signature of their authorized representatives.

**6. Purchase of Bid Document**

For purchasing of the bid document bidders have to pay Service Charge online ONLY as per Bid Data Sheet. Cost of Bid document is separately mentioned in the detailed NIT. The Bid Document shall be available for purchase to concerned eligible bidders immediately after online release of the bids and up to scheduled time and date as set in the key dates. The payment for the cost of bid document shall be made online through Debit/Credit card. Net banking or NEFT Challan through the payment gateway provided on the portal.

**7. Withdrawal, Substitution and Modification of Bids**

Bidder can withdraw and modify the bid before submission end date.

**JOINT VENTURE (J.V.)****If J.V. is allowed following conditions and requirements must be fulfilled –**

1. Number of partners in a Joint Venture shall not exceed 3 (three). The partners shall comply with the following requirements:
  - a. One of the partners shall be nominated as being Lead Partner, and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners.
  - b. The bid and, in case of successful bid, the Agreement, shall be signed so as to be legally binding on all partners,
  - c. The Lead Partner shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the contract, including payment, shall be done exclusively with the lead partner.
  - d. All the partners of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization mentioned under [c] above, as well as in the bid and in the Agreement [in case of successful bid];
  - e. Bidder shall submit the joint venture agreement at the time of submission of bid and all shall disclose the name of SPV in the agreement indicating precisely the role and responsibilities of all the members of JV in respect of planning, design, construction equipment, key personnel, work execution, and financing of the project including operation and maintenance of the works. All members of JV should have active participation in execution during the currency of the contract. This should not be varied/modified subsequently without prior approval of the employer.
  - f. A copy of the Joint Venture Agreement entered into by the partners shall be submitted with the bid. In the event the JV is declared to be the successful bidder, the partners of the JV shall form a special purpose vehicle (SPV) which should be a company registered under the companies act 2013/partnership firm registered under the Indian partnership acts to be execute the contract. In the SPV, one of the partnerships shall be the lead partner, who shall hold minimum 51% shares/shares of investment. The said shares pattern shall continue during the contract period. All the partners shall be made to the SPV so constituted.
  - g. The joint venture agreement shall be registered at the time of agreement, so as to be legally valid and binding on all partners.
2. All the partners should meet out the minimum qualifying criteria required for the bid and collectively must meet the criteria specified in full. Failure to comply with this requirement will result in rejection of the joint venture's bid.
3. The performance security of joint venture shall be in the name of the Lead partner / Joint venture.
4. Attach the power of attorney of the partners authorizing the Bid signatory(ies) on behalf of the joint venture
5. An individual Bidder cannot at the same time be member of a Joint Venture applying for this Bid. Further, a member of a particular Bidder Joint Venture cannot be member of any other Bidder Joint Venture applying for this bid.
6. A copy of the Joint Venture agreement entered into by the partners made on Rs 1000/- Non-judicial stamp duly notarized shall be submitted with the bid. However, at the time of agreement bidder shall get the joint venture agreement registered, so as to be legally valid and binding on all partners.
7. Furnish details of participation proposed in the joint venture as below:

<b>PARTICIPATION DETAILS</b>	<b>FIRM 'A' (Lead partner)</b>	<b>FIRM 'B'</b>	<b>FIRM 'C'</b>
<b>Financial</b>			
<b>Name of the Banker(s)</b>			
<b>Planning</b>			
<b>Construction Equipment</b>			
<b>Key personnel</b>			
<b>Execution of Work (Give details on contribution of each)</b>			

- a. The Lead Partner must have the financial share of 51% in the J.V.
  - b. Any of other partner(s) must have a share of minimum 26% in the J.V.
8. The partners of J.V. should satisfy the qualification criteria as below,
  - a. The Lead Partner must have the share of 51% in the J.V.
  - b. The Second partner must have a share of minimum 26% in the J.V.
  - c. The lead partner must meet 51% and any of the other partners should meet 26% of all qualification criteria respectively except for the requirement of work experience described in Annexure 'C'. However, all the partners must satisfy the full (100%) qualification criteria jointly. For this purpose, the

qualification of individual partners shall be added (for annual average turnover and for Bid Capacity Only).

9. For the meeting the minimum qualification criteria of experience of similar nature work,
  - i. Out of 3 similar works of value more than 20% of PAC, at least 2 (Two) works must be done by lead partner and 1 (one) work to be done by either of the remaining partners,  
OR
  - ii. Out of 2 similar works of value more than 30% of PAC, at least 1 (one) work must be done by lead partner and 1 (one) work to be done by either of the remaining partners,  
OR
  - iii. In case of one similar work of value more than 50% of PAC, the lead partner must have executed one work of value more than 25.50% of PAC (51% of 50%) and either of the remaining partner must satisfy the criteria as per point (i) mentioned above i.e., at least one work of minimum 20% of PAC, however the value of works executed by all the partners shall be more than 50% of PAC.
10. For meeting the minimum qualification criteria of experience of similar nature of work, each partner can have experience of different works as defined in similar nature of works and together should have the experience of all type of works described in similar nature of works.



**ORGANIZATIONAL DETAILS FOR SINGLE ENTITY BIDDER OR JOINT VENTURE BIDDER  
(To be enclosed with Technical Proposal)**

S.No.	Particulars	Details
1.	Registration No. issued by centralized registration system of Govt. of MP or proof of application for registration	(If applicable, scanned copy of proof of application for registration to be uploaded)
2.	Valid registration of Bidder in appropriate class through centralized registration of Govt. of MP	Registration no.....date..... (Scanned copy of Registration to be uploaded)
3.	Name of Organization/ Individual	
4.	Entity of Organization Individual/ Proprietary Firm/ Partnership Firm (Registered under Partnership Act)/ Limited Company (Registered under the Companies Act-1956)/ Council	
5.	PAN Number	
6.	GST Number	
7.	Address of Communication	
8.	Telephone Number with STD Code	
9.	Fax Number with STD Code	
10.	Mobile Number	
11.	E-mail Address for all communications	
	<b>Details of Authorized Representative</b>	
12.	Name	
13.	Designation	
14.	Postal Address	
15.	Telephone Number with STD Code	
16.	Fax Number with STD Code	
17.	Mobile Number	
18.	E-mail Address	

**Note: In case of partnership firm and limited company certified copy of partnership deed/ Articles of Association and Memorandum of Association along with registration certificate of the company shall have to be enclosed.**

**Annexure – I****(See clause 14 of Section 2 of ITB)****Envelope – B, Technical Proposal****Technical Proposal shall comprise the following documents:**

<b>S.No.</b>	<b>Particulars</b>	<b>Details to be submitted</b>
1	Organizational Details	Annexure –H
2	Experience - Financial and Physical	Annexure – I (Format : I - 1)
3	Annual Turnover	Annexure – I (Format : I - 2)
4	List of technical personnel for the key positions	Annexure – I (Format: I - 3)
5	List of Key equipment's/ machines for quality control labs	Annexure – I (Format: I - 4)
6	List of Key equipment's / machines for construction work	Annexure – I (Format: I – 5)
7	Similar nature of work experience	Annexure – I (Format: I – 6)
8	Special eligibility criteria	Annexure – I (Format: I – 7)

**Note:**

1. *Technical Proposal should be uploaded duly page numbered and indexed.*
2. *Technical Proposal uploaded otherwise will not be considered.*

**FINANCIAL & PHYSICAL EXPERIENCE DETAILS**

**A. Financial Requirement**

**The bidder should have completed either of the below:**

- a) Three similar works each costing not less than the amount equal to 20% of the probable amount of contract during the last 10 (ten) years; or
- b) Two similar works each costing not less than the amount equal to 30% of the probable amount of contract during the last 10 (ten) years; or
- c) One similar work of aggregate cost not less than the amount equal to 50% of the probable amount of contract during the last 10 (ten) years;

**To be filled in by the contractor:**

- i. Details of successfully completed similar works shall be furnished in the following format.
- ii. Certificate duly signed by the employer shall also be enclosed for each completed similar work.
- iii. For evaluation of above mentioned financial Similar Work Criteria, only the CAPEX value of the executed work shall be considered. Operation & Maintenance (O&M) cost, if any, shall not be considered for qualification purposes

Agreement Number & Year	Name of Work	Date of Work Order	Date of Completion	Amount of Contract (exclusive of GST)	Employer's Name and Address

**Existing commitments – (Value of 'C' for Bid Capacity formula)**

Agreement Number & Year	Name of Work	Date of Work Order	Date of Completion	Amount of Contract	Amount	Employer's Name and Address

**B. Physical Requirement:**

**As per Annexure C**

**Annexure – I (Format: I-2)**

(See clause 14 of Section 2 of ITB)

**ANNUAL TURN OVER**

**Requirement:**

Average annual construction turnover on the construction works not less than 50% of the probable amount of contract for any 3 financial years out of last 5 financial years.

**To be filled in by the contractor:**

Financial Year	Payments received for contracts in progress or completed	Net Worth
1		
2		
3		
4		
5		

**Note:**

*i. Annual turnover of construction and net worth should be certified by the Chartered Accountant.*

**Bid Capacity**

Applicants who meet the minimum qualifying criteria in the evaluation as stated above are to be evaluated further for bid capacity as under:

$$\text{Bid Capacity} = (4.0 \times A \times B) - C$$

Bid Capacity shall be equal to or greater than PAC

Where,

- A = Maximum escalated turnover in any one year during the last 5 financial years preceding Bid due date. (10% weightage per year shall be given to bring the value of Work executed at present price level)
- B = Prescribed completion period in years for the subject contract
- C = Balance amount of contract work in hand to be executed during the contract period

The amount of BID Capacity arrived at from the above formula shall be greater than Probable amount of Contract (PAC)

## LIST OF TECHNICAL PERSONNEL FOR THE KEY POSITIONS

Minimum Requirement							Available with the bidder						
S. No.	Key Position	Minimum requirement	Qualification	Age	Similar work experience	Total Work Experience	S. No.	Name of Personnel	Key Position	Qualification	Age	Similar work experience	Total Work Experience

Minimum Requirement to be filled as per project requirement.

To be filled as per project requirement.

**List of Key Equipment's/ Machines for Quality Control Labs**

The Contractor shall be required to carry out all mandatory quality control tests as per specifications of various items of work under the project. The Contractor should demonstrate his capacity with respect to availability of key equipment's / machines required for carrying out mandatory tests under project. All the materials to be procured under this contract shall be as per relevant IS codes of practice and inspected by 3<sup>rd</sup> party. The certificate in this regard shall be furnished by the Contractor.

Apart from above for the various civil works following Equipment/ Machines shall be required for quality control.

Minimum requirement			Available with the Bidder	
S. No.	Name of Equipment/ Machinery	Quantity	Name of Equipment/ Machinery	Quantity
1	Digging tools like pick axe, shovel, etc.	One set		
2	IS Sieves Nos. with lid and pan (90mm, 80mm, 63 mm, 53mm, 45mm, 37.5mm, 26.5mm, 19mm, 13.2mm, 11.2mm, 9.5mm, 4.75mm, 2.8mm, 5.6mm, 3.35mm, 2.36mm, 600Micron, 425 Micron, 300Micron, 50 Micron, 180 Micron, 90 Micron and 75 Micron)	One set		
3	Sand Pouring Cylinder with tray complete for field Density test	One set		
4	Speedy moisture meter complete with chemicals	One set		
5	Straight Edges 3.00 meter width	Two sets		
6	Liquid Limit and plastic limit testing apparatus complete with water bottle and glass wares	One set		
7	Electronic/digital balance 5 kg	One no.		
8	Pan balance with weight box, 5 kg.	One no.		
9	Slump cone	Two nos.		
10	Concrete cube moulds (150 mm X 150mm)	Twelve nos.		
11	Free swelling index test Apparatus	Six nos.		
12	Flakiness and elongation testing gauges	Two no.		
13	Water absorption test apparatus	One no.		
14	Specific gravity test apparatus	One no.		
15	B.S. compaction apparatus	One no.		
16	Proving rings	One each		
17	Glass ware	One set		
18	Auto level and staff	Three nos.		
19	Rapid moisture meter	One no.		
20	Post Hole Auger with extensions	One set		
21	Measuring tape, spatula, glassware, Porcelain dish, pestle mortar	One set		
22	Standard Proctor Density Test Apparatus with Rammer	One set		

23	Electronic/digital balance 1kg with the least count of 0.01 gm	One set		
24	Camber Board	Two nos.		
25	Core Cutter (10 cm dia) 10cm/15cm height complete with dolly and hummer.	One set		
26	CBR Testing machine	One no.		
27	Oven (ambient to 200°C)	One no.		
28	Digital Thermometers	Three nos.		
	Aggregate Soundness test apparatus	One no.		
30	Concrete cube testing machine	One no.		
31	First aid box	One no.		
32	Sampling Pipette	One no.		
33	Balance	One no.		
34	Dial Gauges	Six nos.		
35	Thickness gauge	One set		
36	Water still (4 ft.)	One no.		
37	A.I.V. testing equipment	One no.		

*The above list of essential equipment for quality control is for guidance and is not complete. Other apparatus and equipment as desired/required by the Engineer-in-Charge shall be procured by the Contractor.*

The Contractor shall carryout the construction work in such a way that the requirements of the specifications of each item of work under the project are fully satisfied. For achieving the quality parameters as per the specifications, the contractor shall be required to deploy appropriate machinery and equipment for carrying out the work. In this section, the Bidder is required to demonstrate his capacity with respect to Key equipment's and machinery that are required to carry out this work successfully.

Minimum Requirement to be filled as per project requirement.			
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**Similar Nature of Work Experience**

(Separate form for each work)

(Give details separately for each member in case of a joint Venture.)

Form-20

(Form-3A)

**WORK WISE DETAILS OF WORK COMPLETED/ IN PROGRESS BY THE CONTRACTOR**

1. Name of Contractor:
2. Name of Technology Provider (If Applicable) :
3. Name of Work:
4. Estimated Cost of Work Put to Tender:
5. Tendered Amount:
6. Date of starting of the work:
7. Date of completion of the work: (As per contract agreement)
8. Actual Date of Completion of Work:
9. Date of completion of trial & run period:
10. Date of commissioning of project:
11. Amount of work done up to:
12. Brief history of the work:

Sr. No.	Particular	Unit	Qty. (As per BOQ)	Amount (As per BOQ)	Qty. (As per Execution)	Amount (As per Execution)

- 10 State whether details as above given by the contractor correct, if not as to what is the correct information. :
- 11 State whether the contractor has executed the work in progress satisfactory as per specification/ has completed the work, satisfaction, if any give the correct position of the work. :

**Note:** In case of joint venture the above form shall be filled by the JV members separately

### Special eligibility criteria

Sr. No.	Name of Technology	Details of Technology Provider	Name of Reference Municipal Sewage Project	Date of Commissioning	Capacity of Sewage Treatment Plant (In MLD)	Remarks (If any)

**FINANCIAL BID**  
**(TO BE CONTAINED IN ENVELOPE C)**

**TENDER FOR A LUMP SUM CONTRACT**

I/We do hereby TENDER to execute the whole of the work described in the scope, drawing and of according to the annexed specification for the sum of Rupees (in figures) ..... (in words) ..... (To be quoted in lump sum online and to be expressed both in words and figures). I/We have visited the site of work and am/are fully aware of all the difficulties and conditions likely to affect carrying out the work. I/We have fully acquainted myself/ourselves about the conditions in regard to accessibility of site and quarries/kilns, nature and the extent of ground, working conditions including stacking of materials, installation of tools and plant conditions effecting accommodation and movement of labor etc. required for the satisfactory execution of contract. Should this bid be accepted, I/We hereby agree to abide by and fulfill all the terms and provisions of the said conditions of contract annexed hereto so far as applicable, or in default thereof to forfeit and pay to the **NAGAR PALIKA PARISHAD BETUL, Madhya Pradesh** or his successors in office the sums of money mentioned in the said conditions.

Dated \_\_\_\_\_

Bidder's Signature \_\_\_\_\_

Address \_\_\_\_\_

Witnesses: \_\_\_\_\_

Address: \_\_\_\_\_

The above said TENDER is hereby accepted by me on behalf of the (**NAGAR PALIKA PARISHAD BETUL, and Madhya Pradesh**)

The \_\_\_\_\_ 2024 \_\_\_\_\_

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\* To be expressed in words and figure)

**SECURITIES**

Name	Address	Occupation or Profession	Remarks
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The above bid is hereby accepted by me on behalf of the (Name of ULB) on dated the \_\_\_\_\_ day of \_\_\_\_\_ 2024

Chief Municipal Officer  
**NAGAR PALIKA PARISHAD  
BETUL**

- i. Only Lump sum cost for the scope of work given therein shall be quoted.
- ii. Financial offer shall be quoted in figures as well as in words. If any difference in figures and words found lower of the two shall be taken as valid and correct rate. If the bidder is not ready to accept such valid and correct rate and declines to furnish performance security and sign the agreement his earnest money deposit (EMD) shall be forfeited.
- iii. In case the price is not given by a bidder, his bid shall be treated as non-responsive. EMD shall be forfeited.
- iv. All duties, taxes and other levies payable, by the bidder shall be included in the offer given by the bidder. GST shall be paid separately.

**Note : - Please refer financial bid format on [www.mpetender.gov.in](http://www.mpetender.gov.in)**

**MATERIALS TO BE ISSUED BY THE DEPARTMENT**

(Deleted)

## LETTER OF ACCEPTANCE (LOA)

No. \_\_\_\_\_

Dated: \_\_\_\_\_

**To,**

M/s. \_\_\_\_\_  
(Name and address of the contractor)

**Subject:** \_\_\_\_\_  
(Name of the work as appearing in the bid for the work)

Dear Sir (s),

Your bid for the work mentioned above has been accepted on behalf of the (Name of ULB) at your bided lump sum offer as per scope of work given therein.

You are requested to submit the following within **15 (Fifteen)** days from the date of issue of this letter:

- a. The Performance Security/ Performance Guarantee of Rs. \_\_\_\_\_ (in figures) (Rupees \_\_\_\_\_ in words) only being 3% of the capital cost of the project. The performance security shall be in the shape of Term Deposit Receipt/ Bank Guarantee of any nationalized / Schedule commercial bank valid until 3 (Three) months from the date of completion of the project. (In prescribed Format as per Annexure - M)
- b. The Additional Performance Security/ Additional Performance Guarantee of Rs. \_\_\_\_\_ (in figures) (Rupees \_\_\_\_\_ in words) only. The performance security shall be in the shape of Term Deposit Receipt/ Bank Guarantee of any nationalized / schedule commercial bank valid until 3 (three) months from the date of expiry of the Defect Liability Period. (In prescribed Format as per Annexure - M)
- c. Duly signed Contract Agreement in Agreement Form as prescribed in Section - 5

Please note that

(i) The time allowed for carrying out the work as entered in the bid is \_\_\_\_\_ months including rainy season, shall be reckoned from the date of signing the Contract Agreement and

(ii) The Performance Security/ performance guarantee of Rs. \_\_\_\_\_ (in figures) (Rupees \_\_\_\_\_ in words) only being 10% of O & M, to be submitted before the completion of design-built component valid up to 3 months beyond the end of O&M period. The performance security shall be in the shape of Term Deposit Receipt/ Bank Guarantee of any nationalized / schedule commercial bank. (In prescribed Format as per Annexure – M)

Signing the contract agreement shall be considered as intimation to commencement of work and no separate letter for commencement of work is required.

Therefore, after signing of the agreement, you are directed to contact Engineer-in-charge within 14 days for taking the possession of site and necessary instructions to start the work.

Chief Municipal Officer  
**NAGAR PALIKA PARISHAD  
BETUL**

Section 2 of ITB)

**PERFORMANCE SECURITY**

To,

\_\_\_\_\_ [Name of Employer]

\_\_\_\_\_ [Address of Employer]hn

WHEREAS \_\_\_\_\_ [name and Address of Contractor]

(Hereinafter called “the Contractor”) has undertaken, in pursuance of Letter of Acceptance No. \_\_\_\_\_

Dated \_\_\_\_\_ to execute \_\_\_\_\_ [Name of Contract and brief description of Works] (herein after called “the Contract”).

AND WHEREAS it has been stipulated by you in the said Contract that the contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligation in accordance with the contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee://

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up to a total of \_\_\_\_\_ [amount of Guarantee]\* \_\_\_\_\_ (in words), such sum being payable in the types and proportions of currencies in which the contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of \_\_\_\_\_ [amount of Guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition or modification.

This Guarantee shall be valid until 3 (three) months from the date of completion of the project.

Signature, Name and Seal of the Guarantor \_\_\_\_\_

Name of  
Bank \_\_\_\_\_

Address \_\_\_\_\_

—

Phone No., Fax No., E-mail Address, of Signing Authority \_\_\_\_\_

Date \_\_\_\_\_

—

\* An amount shall be inserted by the Guarantor, representing the percentage the Contract Price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.

**Format for Confirmation letter to be sent to Bank for verification of Bank Guarantee  
Office of NAGAR PALIKA PARISHAD BETUL , Madhya Pradesh**

**No. ....**

**Dated.....**

**To,**

**Manager,**

.....

.....

.....

**Sub.-** Bank Guarantee for Rs. .... in respect of N.I.T. No. .... Agreement No. .... Dated. ....

**Ref. -** Your No. .... Dated. ....

Dear Sir,

We have received a Bank Guarantee for an amount of Rs... in lieu of Earnest money/Security deposit/Mobilization advance. We request you to kindly confirm having issued the said guarantee. A photocopy of the guarantee as received is enclosed.

Furthermore, you are requested to kindly encash the said guarantee before its expiry unless it is renewed for further period or you hear anything to the contrary from us.

**(Enclosed .....)**

**You're faithfully**

.....

.....

### SECTION 3

#### Conditions of Contract Part – I General Conditions of Contract [GCC]

**Table of Clauses of GCC**

S.No	Particulars	S.No	Particulars
	<b>A. General</b>	22	No compensation for alterations in or restriction of work to be carried out.
1	Definitions	23	No Interest payable
2	Interpretations and Documents	24	Recovery from Contractors
3	Language and Law	25	Tax
4	Communications	26	Check Measurements
5	Subcontracting	27	Termination
6	Personnel	28	Payment upon Termination
7	Force Majeure	29	Performance Security
8	Contractor's Risks	30	Security Deposit
9	Liability For Accidents to Person	31	Price Adjustment
10	Contractor to Construct the Works	32	Mobilization and Construction Machinery Advance
11	Discoveries	33	Secured Advance
12	Dispute Resolution System	34	Payment certificates
	<b>B. Time Control</b>		<b>E. Finishing the Contract</b>
13	Program	35	Completion of Certificate
14	Extension of Time	36	Final Account
15	Compensation for Delay		<b>F. Other Conditions of Contract</b>
16	Contractor's quoted percentage	37	Currencies
	<b>C. Quality Control</b>	38	Labour
17	Tests	39	Compliance with Labour Regulations
18	Correction of Defects noticed during the Defect Liability Period	40	Construction Safety
	<b>D. Cost Control</b>	41	Audit and Technical Examination
19	Variations - Change in original Specifications, Designs, Drawings etc.	42	Death and Permanent Invalidity of Contractor
20	Extra Items	43	Jurisdiction
21	Payments for Variations and / or Extra Quantities	44	Monthly RA Bills



## A. General

### 1. DEFINITIONS

- **Chief Engineer:** means Chief Engineer of the Urban Administration Development Department.
- **Bill of Quantities:** means the priced and completed Bill of Quantities forming part of the Bid.
- **Contract:** means the Contract between the Employer and the Contractor to execute, complete and/or maintain the work. Agreement is synonym of Contract and carries the same meaning wherever used.
- **Contract Data Sheet:** means the documents and other information which comprise of the Contract.
- **Contractor:** means a person or legal entity whose bid to carry out the work has been accepted by the Employer.
- **Completion of Work:** means completion of the entire contracted work. Exhaustion of quantity of any particular item mentioned in the bid document shall not imply completion of work or any component thereof.  
**aaa**
- **Day:** means the calendar day.
- **Defect:** means any part of the work not completed in accordance with the specifications included in the contract.
- **Department:** means department of urban administration and development, Madhya Pradesh
- **Drawings:** means drawings including calculations and other information provided or approved by the Engineer-in-Charge.
- **Employer:** means the party as defined in the Contract Data, who employs the Contractor to carry out the work. The employer may delegate any or all functions to a person or body nominated by him for specified functions. The word Employer/Government/Department wherever used denote the Employer. The word Urban Local Body (ULB) wherever used denote the Employer
- **Engineer:** means the person named in contract data sheet. from employer side
- **Engineer in charge:** means the person named in the contract data sheet from employer side
- **Engineer In Chief:** Engineer In Chief of Directorate, Urban Administration and Development
- **Equipment:** means the Contractor's machinery and vehicles brought temporarily to the Site for execution of work.
- **Government:** means Government of Madhya Pradesh.
- **In Writing:** means communicated in written form and delivered against receipt.
- **Material:** means all supplies, including consumables, used by the Contractor for in Council in the work.
- **PDMC:** means Project Development and Management Consultants (PDMC) of Concerned Division appointed by UADD for AMRUT 2.0 Project in M.P
- **Schedule of Rates:** means, Schedule of Rates of Urban Administration and Development and Department, Government of Madhya Pradesh **w.e.f. 02.08.2021** with up to date amendments.
- **Superintending engineer:** means superintending engineer of the concerned division of the Urban Administration & Development Department as the case may be.
- **Stipulated date of completion:** means the date on which the Contractor is required to complete the work. The stipulated date is specified in the Contract Data.

- **Specification:** means the specification of the work included in the Contract and any modification or addition made or approved by the Engineer-in-Charge.
- **Start Date :** means the date of signing of agreement for the work.
- **Sub-kContractor:** means a person or corporate body who has a Contract (duly authorized by the employer) with the Contractor to carry out a part of the construction work under the Contract.
- **Temporary Work :** means work designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the work.
- **Tender / Bid, Tenderer /Bidder :** are the synonyms and carry the same meaning where ever used.
- **UADD :** Urban Administration and Development Department, Bhopal
- **Variation:** means any change in the work which is instructed or approved as variation under this contract.
- **Work:** the expression "work" or "works" where used in these conditions shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the work by virtue of contract, contracted to be executed, whether temporary or permanent and whether original, altered, substituted or additional.

## 2. INTERPRETATIONS AND DOCUMENTS

### 2.1 Interpretations

In the contract, except where the context requires otherwise:

- a. words indicating one gender include all genders.
- b. words indicating the singular also include the plural and vice versa.
- c. provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing;
- d. written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;

### 2.2 Priority of bid document

In case of discrepancy, the priority of bid documents is as follows.

1. NIT with all amendments.
2. Instructions to Bidders.
3. Technical Bid
4. Financial Bid.
5. Letter of acceptance.
6. Billing Break-up- (Payment schedule)
7. Priced Break-up schedule (Estimated cost Break-up)
8. Part II Special Conditions of Contract.
9. General Conditions of Contract and Contract Data; with all Annexures.
10. Specifications
11. Drawings
12. Agreement
13. Any other document (s), as specified (Detailed Project Report)

### 2. Language and Law

The language of the Contract and the law governing the Contract are stated in the Contract Data.

### 3. Communications

All certificates, notice or instruction to be given to the Contractor by Employer/Engineer shall be sent on the address or contact details given by the Contractor in [Annexure H of ITB]. The address and contract details for communication with the Employer/Engineer shall be as per the details given in Contract Data Sheet. Communication between parties that are referred to in the conditions shall be in writing. The notice sent by facsimile (fax) or other electronic means (email) shall also be effective on confirmation of the transmission. The notice sent by registered post or speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service. In case of any change in address for communication, the same shall be immediately notified to Engineer-in-Charge

### 4. Subcontracting

Subcontracting shall be permitted for contract value more than the amount specified in the contract data with following conditions.

Bidder may sub contract up-to 25 percent of the contract price, only with and after approval of Employer in writing, but will not assign the contract. Sub-contracting shall not alter the Contractor's obligations.

- a. Following shall not form part of the subcontracting
  - (i) Hiring of labour through a labour contractor,
  - (ii) The purchase of Materials required for carrying out the works.
  - (iii) Hiring of plant & machinery
- b. Sub-contractor will have to be registered with centralized registration system for Contractors of Government of Madhya Pradesh, Public Works Department (MPPWD).

### 5. Personnel

- 6.1 The Bidder shall employ for the construction work and routine maintenance the Technical Personnel as provided in Annexure-I-3, If the Bidder fails to deploy required number of technical staff, a recovery in the form of penalty as specified in the Contract Data will be made from the Contractor's R.A. Bills.
- 6.2 If the Engineer asks the Bidder to remove a person who is a member of the Bidder's and/or Sub-Contractor's staff or work force, stating the reasons, the Bidder and/or Sub-Contractor shall ensure that the person leaves the site within three days and has no further connection with the works under this Contract. Bidder or Sub-Contractor will employ another competent staff in place of removed staff within 07 (Seven) days.

### 7. Force Majeure

- 7.1 The term "Force Majeure" means an exceptional event or circumstance:
  - a) Which is beyond a party's control,
  - b) Which such party could not reasonably have provided against before entering into the contract,
  - c) Which, having arisen, such party could not reasonably have avoided or overcome, and
  - d) Which is not substantially attributed to the other Party

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- (i) War, hostilities (whether war be declared or not), invasion, act of foreign enemies),
- (ii) Rebellion, terrorism, sabotage by persons other than the contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
- (iii) Riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,

- (iv) Munitions of war, explosive materials, ionising radiation or contamination by radio activity, except as may be attributed to the Contractor's use of such munitions, explosives, radiation or radio activity, and
- (v) Natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity,

7.2 In the event of either party being rendered unable by force majeure to perform any duty or discharge any responsibility arising out of the contract, the relative obligation of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by either party shall be borne by respective parties.

7.3 For the period of extension granted to the Contractor due to Force Majeure the price adjustment clause shall apply but the penalty clause shall not apply. It is clarified that this sub clause shall not give eligibility for price adjustment to contracts which are otherwise not subject to the benefit of Price adjustment clause.

7.4 The time for performance of the relative obligation suspended by the force majeure shall stand extended by the period for which such cause lasts. Should the delay caused by force majeure exceed twelve months, the parties to the contract shall be at liberty to foreclose the contract after holding mutual discussions.

## **8. Contractor's Risks**

8.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.

8.2 All risks and consequences arising from the inaccuracies or falseness of the documents and/or information submitted by the contractor shall be the responsibility of the Contractor alone, notwithstanding the fact that designs/drawings or other documents have been approved by the department.

## **9. Liability for Accidents to Person**

The contractor shall be deemed to have indemnified and saved harmless the Government and/or the employer, against all action, suits, claims, demands, costs etc. arising in connection with injuries suffered by any persons employed by the contractor or his subcontractor for the works whether under the General law or under workman's compensation Act, or any other statute in force at the time of dealing with the question of the liability of employees for the injuries suffered by employees and to have taken steps properly to ensure against any claim there under.

## **10. Contractor to Construct the Works**

10.1 The Contractor shall construct, install and maintain the Works in accordance with the Specifications and Drawings as specified in the Contract Data

10.2 In the case of any class of work for which there is no such specification as is mentioned in contract Data, such work shall be carried out in accordance with the instructions and requirement of the Engineer-in-charge.

10.3 The contractor shall supply and take upon himself the entire responsibility of the sufficiency of the scaffolding, timbering, Machinery, tools implements and generally of all means used for the fulfilment of this contract whether such means may or may not approved of or recommended by the Engineer.

## **11. Discoveries**

Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

## **12. Dispute Resolution System**

- 12.1 No dispute can be raised except before the Competent Authority as defined in Contract data in writing giving full description and grounds of Dispute. It is clarified that merely recording protest while accepting measurement and/or payment shall not be taken as raising a dispute.
- 12.2 No issue of dispute can be raised after 45 days of its occurrence. Any dispute raised after expiry of 45 days of its first occurrence shall not be entertained and the Employer shall not be liable for claims arising out of such disputes.
- 12.3 The Competent Authority shall decide the matter within 45 days.
- 12.4 Appeal against the order of the Competent Authority can be preferred within 30 days to the Appellate Authority as defined in the Contract data. The Appellate Authority shall decide the dispute within 45 days.
- 12.5 Appeal against the order of the Appellate Authority can be preferred before the Madhya Pradesh Arbitration Tribunal constituted under Madhya Pradesh Madhyastham Adhikaran Adhiniyam, 1983.
- 12.6 The contractor shall have to continue execution of the works with due diligence notwithstanding pendency of a dispute before any authority or forum.

## **B. Time Control**

### **13. Programme**

- 13.1 Within the time stated in the Contract Data, Contractor shall submit the Engineer/Engineer-In-Charge a programme, showing the general methods, arrangements, order, and timing for all the activities in the works for the construction of works.
- 13.2 The programme shall be supported with all details regarding key-personnel, equipment and machinery proposed to be deployed on the works for its execution. The Contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/equipment being placed in field laboratory and the location of field laboratory along with the Programme.
- 13.3 The Engineer/Engineer-In-Charge will review and approve the programme within 7 days from the date of receipt of programme from the Contractor. In the opinion of Engineer/Engineer-In-Charge any modification in programme is required; a discussion by Engineer/Engineer-In-Charge with the Contractor or its Project Manager and Deputy Project Manager has been made within 7 days from the date of receipt of programme. If modification is agreed after discussion, the Contractor shall submit modified programme within next 3 days and programme will be approved by the Engineer/Engineer-In-Charge within 3 days. If Contractor is not conveyed any notice with respect to programme submitted by him, the programme will be deemed as approved. In case programme for completion of all works within the stipulated period of time is not submitted by the contractor, a penalty will be imposed on the contractor as specified in the Contract Data and amount of penalty will be deducted from the RA bill of the Contractor.

- 13.4 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining works, including any changes to the sequence of the activities.
- 13.5 The Contractor will review progress of works on the basis of approved programme and submit monthly progress report in 2nd week of next month and in case progress in a month is not achieved as per the programme, the Contractor shall submit an updated programme with reasons of not achieving the progress in a month as per approved programme, incorporating additional manpower as well as key personnel to achieve left over works and current works proposed in the concerned month in updated programme. The Contractor is required to submit an updated programme whenever, progress of work in a month is not achieved as per programme. The Contractor shall submit an updated programme within 15 days from the last date of month up-to which progress has not been achieved as per programme. If the Contractor does not submit an updated programme within prescribed period, the Engineer/Engineer-In-Charge will withhold the amount stated in the Contract Data from then next payment certificate and continue to withhold specified amount until the next payment after the date on which the updated programme has been submitted.
- 13.6 The Engineer's/Engineer-In-Charge's approval of the programme shall not alter the Contractor's obligations.

#### **14. Extension of Time**

- 14.1 If the Contractor desires an extension of time for completion of the work on the ground of his having been unavoidably hindered in its execution or on any other grounds, he shall apply, in writing, to the Engineer-in-charge, on account of which he desires such extension. Engineer-in-charge shall forward the aforesaid application to the competent authority as prescribed.
- 14.2 The competent authority shall grant such extension at each such occasion within a period of 30 days of receipt of application from contractor and shall not wait for finality of work. Such extensions shall be granted in accordance with provisions under **clause -7or clause- 15** of this agreement.
- 14.3 In case of the work already in progress, the contractor shall proceed with the execution of thr works, including maintenance thereof, pending receipt of the decision of the competent authority as aforesaid with all due diligence.

#### **15. Compensation for delay**

- 15.1 The time allowed for carrying out the work, as entered in the agreement, shall be strictly observed by the Contractor.
- 15.2 The time allowed for execution of the contract shall commence from the date of signing of the agreement. It is clarified that the need for issue of work order is dispensed with.
- 15.3 In the event milestones are laid down in the Contract Data for execution of the works, the contractor shall have to ensure strict adherence to the same.
- 15.4 Failure of the Contractor to adhere to the timelines and/or milestones shall attract such liquidated damages as is laid down in the Contract Data
- 15.5 In the event of delay in execution of the works as per the timelines mentioned in the contract data the Engineer-in- charge shall retain from the bills of the Contractor Amount equal to the liquidated damages liveable until the contractor makes such delays good. However, the Engineer-in-charge shall accept bankable security in lieu of retaining such amount.
- 15.6 If the contractor is given extension of time after liquidated damages have been paid, the engineer in charge shall correct any over payment of liquidated damages by the Contractor in the next payment certificate.
- 15.7 In the event the contractor fails to make good the delay until completion of the stipulated contract period (including extension of time) the sum so retained shall be adjusted against liquidated damages levied.

#### **16. Contractor's quoted offer: NA**

The contractor's quoted lump sum offer referred to in the "Bid for works" will be deducted/ added from/to the net amount of the bill after deducting the cost of material supplied by the department, if any.

### **C. Quality Control**

#### **17. Tests**

- 17.1 The Contractor shall be responsible for:
  - a. Carrying out the tests prescribed in specifications, and
  - b. For the correctness of the test results, whether preformed in his laboratory or elsewhere.
- 17.2 The contractor shall have to establish field laboratory within the time specified and having such equipment as are specified in the Contract Data.
- 17.3 Failure of the contractor to establish laboratory shall attract such penalty as is specified in the Contract Data.
- 17.4 Ten percent of the mandatory tests prescribed under the specifications shall be got carried out through Laboratories accredited by National Accreditation Board of Laboratories (NABL) by the Engineer-In –Charge and the cost of the such testing shall be deducted from the payments due to Contractor.

#### **18. Correction of Defects noticed during the Defect Liability Period**

- 18.1 The defect liability period of work in the contract shall be the Contract Data
- 18.2 The Contractor shall promptly rectify all defects pointed out by the Engineer well before the end of the Defect Liability Period. The Defect Liability Period shall automatically stand extended until the defect is rectified.
- 18.3 If the Contractor has not corrected a Defect pertaining to the Defect Liability Period to the satisfaction of the Engineer, within the time specified by the Engineer, the Engineer will assess the cost of having the Defect corrected, and the cost of correction of the Defect shall be recovered from the Performance Security or any amount due or that may become due to the contractor and other available securities.

### **D. Cost Control**

#### **19. Variations - Change in original Specifications, Designs, and Drawings etc.**

- 19.1 The Engineer in charge shall have power to make any alterations, omissions or additions to or substitutions from the original specifications, drawings, designs and instructions, that may appear to him to be necessary during the progress of the work after the approval of competent authority as mentioned in the contract data and the contractor shall carry out the work in accordance with any instructions which may be given to him in writing signed by the Employer, and such alterations, omission, additions or substitutions shall not invalidate the contract and any altered, additional or substituted work, which the contractor may be directed to do in the manner above specified, as part of the work, shall be carried out by the contractor on the same conditions in all respects on which he agree to do the main work.

- 19.2 The time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work bears to the original contract work and the certificate of the Engineer in charge shall be conclusive as to such proportion.

**20. Extra items**

- 20.1 Any such works, arising due to instructions of Engineer in Charge as per clause 19 after the approval of competent authority and which are not in the Scope of Bid, Section-2 ITB / Price break up (Estimated cost breakup) schedule shall be treated as extra items.

**21. Payments for Variations and / or Extra Quantities**

- 21.1 The rates for the additional (Extra Quantities), altered or substituted work/ extra items under this clause shall be worked out in accordance with the following provisions in their respective order:-
- a. The contractor is bound to carry out the additional (Extra quantity), work at the same rates as are specified in the contract for the work.
  - b. If the item is not in the Price break-up Schedule and is included in the SOR of the department, the rate shall be arrived at by applying the quoted tender percentage on the SOR rate.
  - c. If the rates of the altered or substituted work are not provided in applicable SOR-such rates will be derived from the rates for a similar class (type) of work as is provided in the contract (Price break-up Schedule) for the work.
  - d. If the rates are for the altered, substituted work cannot be determined in the manner specified in the sub clause (c) above-then the rates for such composite work item shall be worked out on the basis of the concerned schedule of rates minus/plus the percentage quoted by the contractor.
  - e. If the rates of a particular part or parts of the item is not in the schedule of rates and the rates for the altered, or substituted work item cannot be determined in the manner specified in sub clause (b) to (d) above, the rate for such part or parts will be determined by the Competent Authority as defined in the Contract data on the basis of the rate analysis derived out of prevailing market rates when the work was done.
  - f. But under no circumstances, the contractor shall suspend the work on the plea of non-acceptability of rates on items falling under sub clause (a) to (d). In case the contractor does not accept the rate approved by Engineer in charge for a particular item, the contractor shall continue to carry out the item at the rates determined by the Competent Authority. The decision on the final rates payable shall be arrived at through the dispute settlement procedure.

22. No compensation for alterations in or restriction of work to be carried out.

- 22.1 If at any time after the commencement of the work, the Government, for any reason whatsoever, not require the whole or any part of the work as specified in the bid to be carried out, the Engineer in charge shall give notice in writing of the fact to the Contractor and withdraw that whole or any part of the work.
- 22.2 The Contractor shall have no claim to any payments or compensation whatsoever, on account of any profit or advantage which he might have derived from the execution of work in full or on account of any loss incurred for idle men and machinery due to any alteration or restriction of work for whatsoever reason.
- 22.3 The Engineer in charge may supplement the work by engaging another agency to execute such portion of the work, without prejudice to his rights.

**23. No Interest Payable**

No interest shall be payable to the Contractor on any payment due or awarded by any authority.

**24. Recovery from Contractors**

Whenever any claim against the Contractor for the payment arises under the contract, the Department shall be entitled to recover such sum by:



- (a) Appropriating, in part or whole of the Performance Security and additional Performance Security, if any; and/or Security deposit and/or any sums payable under the contract to the contractor.
- (b) If the amount recovered in accordance with (a) above is not sufficient, the balance sum may be recovered from any payment due to the contractor under any other contract of the department, including the securities which become due for release.
- (c) The department shall, further have an additional right to effect recoveries as arrears of land revenue under the M.P. Land revenue Code.

## **25. Tax**

- 25.1 The rates quoted by the Contractor shall be deemed to be inclusive of the sales and other levies, duties, cess, toll, taxes of Central and State Governments, local bodies and authorities. But the rates shall be excluding GST which shall be reimbursed as per prevailing Government Norms.
- 25.2 The liability, if any, on account of quarry fees, royalties, octroi and any other taxes and duties in respect of materials actually consumed on public work, shall be borne by the Contractor.

## **26. Check Measurements**

- 26.1 The department reserves to itself the right to prescribe a scale of check measurement of work in general or specific scale for specific works or by other special orders.
- 26.2 Checking of measurement by superior officer shall supersede measurements by subordinate officer(s), and the former will become the basis of the payment.
- 26.3 Any over/excess payments detected, as a result of such check measurement or otherwise at any stage up to the date of completion of the defect liability period specified in this contract, shall be recoverable from the Contractor, as per clause 24 above.

## **27. Termination by Employer**

- 27.1 If the contractor fails to carry out any obligation under the Contract, the Employer may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.
- 27.2 The Employer on the recommendation of the Engineer in Charge, shall be entitled to terminate the contract, if the Contractor.
  - a) abandons the works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the contract;
  - b) is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
  - c) without reasonable excuse fails to comply with the notice to correct a particular defect within a reasonable period of time;
  - d) does not maintain a valid instrument of Financial Security, as prescribed;
  - e) has delayed the completion of the works by such duration for which the maximum amount of liquidated damages is recoverable;
  - f) fails to deploy machinery and equipment or personnel or set up a field laboratory as specified in the Contract Data.
  - g) in judgmental of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the contract;
  - h) any other fundamental breaches as specified in the Contract Data.
- 27.3 In any of these events or circumstances, the employer on the recommendation of the Engineer in Charge may, upon giving 14 days' notice to the contractor, terminate the contract and expel the Contractor from the site. However, in the case of sub paragraph (b) or (g) of clause 27.2, the Engineer in charge may terminate the contract immediately.

- 27.4 Notwithstanding the above, the employer on the recommendation of the Engineer in Charge may terminate the contract for convenience by giving notice to the contractor.

## **28. Payment upon Termination**

- 28.1 If the contract is terminated under clause 27.3, the Engineer shall issue a certificate for value of the work done less advance payments received up to the date of issue of the certificate less other recoveries due in terms of the Contract Data, less taxes to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the contract data .
- 28.2 Payment on termination under clause 27.4 above, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the contractor's personnel employed solely on the works, and the contractor's costs of protecting and securing the works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.
- 28.3 If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be recovered as per clause 24 above.

## **29. Performance Security**

The Contractor shall have to submit performance security and additional performance security, if any, as specified in Bid data sheet at the time of signing of the contract. The contractor shall have to ensure that such performance security and Additional performance, if an, security remains valid for the period as specified in the Contract data.

## **30. Security Deposit**

- 30.1 Security deposit shall be deducted from each running bill at the rate as specified in the contract data. The total amount of security deposit so deducted shall not exceed the percentage of contract price specified in the Contract data.
- 30.2 After 50% of Physical Completion, Security Deposit deducted from running bills can be released by replacing it with an equivalent amount of BG with validity up to 3 (three) months beyond the Defect Liability Period/ extended Defect Liability.
- 30.3 The 50 % of the Security Deposit shall be released after 1 year from date of issuance of completion certificate and remaining 50% of the Security Deposit shall be released after Defect Liability Period + 3 Months.

## **31. Price Adjustment**

**31.1** Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with following principles and procedures and as per formula given in the contract data.

### **31.2 Applicability**

1. The price adjustment clause shall apply only for the works executed from the date of start of work (29th day from LOA) until the end of the scheduled completion date or extensions granted for reasons attributed to the Employer.
2. The Contractor shall not be entitled to any benefit arising from the, price adjustment clause for extension in the contract period for reasons attributed to the Contractors
3. In the Force Majeure event, the price escalation clause shall apply as given in the Force Majeure clause.

## **32. Mobilization Advance**

1. Payment of advances shall be up to 10% of contract price applicable if provided in the Contract Data.
2. If applicable, the Engineer in charge shall make interest bearing advance payment to the contractor of the amounts started in the Contract Data, against provision by the contractor of an unconditional Bank Guarantee in a form and by Scheduled commercial banks, in the name as stated in the Contract data, in amounts equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the contractor.
3. The rate of interest chargeable shall be as per Contract data.
4. The construction machinery advance, if applicable, shall be limited to 80% of the cost of construction machinery and admissible only for new construction machinery.
5. The advance payment shall be recovered as stated in the Contract data by deducting proportionate amounts from payment otherwise due to the Contractor. No account shall be taken of the advance payment or its recovery in assessing valuations of work done, variations, price adjustments, compensation events, or liquidated damages.

**33. Secured Advance (Deleted)**

**34. Payment Certificates**

The payment to the contractor will be as follows for construction work:

- (a) The contractor shall submit to the engineer monthly statement of the value of the work executed less the cumulative amount certified previously, supported with detailed measurement of the items of work executed as per the Billing Break-up duly checked and verified by PDMC.
- (b) The engineer shall check the Contractor's monthly statement and certify the amount to be paid to the contractor.
- (c) The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
- (d) The value of work executed shall also include the valuation of variations and compensation events.
- (e) All payments shall be adjusted for deductions for advance payment, security deposit, other recoveries in terms of contract and taxes at source as applicable under the law.
- (f) The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- (g) Payment of intermediate certificate shall be regarded as payments by way of advance against the final payment and not as payments for work actually done and completed.
- (h) Intermediate payment shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or be considered as an admission of the due performance of the contractor any part thereof, in any respect or the occurring of any claim.
- (i) The payment of final bill shall be governed by the provisions of clause 36 of GCC.

## **E. Finishing the Contract**

**35. Completion Certificate**

- 35.1.1 A physical completion certificate in the prescribed format given in Contract data (Annexure –U) shall be issued by the Engineer in charge/ Employer after physical completion of the capital work.
- 35.1.2 Substantial completion certificate may be issued in case of 80% coverage of service area in terms of sewerage collection network and installation of the Functional House service connections as instructed by the employer. In such case if employer permits for carrying out O&M then proportionate amount of O&M shall be payable till 100% completion is achieved and completion certificate as per clause 35.1 is issued.
- 35.3 After final payment to the contractor at the end of O&M, a final completion certificate in the prescribed format given in Annexure –V shall be issued by the Engineer In charge/ Employer.

**36. Final Account**

- 36.1 The Contractor shall supply the Engineer with a detailed account of the total amount that the Contractor considers payable for works under the Contract within 21 days of issue of certificate of physical completion of works. The Engineer shall issue a letter for start of Defects Liability period/O&M period and certify any payment that is due to the Contractor within 45 days of receiving the Contractor's account if it is correct and complete. If the account is not correct or complete, the Engineer shall issue within 45 days a schedule that states the scope of the corrections or additions that are necessary. If the Account is still unsatisfactory after it has been resubmitted, the matter shall be referred to the competent authority as defined in the Contract data, who shall decide on the amount payable to the contractor after hearing the Contractor and the Engineer in Charge/ Employer.
- 36.2 In case the account is not received within 21 days of issue of Certificate of Completion as provided in clause 35.2 above, the Engineer shall proceed to finalize the account and issue a payment certificate within 28 days.

## **G. Other Conditions of Contract**

### **37. Currencies**

All payments will be made in Indian Rupees.

### **38. Labour**

- 38.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
- 38.2 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

### **39. COMPLIANCE WITH LABOUR REGULATIONS**

- 39.1 During continuance of the Contract, the Contractor and his sub-Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given in the Contract data. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/byelaws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer. The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

### **40. Construction Safety**

The contractor should be well conversant with technical as well as administrative and legal aspects of safety and judicial pronouncement. The contractor shall all times take all reasonable precautions and safety measures to maintain safety of personnel and property. The contractor shall, at his own expenses and throughout the period of the contract ensure appropriate and suitable arrangements

for health, safety and hygiene requirements for the surroundings. The State and Central Government prevailing all Statutes in this regard must be complied in letter and spirit throughout the period of contract.

**41. Audit and Technical examination**

Government shall have the right to cause an audit and technical examination of the works and the final bill of the contract including all supporting vouchers, abstract etc. To be made after payment of the final bill and if as a result of such audit and technical examination nay sum is found to have been overpaid in respect of any work done by the contractor under the contract or nay work claimed by him to have been done under the contract and found not to, have been executed, the contractor shall be liable to refund the amount of overpayment and it shall be lawful for government to recover the same from him in the manner prescribed in clause 24 above and if it is found that the contractor was paid less than what was due to him, under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by government to the Contractor.

**42. Death or permanent invalidity of contractor**

During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications, and bye laws of the state or central government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the state or the major labour laws that are applicable to construction industry are given in the contract data. The contractor shall keep the employer indemnified in case any action is taken against the employer by the competent authority on account of contravention of any of the provisions of any Act or rules made their under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules regulations including amendments, if any, on the part of the contractor, the engineer/employer shall have the right to deduct from any money due to the contractor including his amount of performance of security. The employer/engineer shall also have right to recover from the contractor any sum required or estimated to be required for making good the loss or damage suffered by the employer. The employees of the contractor and the sub-contractor in no case shall be treated as the employees of the employer at any point of time.

**43. Jurisdiction**

This contract has been entered into the State of Madhya Pradesh and its validity, construction, interpretation and legal effect shall be subjected to the exclusive jurisdiction of the courts in Bhopal or of the courts at the place where this agreement is entered into. No other jurisdiction shall be applicable.

**44. Monthly RA Bills**

The payment certificates shall be regulated as per the provisions of clause 34 of the contract.

- 44.1 Upon the signing of agreement the Engineer shall decide the date of submission of monthly statement (RA Bills) as mentioned in clause 34 (a)
- 44.2 The Engineer shall check the Contractor's monthly statement (RA Bills) and certify the amount to be paid to the contractor within 15 days of submission of monthly statement (RA Bills).
- 44.3 The employer shall ensure the payment to the Contractor as per clause 34 (d), (e), (f) & (g) within 25 days of submission of monthly statement (RA Bills).

**[End of GCC]**



### Contract Data

Clause reference	Particulars	Data
1.14	Employer	NAGAR PALIKA PARISHAD BETUL
1.15	Engineer	Engineer as approved by Employer
1.16	Engineer in charge	Engineer as approved by Employer
1.22	Stipulated period of completion	24 months including rainy season
3	Language & Law of Contract	English & Indian Contract Act 1872
4	Address & contact details of the Contractor	As per Annexure H
	Address & contact details of the Employer/Engineer-phone, Fax, e-mail.	NAGAR PALIKA PARISHAD BETUL Ph: 07141-230424 mail: cmobetul@mpurban.gov.in
5	Subcontracting permitted for contract value	25% of the Contract value
6	Technical Personnel to be provided by the contractor – requirement &	As per Annexure I (Format I-3)
	Penalty, if required Technical personal not employed	Deduction shall be as per minimum manpower and their fixed wages.
10	Specifications	Annexure E
	Drawings	As per Annexure N
	Competent authority for deciding dispute under Dispute resolution system	Divisional Superintending Engineer, UADD
12	Appellate Authority for deciding dispute under Dispute resolution system	Chief Engineer/Engineer in Chief, Directorate UADD, Bhopal
13	Period of submission of construction program	30 days upon signing the agreement
	Period of submission of updated construction program	Quarterly bases
	Amount to be withheld for not submitting construction/updated construction program in the prescribed period	0.20% of the Contract Amount
14	Competent Authority for granting Time Extension	Chief municipal officer Betul
15	Milestones laid down for the contract	YES
	If Yes, details of milestones	As per Annexure O
	Liquidated damage	As per Annexure P
17	List of equipment for lab	As per Annexure Q
	Time to establish lab	3 months upon signing the agreement
	Penalty for not establishing field Laboratory	0.20% of the Contract amount till the establishment of Lab
18	Defect Liability Period	60 Months from the date of issue of Completion Certificate
19	Competent authority for determining the rate/Variation	a) For variation in Items/ Components of BOQ within the contract amount – Divisional Superintending Engineer of

		UADD. b) For Variation in Items/ Components beyond BOQ (new items) within the contract amount- CE / EinC of UADD.. c) For variation above contract amount – State Level Technical Committee (SLTC).
20	Any other conditions for breach of contract	_____
28	Penalty	Penalty shall include a) Forfeiture of Security deposit as per clause 30 of General conditions of contract and the percentage to apply to the value of work not completed representing the employer's additional cost for completing the work shall be 20%. b) Recovery of Liquidated damages imposed as per clause 15 c) Forfeiture of performance security (Guarantee) including additional performance security (Guarantee), if any, as per clause 29 of General conditions of contract d) Any other penalty as mentioned in the special condition of contract and operation and maintenance conditions
29	Performance Guarantee (security) shall be valid up to	Up to 3 months from the date of issuance of Completion Certificate, subject to submission of BG for O&M Period.
30	Security deposit to be deducted from each running bill	At the rate of 7 %
	Maximum limit of deduction of security deposit	Up to 7 % of Final contract amount. After 50% of Physical Completion, Security Deposit deducted from running bills can be released by replacing it with an equivalent amount of BG.
	Security deposit shall be valid up to	50% SD to be released after 1 Year from the date of issuance of Completion Certificate and remaining 50% to be released three Months beyond Defect Liability Period.
31	Price adjustment formula and procedure to calculate	As Per Annexure-R
31.1(1)	Price adjustment shall be applicable	Yes
32	32.1 Mobilization and Construction Machinery Advance applicable	Yes
	32.2 If yes, unconditional Bank Guarantee	In the format prescribed in Annexure - S
	32.3 If yes, Rate of interest chargeable on advance	Interest rate as per notified bank rate on the date of inviting tender
	32.4 If yes, Type & Amount payment that can be paid	1. Mobilization advance-Not more than 10% of contract amount



	32.5 If yes, Recovery of Advance payment	Recovery of Mobilization advance shall commence when 10% of the contract amount is executed and recovery of total advance shall be done on pro-rata basis and shall be completed by the time work equivalent to 80% of the contract amount is executed. In addition to the recovery of the principal amount, recovery of interest shall be carried out as calculated on the outstanding amount of principal at the close of each month. The interest shall accrue from the day of payment of advance and the recovery of interest shall commence when 10% of the contract amount is executed and shall be completed by the time work equivalent to 80% of the contract amount is executed.
33	33.1 Secured Advance applicable	No Security Advance payable
	33.2 If yes, Unconditional bank Guarantee	In the format prescribed in Annexure-T
34	33.3 If yes, Conditions for secured Advance	Not Applicable
	33.4 If yes, recovery of secured advance	Not Applicable
35	Completion certificate- After physical completion of the work	As per Annexure - U
	Final Completion Certificate – after final payment on completion of the work	As per Annexure - V
36	Salient features of some of the major labour laws that are applicable	As per Annexure - W

## **DRAWINGS**

(To be prepared by Contractor and approved by the by the Chief Engineer/ Engineer in Chief)

### **DETAILS OF MILESTONES**

The time allowed for the carrying out the work, as entered in the tender form shall be strictly observed by the contractor and shall be deemed to be essence of the contract and shall be reckoned immediately from the date of issue of the order to commence the work issued to the contractor.

The work shall throughout the stipulated period of contract be proceeded with all due diligence keeping in view that time is the essence of the contract. The contractor shall be bound in all cases, to complete the following financial target,

- 1/8th of the contract value before 1/4th of the whole time allowed under the contract has elapsed,
- 3/8th of the contract value before 1/2 of such time has elapsed.
- 3/4th of the contract value before 3/4 of such time has elapsed.

### **COMPENSATION FOR DELAY**

If the contractor fails to achieve the milestones, and the delay in execution of work is attributable to the contractor, the Employer shall retain an amount from the sums payable and due to the contractor as per following scale –

- i. Slippage up to 25% in financial target during the milestone under consideration – 2.5% of the work remained unexecuted in the related time span.
- ii. Slippage exceeding 25% but up to 50% in financial target during the milestone under consideration – 5% of the work remained unexecuted in the related time span.
- iii. Slippage exceeding 50% but up to 75% in financial target during the milestone under construction – 7.5% of the work remained unexecuted in the related time span.
- iv. Slippage exceeding 75% in financial target during the milestone under consideration – 10% of the work remained unexecuted in the related time span.

Note: For arriving at the dates of completion of time span related to different milestones, delays which are not attributable to the Contractor shall be considered. The slippage on any milestone is if made good in subsequent milestones or at the time of stipulated period of completion, the amount retained as above shall be refunded. In case the work is not completed within the stipulated period of completion along with all such extensions which are granted to the Contractor for either Employer's default or Force Majeure, the compensation shall be levied on the contractor at the rate of 0.05% per day of delay limited to maximum of 10% of contract price.

The decision of appropriate authority within the Urban Local Body after scrutiny and recommendation Divisional Superintending Engineer, UADD shall be final and binding upon both the parties.

## **Annexure – Q**

(See clause 10 of Section 3 of GCC)

### **LIST OF EQUIPMENT FOR QUALITY CONTROL LAB**

### **PRICE ADJUSTMENT**

The formulas for adjustment of price are as follow:

R = the value of work done during the month. It will include the amount of secured advance granted, if any during the month, less the amount of secured advance recovered, if any during the month, less value of material issued by Municipal, if any during the month.

Rd = The value of supply of DI pipes as calculated based on Section 4 Price Break-up Schedule (testing and supply part only) for Sewer Pumping main/ Collection during the month considered under the bill. It will include the amount of secured advance granted, if any during the month against DI pipes, less the amount of secured advance recovered, if any during the month, less value of material issued by Municipal, if any during the month.

Rh = The value of supply of DWC/HDPE pipes as calculated based on Section 4 Price Break-up Schedule (testing and supply part only) for sewer collection network during the month considered under the bill. It will include the amount of secured advance granted, if any during the month, less the amount of secured advance recovered, if any during the month against pipe, less value of material issued by Municipal, if any during the month.

Rr = The value of work done excluding the cost of pipe components,  $R - (Rd + Rh)$ .

The formula for deriving price adjustment is divided into two parts.

First Part (Rd + Rh) shall be for the pipe supply components only for DI & DWC pipe supply cost calculated as per Annexure H. (testing and supply part only) and

Second part  $[R - (Rd + Rh)]$  shall be for the value of works done excluding part (A) cost.

The formula for adjustment of prices for Part- A

A (i) Adjustment of DI component (Rd) for pipes

Price adjustment for increase or decrease in the cost of DI material procured by the Contractor shall be paid in accordance with the following formula:

$$Vd = 0.85 \times Rd \times (Di - Do) / Do$$

Vd = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for DI.

Do = The all-India wholesale price index for pig iron on the day 28 days prior to the date of notification of the tender, as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi.

Di = The all-India wholesale price index for pig iron for the month under consideration as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi.

Note: For the application of this clause, index of Pig Iron has been chosen to represent DI material group.

A (ii) Adjustment of DWC Component (Rh) for pipes

Price Adjustment for increase or decrease in the cost of DWC/HDPE shall be paid in accordance with the following formula:

$$Vr = 0.85 \times Rh \times (Ri - Ro) / Ro$$

Vr = Increase or decrease in the cost of work during the month under consideration due to changes in rates for HDPE/DWC

Ro = The all-India wholesale price index for polyethylene on the day 28 days prior to the date of notification of the tender, as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi

Ri = The all-India wholesale price index for polyethylene for the month under consideration as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi.

Note: For the application of this clause, index for polyethylene has been chosen to represent HDPE component.

The formula for adjustment of prices for Part-B [ $R_r = R - (R_d + R_h)$ ]

#### B (i) Adjustment for Labour Component

Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$$V_L = 0.85 \times P_i / 100 \times R_r (L_i - L_o) / L_o$$

$V_L$  = increase or decrease in the cost of work during the month under consideration due to changes in rates for local labour.

$L_o$  = the consumer price index for industrial workers for the State on the day 28 days prior to the date of notification of the tender, as published by Labour Bureau, Ministry of Labour, Government of India.

$L_i$  = the consumer price index for industrial workers for the State for the month under consideration as published by Labour Bureau, Ministry of Labour, Government of India.

$P_i$  = Percentage of Labour component.

Note: The price index for the state shall be for Madhya Pradesh (if given) else average index of all zones of Madhya Pradesh shall be determined up to two decimal places for use in the above calculation.

#### B (ii) Adjustment for Cement Component

Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula:

$$V_c = 0.85 \times P_c / 100 \times R_r (C_1 - C_o) / C_o$$

$V_c$  = increase or decrease in the cost of work during the month under consideration due to changes in rates for cement

$C_o$  = The all-India wholesale price index for Ordinary Portland Cement (OPC) on the day 28 days prior to the date of notification of the tender, as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi

$C_1$  = All India wholesale price index for Ordinary Portland Cement (OPC) for the month under consideration as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi.

$P_c$  = Percentage of cement component

#### B (iii) Adjustment of Steel Component

Price adjustment for increase or decrease in the cost of steel procured by the Contractor shall be paid in accordance with the following formula:

$$V_s = 0.85 \times P_s / 100 \times R_r (S_i - S_o) / S_o$$

$V_s$  = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel

$S_i$  = The all-India wholesale price index for mild steel long products for the month under consideration as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi

$P_s$  = Percentage of steel component

Note: For the application of this clause, index of mild steel long products has been chosen to represent steel group.

#### B (iv) Adjustment of POL (Fuel and Lubricant) Component

Price adjustment for increase or decrease in cost of POL (Fuel and Lubricant) shall be paid in accordance with the following formula:

$$V_f = 0.85 \times P_f / 100 \times R_r (F_i - F_o) / F_o$$

$V_f$  = Increase or decrease in the cost of work during the month under consideration due to changes in rates for fuel and lubricants

$F_o$  = The all-India wholesale price index for High-Speed Diesel (HSD) on the day 28 days prior to the date of notification of the tender, as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi

$F_i$  = The all-India wholesale price index for High-Speed Diesel (HSD) for the month under consideration as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi

$P_f$  = Percentage of fuel and lubricants component

Note: For the application of this clause, index for High-Speed Diesel (HSD) has been chosen to represent fuel and lubricants group.

B (v) Adjustment for Plant and Machinery Spares component

Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the Contractor shall be paid in accordance with the following formula:

$$V_p = 0.85 \times P_p / 100 \times R_r (P_i - P_o) / P_o$$

$V_p$  = Increase or decrease in the cost of work during the month under consideration due to changes in rates for plant and machinery spares

$P_o$  = The all-India wholesale price index for manufacturer of machines for mining, quarrying and construction on the day 28 days prior to the date of notification of the tender, as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi

$P_i$  = The all-India wholesale price index for manufacturer of machines for mining, quarrying and construction for the month under consideration as published by the Economic Advisor, DPIIT, Ministry of Commerce

& Industry, Government of India, New Delhi

$P_p$  = Percentage of plant and machinery spares component

Note: For the application of this clause, index of manufacturer of machines for mining / quarrying and construction has been chosen to represent the Plant and Machinery Spares group.

B (vi) Adjustment of Other Materials Component

Price adjustment for increase or decrease in cost of local materials other than cement, Steel, Bitumen and POL procured by the contractor shall be paid in accordance with the following formula:

$$V_m = 0.85 \times P_m / 100 \times R_r (M_i - M_o) / M_o$$

$V_m$  = Increase or decrease in the cost of work during the month under consideration due to changes in rates for other materials (other than Labour, cement, steel, P&M and POL)

$M_o$  = The all-India wholesale price index (all commodities) on the day 28 days prior to the date of notification of the tender, as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi

$M_i$  = The all-India wholesale price index (all commodities) for the month under consideration as published by the Economic Advisor, DPIIT, Ministry of Commerce & Industry, Government of India, New Delhi

$P_m$  = Percentage of other material component



The following percentages will govern the price adjustment:

S. No.	Component	Percentage of component in the work
<b>A</b>	<b>Part A (Rd + Rm + Rh)</b>	
1	DI pipe component	Rd = Pipe supply cost of DI pipes as per Annexure H for sewerage network, pumping main etc.
3	DWC pipe component	Rh = Pipe supply cost as per Annexure H for sewerage network

S. No.	Component	Percentage of component in the work
<b>B</b>	<b>Part B [Rr = R - (Rd + Rh)]</b>	
1	Labour component - Pi	25
2	Cement component - Pc	15
3	Steel component – Ps	10
4	POL component - Pf	10
5	Plant & Machinery Spares	25
6	Other Materials component - Pm	15
	<b>Total Part B</b>	100

**NOTE:**

1. To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

2. For the purpose of clarity, it is pointed out that the price adjustment may be either positive or negative, i.e., if the price adjustment is in favour of the Employer, the same shall be recovered from the sums payable to the contractor.

**BANK GUARANTEE FORM' FOR MOBILIZATION AND CONSTRUCTION MACHINERY ADVANCE**

To,

\_\_\_\_\_ [name of Employer]  
\_\_\_\_\_ [address of Employer]  
\_\_\_\_\_ [name of Contractor]

In accordance with the provisions of the General Conditions of Contract, clause 31 ("Mobilization and Construction Machinery Advance") of the above-mentioned Contract \_\_\_\_\_ [name and address of Contractor] (hereinafter called "the Contractor") shall deposit with \_\_\_\_\_ [name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of [amount of Guarantee\* [in words]].

We, the \_\_\_\_\_ [bank of financial institution] as instructed 'by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to \_\_\_\_\_ [name of Employer] on his first demand without whatsoever right of obligation on our part and without his first claim to the Contractor, in the amount not exceeding [amount of guarantee] \* [in words].

We further agree that no change or addition to or other modification of the terms of the Contractor or Works to be performed there under or of any of the Contract documents which may be made between [name of Employer] and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until \_\_\_\_\_ [name of Employer] receives full repayment of the same amount from the Contractor.

Yours truly,

Signature and Seal:  
Name of Bank/Financial Institution:

Address:

Date:

\* An amount shall be inserted by the Bank or Financial Institution representing the amount of the Advance Payment, and denominated in Indian Rupees.

**Bank Guarantee Form for Secured Advance (Deleted)**

### Physical Completion Certificate

Name of Work:

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Agreement No. \_\_\_\_\_ Date \_\_\_\_\_

Amount of Contract Rs \_\_\_\_\_

Name of Agency: \_\_\_\_\_

Used MB No.: \_\_\_\_\_

Last measurement recorded

a. Page No. & MB No.: \_\_\_\_\_

b. Date: \_\_\_\_\_

Certified that the above mentioned work was physically completed on..... (Date) and taken over on..... (Date) and that I have satisfied myself to best of my ability that the work has been done properly.

Date of issue

Executive Engineer

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**Final Completion Certificate**  
**(After completion of O&M period)**

Name of Work:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Agreement No. \_\_\_\_\_ Date: \_\_\_\_\_

Name of Agency: \_\_\_\_\_

Used MB No. \_\_\_\_\_

Last Measurement recorded

b. Page No. & MB No. \_\_\_\_\_

c. Date \_\_\_\_\_

Certified that the above-mentioned work was physically completed on \_\_\_\_\_ (date)

And taken over on \_\_\_\_\_ (date).

Agreement amount Rs. \_\_\_\_\_

Final amount paid to contractor Rs. \_\_\_\_\_

Incumbency of officers for the work

I have satisfied myself to best of my ability that the work has been done properly.

Date of Issue

Executive Engineer

\_\_\_\_\_  
\_\_\_\_\_

### **Salient Features of Some Major Labour Laws Applicable**

Workmen Compensation Act 1923: - The Act provides for compensation in case of injury by accident arising out of and during the course of employment.

- (a) Payment of Gratuity Act 1972: - Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed the prescribed minimum years (say, five years) of service or more or on death the rate of prescribed minimum days'(say, 15 days) wages for every completed year of service. The Act is applicable to all establishments employing the prescribed minimum number (say, 10) or more employees.
- (b) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the Employer plus workers at the rate prescribed (say, 10% or 8.33%). The benefits payable under the Act are:
  - i. Pension or family pension on retirement or death as the case may be. '
  - ii. Deposit linked insurance on the death in harness of the worker.
  - iii. Payment of P.F. accumulation on retirement/death etc.
- (c) Maternity Benefit Act 1951: - The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- (d) Contract Labour (Regulation & Abolition) Act 1970: - The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The principal Employer is required to take Certificate of Registration and the Contractor is, required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ prescribed minimum (say 20) or more contract labour.
- (e) Minimum Wages Act 1948: - The Employer is to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of buildings, roads, runways is scheduled employment.
- (f) Payment of Wages Act 1936: - It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- (g) Equal Remuneration Act 1979: - The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against female employees in the matters of transfers, training and promotions etc.
- (h) Payment of Bonus Act 1965: - The Act is applicable to all establishments employing prescribed minimum (say, 20) or more workmen. The Act provides for payments of annual bonus 'within the prescribed range of percentage of wages to employees drawing up to the prescribed amount of wages, calculated in the prescribed manner. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. States may have different number of employment size.
- (i) Industrial Disputes Act 1947: - The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.

- (j) Industrial Employment (Standing Orders) Act 1946: - It is applicable to all establishments employing prescribed minimum (say, 100, or 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and gets these certified by the designated Authority.
- (k) Trade Unions Act 1926: - The Act lays down the procedure for registration of trade unions of workmen and Employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- (l) Child Labour (Prohibition & Regulation) Act 1986: - The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations o employment of children in all other occupations and processes. Employment of child labour is prohibited in building and construction industry.
- (m) Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act 1979: - The Act is applicable to an establishment which employs prescribed minimum (say, five) or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as Housing, Medical-Aid, Travelling expenses from home up to the establishment and back etc.
- (n) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996: - All the establishments who carry on any building or other construction work and employs the prescribed minimum (say, 10) or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as. may be modified by the Government., The Employer of the establishment- is required to provide safety measures at the building or construction work and other welfare measures, such as canteens, first-aid facilities, ambulance, housing accommodations for workers near the-work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- (o) Factories Act 1948: - The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. it is applicable to premises employing the prescribed minimum (say, 10) persons or more with aid of power or another prescribed minimum (say, 20) or more persons without the aid of power engaged in manufacturing process.
- (p) The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013-

## CONSTRUCTION SAFETY

- 1) IS: 3696(Part-1, 2) Safety code for scaffolds and ladder
- 2) IS: 3764 Safety code for excavation work
- 3) IS: 7205 Safety code for erecting of structural steel work
- 4) SP: 70-2001 Handbook on Construction Safety Practices

On all excavation work, safety precautions for the protection of life and property are essential: While measures to avoid inconveniences to the public are desirable. Such measures and precautions include the erection and maintenance signs (to forewarn public), barricades, bridges, and detours: placing and maintenance of lights both for illumination and also as danger signals, provision of watchmen to exclude unauthorized persons particularly children, from trespassing on the work: and such other precautions as local conditions may dictate.

Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than  $\frac{1}{4}$  to 1( $\frac{1}{4}$  horizontal and 1 vertical.)

Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3ft.) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.

Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm. (3ft.)

Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11½") for ladder up to and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least  $\frac{1}{4}$ " for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.

(a) Excavation and Trenching - All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3ft.) above the surface of the ground. The side of the trenches which are 1.5m. (5ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m. (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.



(b) Safety Measures for digging bore holes:-

If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;

During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer in-charge of the work.

Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50m all-round the point of drilling to avoid entry of people;

After drilling the bore well, a cement platform (0.50m x 0.50m x 1.20m) 0.60m above ground level and 0.60m below ground level should be constructed around the well casing;

After the completion of the bore well, the contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;

After the bore well is drilled the entire site should be brought to the ground level.

Demolition - before any demolition work is commenced and also during the progress of the work, (i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.

No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.

All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipment shall invariably be provided: --.

(i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles

. (ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.

Those engaged in welding works shall be provided with welder's protective eye shields.

Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.

When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measure are adhered to:- Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.

At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.

Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.

Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.

Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.

The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.

No smoking or open flames shall be allowed near the blocked manhole being cleaned. (h) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.

Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.

Gas masks with Oxygen Cylinder should be kept at site for use in emergency.

Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.

The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole. Manual cleaning of sewers shall be strictly prohibited.

The workers shall be provided with Gumboots or non-sparking shoes, bump helmets and gloves, non-sparking tools, safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.

The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.

The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken:

- (a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.

Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.

Overall shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.

An additional clause (viii)(i) of Safety Code (iv) the Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use :

White lead, sulphate of lead or product containing these pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.

Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray. Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.

Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.

Overall shall be worn by working painters during the whole of working period.

Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.

Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man appointed by competent authority.

The employer may require, when necessary medical examination of workers. (ix) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.

When the work is done near any place where there is risk of drowning, all necessary equipment's should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.

Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions: -

(a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.

(b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.

Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.

In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in- Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.

Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Engineer-in-Charge or their representatives. Notwithstanding the above clauses from (1) to (14), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

**Section 3**  
**Conditions of Contract**  
**Part-II Special Conditions of Contract [SCC]**

**1. GENERAL:**

The special conditions are supplementary conditions to the TENDER and shall form the part of the contract.

- 1.1 It shall be the responsibility of BIDDER to co-ordinate with Various line departments such as Pollution Control Board to apply and obtain CTE and CTO for STPs, Traffic authority, Railways, MPRDC, M.P. Electricity Board, Telephone authority, various authorities including Public Health Engineering, Water resource Department for obtaining necessary permissions regarding crossing of road/railway tracks, shift of various types of public utilities like existing pipe line, sewer line, cable etc. as may be required for the due fulfillment of the obligations under this contract. CMO, Nagar Palika Parishad, Betul shall deposit all charges including charges for Electric Connection, Crossing of Railway and Road way etc. as may be necessary for seeking required permissions from different authorities but it shall be the primary responsibility of the contractor/firm to pursue with various authorities and obtain the permissions at the earliest. If as a result of excavation of trenches the underground services such as water main electric telephones cable, sewer lines become naked and unsupported it shall be the responsibility of the contractor to make suitable and necessary arrangement as per direction of the Engineer-in-Charge for their protection and no extra payment on this account will be made to the contractor. Any damages caused to the above mentioned underground services due to negligence of the contractor or otherwise the same shall be made good by the contractor at his own cost.

**2.0 Accuracy of Lines, Levels and Grades**

- 2.1 The various works shall be done true to line, level and grade. The periodical checking of these by the Engineer or Engineer's representative shall not absolve the Contractor of his responsibility regarding their accuracy. In case of any deviation or discrepancy in line, level or grade at the meeting faces, the contractor shall make good the discrepancy at his own cost and without any compensation for the additional work if any involved. Whenever such a discrepancy is found to arise at the junction of works being carried out by different Contractors the responsibility to set right their respective discrepancies shall be fixed by the Engineer whose decision shall be final and binding on the Contractors concerned. Engineer shall further have the unquestioned right if need be to rectify the discrepancies and recover the cost from the Contractor or Contractors according to proportions as he May consider reasonable.

- 2.2 The details of location and the nearest permanent bench marks. Reference Grid Marks shall be obtained by the Contractor in writing from the Engineer. Temporary bench mark for day to day use shall be fixed with reference to above permanent bench marks with double leveling. The Grid Co-ordinates and its references May be obtained from the Engineer.

**3.0 Arrangements of Water and Electric Power**

Arrangement for water and electric power required by the Contractor for the works shall be made by him at his own cost. Employer will however recommend to the State Electricity Board for giving the connection and power to the Contractor. However, the Employer will bear no responsibility in this respect.

**4.0 Measures for Prevention of Fire**

- 4.1 The Contractor shall not set fire to any standing Jungle, trees, brush wood or grass without a written permission from the Engineer.
- 4.2 When such permission is given and also in all cases when destroying out of dug trees, brush wood, grass etc. by fire, the Contractor shall take necessary measures to prevent such fire spreading to or otherwise damaging surrounding property.

- 4.3 Any damage caused by the spreading of such fire, whether in or beyond limits of the Employer's property, the amount of the damage shall be recovered by the Engineer from the Contractor's Bills as damages or deducted by any other duly authorized officer from any sums that May be due or become due from the Employer to the Contractor under the contractor otherwise.
- 4.4 The Contractor shall bear the expenses of defending any action or law proceedings that May be brought by any person by injury sustained owing to neglect of precautions to prevent the spread of fire and shall pay any damage and cost that May be awarded in consequence.
- 5.0 Site Order Book**
- A site order book shall be kept at the Employer's office on the site of the work. As far as possible all orders regarding the works are to be entered in this book. All entries therein shall be signed by the Engineer on his representative and the contractor or his authorized representative. In important cases the Engineer will countersign the entries which have been made. The site order book shall not be removed from the work site except with written permission of the Engineer and the Contractor or his representative shall be bound to take note of all instructions and directions meant for the Contractor as entered in the site order book without having to be called on separately to note them. The Engineer shall submit periodically copies of the remarks in the site order book to the Employer for record and to the contractor for submitting compliance report.
- 6.0 Foundations Depth/Levels.**
- The drawings indicate the general foundation levels to be adopted for the different conditions of the structures. During execution these levels May be modified to suit the site conditions. The Contractor shall not be liable to any compensation for any minor delays on this account. However, this May be considered for granting suitable extension in the completion period if necessitated by such events.
- 7.0 Approach Road**
- Necessary approach roads for various constructions of components of the work like IPS, STP, and SPS etc. shall be satisfactorily constructed and maintained by the Contractor at his own cost.
- 8.0 Regulation and Bye-Laws**
- The contractor shall conform to the regulations, bye laws or any other statutory rules made by any local authorities or by the Government and shall protect and indemnify the Employer against any claims or liability arising from or based on the violations of any such laws, ordinance, regulations, orders and decrees etc.
- 9.0 Contractor to use Excavated Hard Rock**
- All useful materials like hard rock etc. excavated by the Contractor at site shall be the property of Employer and shall be deemed to be issued to the Contractor at the issue rate of Rs. 200/- per cum. It shall be binding on the Contractor to use it as rubble, metal aggregate etc. after breaking into the required size for concrete work and as directed by the Engineer.
- 10.0 Income Tax**
- During the course of contract period, deductions of Income Tax shall be made at the prevailing rate of Department of Income Tax Government of India and as revised from time to time as per the advice of Income Tax authorities.
- 11.0 Supply and Arrangement of Materials**
- (1) The contractor shall make his own arrangement for supply of materials including cement and steel. The contractor shall be responsible for all transportation and storage of the materials at site and shall bear all the related costs. The Engineer shall be entitled at any time to inspect or examine all such materials. The contractor shall provide reasonable assistance for such inspection or examination as May be required.

- (2) The contractor shall keep an accurate record of use of materials like cement and steel used in the works in a manner prescribed by the Engineers.

#### **12.0 Cement**

- (a) **The contractor shall use Sulphur resistant cement for construction work.**
- (b) The Contractor shall stock his requirement so as to ensure utilization of cement within 60 days but in no case later than 90 days Cement older than the period aforesaid shall not be used on any work except with the written permission of the Engineer, and after satisfactorily passing such test as he may specify. The Contractor shall forthwith remove from the work such cement that Engineer has not allowed. The final disposal of such cement shall comply with the rules in force at the time and as the Engineer may approve
- (c) Large stocks of cement shall not be kept at the works but only sufficient quantities shall be kept to assure continuity of the work. The Contractor shall provide and maintain efficient water proof storage sheds for cement on the site of work. It shall be stacked on the platform 30 cms. above the floor level and shall be covered with tarpaulin or any other impervious covering materials in order to protect the cement bags from moisture. The cement shall be neatly stacked in an orderly manner so as to allow an easy access and count. The arrangement of storage and utilization shall be such as to ensure the utilization of cement in the order of its arrival at the stores and the Contractor shall maintain satisfactory records which would at any time show the date of receipt and proposed utilization of cement laying in the stores at site.
- (d) The Engineer shall at all time have access to the stores at sites of the Contractor. He shall have authority to check and examine the method of storage, record accounting and security provided by the Contractor. The Contractor shall comply with instructions that may be issued by the Engineer in this connection. The Contractor shall further at all times satisfy the Engineer on demand and by the production of records and books or submission of returns and proforma or by other proofs that may be demanded that the cement brought from the approved manufacturer with date of receipt & consumption etc. The Contractor shall at all times keep his records up to date to enable the Engineer to apply such checks as he may desire to impose.
- (e) The contractor shall provide a double locking arrangement to the store the key of one of the locks being with the Engineer or his representative at site. The Engineer or his authorized agent will have the authority to verify the stocks and check the consumption in any manner he thinks proper.

#### **13.0 Special Condition Regarding Conditional tender**

Conditional Tender shall not be considered.

#### **14.0 Design and Drawings**

- (1) Bidder shall carry out detail survey (existing and proposed network), condition assessment of existing network with the help of existing data available and soil investigations (including soil test) as may be required for preparation of detail designs and drawings. If any area is left out in the existing network then contractor has to consider it while designing the network. Left out connections in the existing network will have to be taken into account.
- (2) All Surveys, Project design and drawing shall be submitted and approved by the Contractor within 6 months of award of contract, any observations/corrections in the submitted design and drawing shall be intimated to the contractor in 15 Days, then submitted to IIT / NIT for vetting and examination through letter from Municipal Commissioner/CMO. In addition to these all designs & electro-Mechanical details shall also be vetted by the Technology Provider before client approval. The observations made by the examining institute shall be duly incorporated by the Contractor without any claims whatsoever in this regard. Thereafter, the drawing duly vetted by Government Engineering college shall be submitted to office of Engineer in chief for final approvals.

The delay in approvals on account of Engineering college/UADD shall not be accountable to the contractor. However, any delay in submission of drawing or delay in payment of fees to Govt. Engineering college will be considered on the part of contractor.



- (3) The approved drawings shall remain in the sole custody of the Employer. The Contractor shall obtain and make at his own expense any further copies required by him. At the completion of the contract the Contractor shall return to the Employer all Drawings provided under the Contract.
- (4) "The DPR Shall be referral document for the assessment of the work to be executed. However, the contractor shall prepare the execution drawings after surveying and designing of system / work to be executed. He shall be fully responsible for any discrepancies, errors or commissions in the drawings and other particulars, whether such drawings and particulars have been approved by the competent Authority. The contractor shall be fully responsible to ULB for any loss/damages/failure to part of work for which drawings and designs have been prepared by the contractor notwithstanding the design and drawings proof checked by the design consultant / Engineer or otherwise."
- (5) "Even though the design and drawings are approved by the competent authority, the contractor shall be fully responsible for the technical and arithmetical correctness and soundness of the design and drawings and for the safety of works executed on the basis of such approved design and drawings and to the damages or failure of the work.". One copy of the Drawings to be kept on Site.
- (6) One copy of the Drawings furnished to the Contractor as aforesaid, shall be kept by the Contractor on the site and the same shall at all reasonable times be available for inspection and use by the Engineer and the Engineer's Representative and by any other person authorized by the Engineer in writing.
- (7) The work shall be carried out as per the design and drawing prepared by contractor and approved by competent authority. However, contractor shall not be absolved from the obligations and responsibilities of the due diligence for achieving the desired objectives as per the scope of bid ITB-Section 2.

#### **Disruption of Progress**

- (8) The Contractor shall give written notice to the Engineer whenever planning or progress of the works is likely to be delayed or disrupted unless any further drawing or order, including a direction, instruction or approval is issued by the Engineer within a reasonable time. The notice shall include details of the drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

#### **Delay and Cost of delay of Drawings**

- (9) If, by reason of any failure or inability of the Engineer to issue within a time reasonable in all the circumstances any drawing or order required by the Contractor in accordance with sub-clause (3) of this Clause, the Contractor suffers delay then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under Clause 44 hereof. However, the Contractor shall not be entitled to any compensation for such delay, except extension of time.

#### **Further Drawings and Instructions**

- (10) The Engineer shall have full power and authority to supply to the Contractor from time to time during the progress of the Works such further drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the Works The Contractor shall carry out and be bound by the same.
- (11) As Built drawings in GIS: The Contractor after completion of the works, shall submit as built drawings of AMRUT 2.0 Projects duly verified and checked by PDMC in GIS Layer, shape file layers, in projection (Latitude & longitude). The location of completed works and alignment shall be marked in the drawing and it shall represent true locations at site. The



soft copy of drawings in GIS software and required sets in Hard copy shall be submitted to Engineer in Charge after final approval.

At the time of submission of Running bills, As-built Drawing in soft and Hard copy (5 copies) of the executed work duly checked and verified by PDMC shall be submitted in shape file layers, in projection (Latitude & longitude) and scale, and files must have proper attribute table, with following items,

1. As built pipeline along the road indicating Left side/Right side of road and also mark direction of flow / Diameter of pipe, location of MH, Chambers, valves, all in projection (Latitude - longitude and depth).
  2. Location of STP / IPS shall be geo tagged and with latest photographs of construction.
- (12) The Bidder shall have to submit treated water reuse plan as per Amrut 2.0 guidelines.

#### **15.0 Road Cutting and Restoration: -**

Contractor shall ensure that only mechanical road cutters should be used while excavation for laying of sewerage and carry out trench filling, compaction and restoration as per direction of engineer-in-charge.

#### **16.0 Operation and Maintenance**

Contractor shall operate and maintain the Sewerage project as the case may be as mentioned in Annexure Y, of **NAGAR PALIKA PARISHAD BETUL** for **5** years after successful completion of works, for which Contractor shall be paid separately. The details of the operation and maintenance along with the payment are given in O&M Annexure.

#### **17.0 Sufficiency of TENDER**

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his TENDER for the Works and of the rates and prices of various Quantities and the Schedule of Rates and Prices, if any, which TENDER rates and prices shall, except in so far as it is otherwise provide in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and maintenance of the Works. If, however, during the execution of the Works the Contractor shall encounter physical conditions, other than climatic conditions on the Site, or artificial obstructions, which conditions or obstruction could, in his opinion, not have been reasonable foreseen by an experienced contractor the Contractor shall forthwith give written notice thereof to the Engineer's Representative and if in the opinion of the Engineer, such conditions or artificial obstructions could not have been reasonably foreseen by an experienced contractor, than the Engineer shall certify and the Employer shall pay the additional cost to which the Contractor shall have been put by reason of such conditions, including the proper and reasonable cost. However the Engineer in charge decision shall be final & binding.

#### **18.0 Laying of Pipeline**

- 18.1 Before the finalization of alignment of pipelines, contractor shall examine the underground utilities and will carry out trial pit survey (If required) as determined by Engineer-in-Charge.
- 18.2 In case the pipelines are to be laid under the existing roads / lanes/Bye-lanes, the dismantling of existing roads/lanes/bye-lanes shall be made in such a way that after laying of pipes or other such structures that are required to be constructed / placed under the road, the road /lanes/bye-lanes shall be restored to as per the direction of engineer in charge.
- 18.3 The laying of pipes or other structures under the road is likely to involve public inconvenience such as interruption to traffic or interference in normal right of way. The Contractor shall ensure that because of the execution of work minimum possible public inconvenience is caused. For ensuring this, pipeline laying and road reconstruction work shall be carried out and completed in lengths as per the direction of engineer in charge. The further excavation, dismantling of road and laying of pipes in the same stretch of road shall not be started unless the earlier work of laying has been completed with full reconstruction of roads. The scheduling of work shall be got approved by the Engineer in Charge.
- 18.4 For dewatering no additional payment shall be made while laying of pipelines.

#### **19.0 Reuse of waste water**

- 19.1 The contractor has to submit waste water reuse plan along with design and drawings and operation and maintenance plan before the submission of final bill.

**20.0 Traffic management**

20.1 Contractor shall prepare traffic diversion plan and share it with police department before laying of the network.

**CMO**

**Nagar Palika Parishad Betul**

**Section 4****Price Break-Up Schedule****PAC Rs. 8538.38 Lakh**

S. No.	Name of the work Commissioning & Performance							Cost (in lacs)	Pro-rata Share %	
1.0	Pipe Line							1435.16	16.81%	
	Rising Main Providing, laying, jointing & testing of socket & spigot centrifugally cast (Spun) Ductile Iron pressure pipes with inside cement mortar lining (class K-9) conforming to IS 8329/2000 with latest amendments with suitable Rubber Gasket (Push on) joints as per IS:5382/85 including testing of joint.									
		S.no.	Diameter	Unit	Qty	Rate	Amount (in lacs)			
		1	350 mm dia DI K-9 for IPS-1	m	425	5359	22.78			
		2	400 mm dia DI K-9 for IPS-2	m	250	6423	16.06			
		3	300 mm dia DI K-9 for IPS-3	m	325	4349	14.13			
		4	600 mm dia. DI K-9 for MPS	m	50	11896	5.95			
		For above item, add extra @3% of pipe cost for valves, specials and fittings					1.77			
		Sewer Network DWC Providing, Laying & Jointing of DWC (double wall corrugated) PE Pipes as conforming to IS 16098 :2013 with latest amendments of renowned duly tested inclusive of all cost of inspection charges, transportation charges, transit insurance, loading/ unloading and stacking at site/ store etc, complete. (inner /outer Dia)								
		S.no.	Diameter	Unit	Qty	Rate	Amount (in lacs)			
		1	200 / 238 mm dia	m	139045	538.00	748.06			
		2	250 / 295 mm dia	m	11417	882.00	100.70			
		3	300 / 345 mm dia	m	2835	1260.00	35.72			
		For above item, add extra @3% of pipe cost for valves, specials and fittings					26.54			
		Sewer Network - RCC Providing and Laying non-pressure (NP4) RCC as per IS 458: 2003 with latest amendment socket & spigot pipes with rubber gasket joint including testing of joints conforming to IS 458:2021 with latest amendments.								
		S.no.	Diameter	Unit	Qty	Rate	Amount (in lacs)			
		1	350 mm	m	1864	2050.00	38.21			
		2	400 mm	m	943	2274.00	21.43			

		3	450 mm	m	1289	2681.00	34.56			
		4	500 mm	m	560	2947.00	16.51			
		5	600 mm	m	2200	4173.00	91.79			
		6	800 mm	m	2178	6472.00	140.96			
		Lateral: Providing, Laying & Jointing of DWC (double wall corrugated) PE Pipes as per IS 16098 (Part II): 2013 with latest amendment of renowned duly tested inclusive of all cost of inspection charges, transportation charges, transit insurance, loading/ unloading and stacking at site/ store etc, complete.								
		S.no.	Diameter	Unit	Qty	Rate	Amount (in lacs)			
		1	135 / 160 mm	m	52965	220.00	116.52			
		For above item, add extra @ 3% of pipe cost for valves, specials and fittings					3.50			
2.0		Manhole								
		(900 mm Dia Manhole) Construction of circular type manhole 900 mm internal dia. at bottom, 560 mm dia at top, depth of manhole 900 mm, common Burnt Clay Bricks or fly ash bricks of compressive strength not less than 75 Kg/ cm2 with 1:4 cement mortar (1cement : 4 coarse sand), inside & outside plastering minimum 12 mm thick with cement mortar 1:3 (1 cement:3 coarse sand) finished with a floating coat of neat cement. 20 cm thick foundation in cement concrete 1:3:6 (Nominal Mix) with stone aggregate 40mm nominal size, and making channel in cement concrete 1:2:4 (Nominal Mix) with stone aggregate 20mm nominal size including finishing the channel to shape, including providing and fixing footrest, manhole cover and frame etc. complete. (only excavation as per actual shall be paid separately) fixing of heavy duty (HD-20) SFRC cover and frame as per IS 12592 fixed in Cement concrete 1:2:4 (nominal mix) with stone aggregate 20mm nominal size including centering and shuttering etc. complete as per standard drawing. Depth of manhole shall be considered as the vertical distance from top of the manhole cover to the outgoing invert of main drain channel. (as per Drawing No. - 13-A) Extra for increasing depth of manhole mentioned at Item No. 2 above 900mm and up to 1650mm.								
		S.no.	Depth	Unit	Qty	Rate	Amount			
		1	upto 0.9 m	Nos	2222	7950	176.65			
		1.1	Extra for increasing depth of manhole mentioned at Item No. 2 above 900mm and up to 1650mm	m	1436	4524	64.97	956.27	11.20%	
		(1200 mm Dia Manhole) Construction of circular type manhole 1200 mm internal dia. at bottom, 560 mm dia at top, depth of manhole 1660 mm, common Burnt Clay Bricks or fly ash bricks of compressive strength not less than 75 Kg/ cm2 with 1:4 cement mortar (1cement : 4 coarse sand), inside & outside plastering minimum 12 mm thick Cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, 25 cm thick foundation in cement concrete 1:3:6 (Nominal Mix) with stone aggregate 40mm nominal size, and making channel in cement concrete 1:2:4 (Nominal Mix) with stone aggregate 20mm nominal size including finishing the channel to shape, including providing and fixing footrest, manhole cover and frame etc. complete. (only excavation as per actual shall be paid separately) fixing of heavy duty (HD-20) SFRC cover and frame as per IS 12592 fixed in Cement concrete 1:2:4 (nominal mix) with stone aggregate 20mm nominal size including centering and shuttering etc. complete as per standard drawing. Depth of manhole shall be considered as the vertical distance from top of the manhole cover to the outgoing invert of main drain channel. (as per Drawing No. - 13-B) Extra for increasing depth of manhole mentioned at Item No. 2 above 1660 mm and up to 2300 mm .								

92

			All kinds of ordinary soil	cum	266560.00	151.00	402.51			
			Ordinary rock	cum	19859.00	261.00	51.83			
		1b	Earth work in excavation for foundation, trenches for pipes / cables or drains etc. by mechanical means / manual means (exceeding 30cm in depth.) including ramming of bottom, dressing of sides, disposal of excavated earth including of all lift and lead upto 50m. Disposed earth to be levelled and neatly dressed. (For Depth up to 1.5m). (including excavation for all pipe line network and Manholes) (For depth 1.51m-3.00m)							
			All kinds of ordinary soil	cum	116744.95	181.20	211.54			
			Ordinary rock	cum	29186.24	313.20	91.41			
		1c	Earth work in excavation for foundation, trenches for pipes / cables or drains etc. by mechanical means / manual means (exceeding 30cm in depth.) including ramming of bottom, dressing of sides, disposal of excavated earth including of all lift and lead upto 50m. Disposed earth to be levelled and neatly dressed. (For Depth up to 1.5m). (including excavation for all pipe line network and Manholes) (For depth 3.01-4.50m)							
			All kinds of ordinary soil	cum	24391.82	217.44	53.04			
			Ordinary rock	cum	8130.61	375.84	30.56			
			Hard rock (blasting prohibited)	cum	8130.61	804.96	65.45			
		1d	Earth work in excavation for foundation, trenches for pipes / cables or drains etc. by mechanical means / manual means (exceeding 30cm in depth.) including ramming of bottom, dressing of sides, disposal of excavated earth including of all lift and lead upto 50m. Disposed earth to be levelled and neatly dressed. (For Depth up to 1.5m). (including excavation for all pipe line network and Manholes)(For depth 4.51-6.00m)							
			All kinds of ordinary soil	cum	2766.80	260.93	7.22			
			Ordinary rock	cum	922.27	451.01	4.16			

		Hard rock (blasting prohibited)	cum	922.27	965.95	8.91		
	2	Filling with moorum for pipe bedding or over the pipe including supply of moorum	cum	19868.40	720.00	143.05		
	2.1	Filling by available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. Extra for every additional lift of 1.5 m or part thereof in. 37 Rs/Cum						
	2.1.1	0.0 to 1.50m depth	cum	212596.89	89.00	189.21		
	2.1.2	1.50m to 3.0m depth	cum	80764.87	126.00	101.76		
	2.1.3.	3.0 m to 4.5m depth	cum	16396.339	163.00	26.73		
	2.1.4	4.5 m to 6.0m depth	cum	344.214	200.00	0.69		
		Carriage of Material by Mechanical transport including loading unloading & stacking etc. Distance upto 1 KM	cum	9000.00	92.87	8.36		
	3	Dismantling of flexible pavements and disposal of dismantled materials upto a lead of 1000 m, stacking serviceable and unserviceable material separately and as per relevant clause of section 200						
		Bituminous Course	cum	1506.78	420.00	6.33		
		Granular Course	cum	2260.17	378.00	8.54		
	4	Construction of granular sub-base by providing Coarse graded material (CBR>30), spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, complete in all respect as per relevant clauses of section-400.	cum	1507.00	689.00	10.38		

		5	Water Bound Macadam - Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam including spreading in uniform thickness, handpacking, rolling with vibratory roller 8- 10 tonnes in stages to proper grade and camber, applying and broom in requisite type of screening/binding materials to fill up the interstices of coarse aggregate, watering and compacting to all required density and as per relevant clauses of section-404 of specifications. Using screening Type B (11.2 mm Agg.)	cum	753.39	1441.00	10.86			
		6	Providing and laying bituminous macadam with hot mix plant using crushed aggregates of specified grading premixed with bituminous binder, transported to site, laid over a previously prepared surface with mechanical paver finisher to the required grade, level and alignment and rolled as per clauses 501.6 and 501.7 to achieve the desired compaction complete in all respects and as per relevant clauses of section 504 for Grading I bitumen content 3.25%	cum	904.00	5231.00	47.29			
		7	Providing and laying bituminous concrete with hot mix plant using crushed aggregate of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled vibratory and tandem roller to achieve the desired compaction in all respects and as per relevant clauses of section-507 (lime or cement will be used as filler). for Grading II ( 30-40 mm thickness ), Bitumen content 5.4% (VG-30)	cum	603.00	7945.00	47.91			

		8	Providing and applying primer coat with cationic bitumen emulsion (SS1 grade) on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.75 kg/sqm using mechanical/Manual means and as per relevant clauses of section-502.	Sqm	15068.00	33.00	4.97		
		9	Providing and applying tack coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per relevant clauses of section-503.@ 0.25 kg per sqm (normal bituminous surfaces).	Sqm	15068.00	12.00	1.81		
		10	Dismantling of cement concrete pavements including breaking to pieces not exceeding 0.02 Cum in volume and stock piling at designed locations and disposal of dismantled material upto a lead of 1000 m, stacking of serviceable & unserviceable material separately and as per relevant clause of section 200	cum	47530.00	749.00	356.00		
		11	Providing and laying Cement Concrete grade M-20 (Nominal mix 1:1.5:3) with 20 mm graded crushed stone aggregate, mixing shall be in mechanical mixer, laying with paver compacting by use of pin, plate / screed vibrators including form work by strong steel girders fixed by spikes, separation membrane 125 micron thick, i/c cutting of joints @ 4 to 5 m interval & filling it with hot applied bituminous sealant (without dowel bars). (max. thickness 20cm)----- --Deduct from Item above if paver with electronic sensor is not used and laying, compaction is done by any other method (Note :- The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work.) This item is to be executed with Prior	cum	22848.00	5029.00	1149.03		



[illegible]

5.0	Sewage Treatment Plant (STP)								1641.0	19.22%
Detailed survey, soil investigation, design & preparation of drawings of various Civil, Mechanical , Electrical works included SITC of various works for Construction of Sewerage treatment Plant with MPS, based on suitable technology whose treated effluent is equivalent to SBR/MBBR and inline to NGT norms; having capacity 16.0 MLD. Designing , providing, constructing, hydraulic testing, commissioning and giving satisfactorily trials consisting of Wet well including pumping up to inlet chamber, Inlet Chamber, Screen Chamber, Detritus Tanks, Distribution Chamber and Biological SBR Basins, Sludge Sump, Gravity Sludge Thickner, By pass channel of Plant, Grit Bypass Channel, Chlorine Contact Tank, Chlorinator Room/Shed, Sludge Centrifuge, Pump House, treated water pump and pump house, plant utility pump etc. necessary piping work with required valves, gates, drains pathways, Administration Block cum Laboratory, Laboratory Equipment, Tools and Plants, Spare Parts, etc. complete as turnkey job with all involved civil, electrical and mechanical works inclusive of all items, units as per detailed specifications for civil, electrical and mechanical, instrumentation & SCADA work. Supply installation testing commissioning of complete Electromechanical system which includes but not limited to suitable rating of substation 33/.415 kV, Suitable rating of Transformer (1 Working +1Standby), all applicable pump motor set, all HT LT & APFC Panel (HT Panel, RMU-2 incoming LBS and 2 outgoing VCB), LT panels, all VFD's & starter panels, APFC panels, Earthing Work, Lightning protection Work, EOT & cranes and it's Panel etc), all pipes and fittings, all valves (mechanical and motorized), earthing, cable tray arrangement etc. inline with CPHEEO requirement), works inclusive of all items complete in all respect for Sewage treatment plants to achieve BOD < 10ppm, COD < 50ppm, TSS < 10ppm, or as per latest CPCB & NGT norms to get recyclable quality of water for industrial & agricultural purposes. The plant shall have SCADA-PLC for Controlling and Monitoring of process treatment with online Continuous Effluent Monitoring system (OCEMS) (Spectrum measurement in the UV -VIS range 200-720 nm, double beam with entire spectrum scanning) and IPPTZ Camera at Inlet and Outlet of all STPs as per latest NGT& CPCB complete as per the UADD SOR (Along with facility of public address system, CCTV availability at all major location, complaint resolution system) NGT& CPCB guidelines complete in all respect.										
	S.no	Particulars	Qty	Unit	Amount (In Rs)	Amount (In Lacs)				
	1	16.00 MLD	1	MLD	164100000	1641.0				
6.0	House Service Connections								677.01	7.93%
Providing House Sewer Connection for approximately 17655 houses including laying of 110 mm upvc pipe, construction of collecting chamber etc.										
	S. No.	Particular	Unit	Quantity	Rate	Amount (In Lacs)				
		Providing, laying and jointing following P.V.C. - U pipes with solvent cement joint for Non-pressure gravity drain and sewer applications including testing of joints, cost of jointing materials etc. complete in all respect. 110mm	m	52965.00	214.00	113.35				

	3	Add 3% for Specials, Fittings, Interconnection etc.				3.40			
	7	Making connection of drain or sewer line with existing service lines manhole including breaking into and making good the walls, floors etc. with cement concrete grade M-15 (Nominal Mix) with stone aggregate 20mm nominal size plastered with Cement Mortar 1:3 (1 Cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels etc. complete.							
		For 100mm to 150mm dia. Pipes	Each	17655.00	494.00	87.22			
	House Service Chamber Manhole with above specifications having inside size 600x450mm and 900mm (OR 600) deep including SFRC rectangular Manhole Cover and frame (medium Duty) 600mm x 450mm complete.								
	S.no.	House Chamber	Unit	QTY	Rate	Amount (In Lacs)			
	1	600 x 450 x 900 mm	Each	5296	5854.0	310.0			
	2	600 x 450 x 600 mm	Each	3531	4615.9	163.0			
7.0	Providing, Erecting and installation of 33KV Transmission and 11 KV Transmission Feeder for IPSs, STP as mentioned below, complete in all respect as per MPMKVVCL norms & approvals, IE norms and specifications, electrical way if applicable, metering panel/equipment. Providing and laying of HT feeder connection upto Sewerage treatment plant/pumping station, including DG set for IPS1- IPS-2, IPS-3 and STP campus								
	S. No.	Particular	Unit	Quantity	Amount (In Lacs)		206.62	2.42%	
	A	33 KV HT Line on H-Beam 13mtr with Dog Conductor (Urban)	Km	1.2	30.17				
	B	11 KV HT Line on H-Beam 13mtr with Dog Conductor (Urban)	Km	0.63	16.97				

				<p>SITC of Radiator Cooled and Turbo charged Silent DG Set (As per latest CPCB emission norms) having specifications as per A, B, C, D, E, F,G,H &amp; IA) 1500 RPM Diesel Engine conforming to BS:649/5514 of suitable BHP (up to 82.5 kVA 6 cylinder or Below required, 125 kVA &amp; Above ratings 6 cylinder or above required ) capable of taking 10% over loading for one hour after 12 hours of continuous operation., Dry exhaust manifold with Hospital grade silencer and catalytic convertor(isolated from main DG chamber), up to 3 M exhaust piping (with LRB insulation &amp; Alum. cladding ) as required .B) AC Brush less SPDP Alternator conform to BS 5000 (part 99) or IS/IEC 60034-1. . Alternator shall be self regulated with standard Alternator Protection( Over voltage , over speed &amp; under voltage, under speed warning &amp; shutdown).Engine &amp; Alternator mounted on a common base Frame &amp; coupled through a flexible coupling or close coupledC) CPCB / ARAI approved Standard canopy with Weatherproof, powdercoated Accoustic enclosure for DG set for sound attenuation fabricated from 1.6 mm CRCA sheet steel (structure) with sidewall fabricated from 1.6 mm CRCA sheet &amp; filled with</p>						
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glasswool (96Kg/m<sup>3</sup>) / Foam. as per IS1813 the doors of 28/40/50/85mm thick as perrating and fabricated from 1.6mm CRCA sheet packed with accoustic material, All doors/opening are sealed with neoprene /EPDNgaskets. The DG Set has Inbuilt / External in fuel tank to run 6 to 8 Hrs as per OEM standard, with protection and tripping of DG set against temperature of more than 50 degree centigrade.D) Electronic / Mechanical governor, Manual & electric Start ,Batteries with battry charger, Engine instruments panel,AVM pads All controls for operation of DG set are from outside the enclosure with DG control panel having Microprocessor based Genset monitoring like Running Hour, RPM, Low Lube Oil tripping & control system, Panel mounted MCCB/ACB of suitable rating, Ammeter, Voltmeter, PF meter, frequency meter, KWH meter,digital fuel display meter, Ind.lamps etc. mounted inside enclosure , visible and accessible from outside. The enclosure should be suitable for following capacity DG sets and alternator. Noise level shall be less than 75 dB at a distance of 1 Mtrs. duly certified by authorised agency etc. complete in all respect of following capacity :E) (i) Accoustic glass wool wall thickness should not be less then 40mm and not less then 20mm PU foam upto rating 100 KVA. (ii).Accoustic glass

				wool wall thickness should not be less then 65mm and not less then 50mm PU foam upto rating 250 KVA. (iii)Accoustic glass wool wall thickness should not be less then 100mm for rating above 250 KVA.F) First filling of the fuel tank shall be done by contractor and the prevailing fuel cost at that time shall be reimbursed to the contactor by department.G) Servicing Contract of DG Set from OEM's Authorised Service Dealer as per OEM guidelines during the DLP period shall be done by contractor including all consumables, actual charges shall be reimbursed to the contractor by End User Department.H) Manufacturer / OEM must have its authorized service dealer in Rajasthan. Which can provide service within 6 Hours of compalint registration.I) DG set will be offered for Inspection and Testing at Manufacturer's Works in presence of Departmental Engineers. All as per pre approved by Engineer in-charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .						
			C	400 KVA at 0.8 pf 415V 50Hz 3-ø - For IPS - 1	Nos	1.00	34.02			
			D	400 KVA at 0.8 pf 415V 50Hz 3-ø - for IPS - 2	Nos	1.00	34.02			
			E	320 KVA at 0.8 pf 415V 50Hz 3-ø - For IPS - 3	Nos	1.00	27.61			
			F	750 KVA at 0.8 pf 415V 50Hz 3-ø - MPS & STP location	Nos	1.00	63.84			
8			9.1 Railway Crossing							
		S. No.	Particular	Unit	Quantity	Rate	Amount (In Lacs)		89.43	1.05%

102

	1	Trenchless Pipe pushing method of suitable dia. hole below natural ground level and pushing MS casing pipe and insertion of carrier pipe and anti corrosive treatment, epoxy painting, PU coating and insulation sheet / spacer including excavation, shoring/strutting, preparation and maintaining the entry and exit pit, excluding cost of Supply, laying and jointing of MS casing Pipe and carrier Pipe (For Railway and Highway crossings, Nallah crossings)						
		In Rock - More than 1000 mm	m	100.00	46560.00	46.56		
	2	Providing, Supplying & laying of following M.S. pipes as per IS specifications with inside & outside epoxy coating as per relevant IS code, duly tested for usage in Drinking water inclusive of all materials, inspection charges, transit insurance, loading/unloading FOR site unloading & stacking etc. complete as per direction of Engineer-in-Charge.						
		Dia. of pipe 1067.00 mm (O. D.)						
	3	10 mm - Thickness of Pipe	m	100.00	16039.00	16.04		
	4	Costing for Required Permission from Railway department	LS	-	-	20.00		
9.2 Nalla Crossing								
	S. No.	Particular	Unit	Quantity	Rate	Amount (In Lacs)		
	1	9 Nos Nalla Crossings at Different location	each	9	75938.00	6.83		
<b>Grand Total</b>								8538.39 100.00%

**Notes:**

- During execution of the work, the existing concrete road shall not be cut, damaged or disturbed unless absolutely unavoidable. Wherever this is required for laying of pipelines, cables, or any other utilities, the Contractor shall adopt HDD (Horizontal Directional Drilling) technology.
- Payment for HDD-related works shall be released strictly on the basis of actual executed quantities, duly measured, recorded and verified by the Engineer-in-Charge.
- The sewage pipe to be used shall have epoxy/suitable coating inside the pipe wall for protecting pipe from any

possible damage due to sewage flow, if required.

- In case of constraint in land availability the construction of pumphouse/sump shall be carried by well sinking method with prior approval of Engineer in-charge without any extra cost.



**SECTION 5  
AGREEMENT FORM  
AGREEMENT**

This agreement, made on the day of \_\_\_\_\_ between (name and address of Employer) (hereinafter called "the Employer") and \_\_\_\_\_ (name and address of contractor) hereinafter called "the Contractor" of the other part.

Whereas the Employer is desirous that the Contractor execute \_\_\_\_\_ (name and identification number of Contract) (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs. \_\_\_\_\_

NOW THIS AGREEMENT WITNESSED as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be ready and construed as part of this Agreement viz.
  1. NIT with all amendments.
  2. Instructions to Bidders.
  3. Condition of Contract
    - i. Part I General Condition of Contract and contract data: and
    - ii. Part II Special Condition of Contract
  4. Specification
  5. Drawings,
  6. Price Break up schedule (Estimate for break-up)
  7. Billing Break-up (Payment schedule)
  8. Technical and Financial Bid
  9. Letter of Acceptance
  10. Agreement and
  11. Any other document(s), as specified (Detailed project report)

In witnessed whereof the parties there to have caused this Agreement to be executed the day and year first before written.

The Common Seal of affixed in the presence of:

Signed, Sealed and Delivered by the said \_\_\_\_\_ in the presence of:

Binding Signature of Employer \_\_\_\_\_

Binding Signature of Contractor \_\_\_\_\_

## SECTION – 6

ANNEXURE :X

### BILLING BREAK-UP

#### **Sewerage Network / Pumping Main /Laterals (16.82% of the total sanctioned cost) (S. No.-1.0)**

1. 3 % shall be payable after Approval of Design & Drawing.
2. 75% shall be payable after laying of pipeline as per actual work done on unit rate basis.
3. 10% shall be payable on Successful Testing of the pipeline.
4. 5% shall be payable on Successful connection of HSC on the laid pipeline
5. 5% shall be payable after completion of the whole work and trial run for a period of 1 month.
6. 2 % shall be payable after Submission of as Built Drawing.

#### **Sewer Manholes (11.20 % of the total sanctioned cost) (S. No.- 2)**

1. 3 % shall be payable after Approval of Design & Drawing.
2. 75% shall be payable on civil construction as per actual work done on unit rate basis.
3. 10% shall be payable after successful Testing of the connection.
4. 5% shall be payable on Successful connection of HSC on the laid pipeline
5. 5% shall be payable after completion of the whole work and trial Run for a period of 3 month
6. 2 % shall be payable after Submission of as Built Drawing.

#### **For Sewage Treatment plant, Main Pumping station and Intermediate sewage pumping station (20.17 % of the total sanctioned cost) (S. No.-4 and 5)**

##### **A) Civil works (70%)**

1. 3 % shall be payable after Approval of Design & Drawing
2. 15% shall be payable after completion of excavation and foundation works.
3. 15% shall be payable after completion of works upto ground level on pro rata basis
4. 50% shall be payable on super structure work on pro-rata basis (i.e, with the on progress of work).
5. 10% shall be payable on Successful Testing.
6. 5% shall be payable after completion of the whole work and trial run for a period of 3 month (At least 25% design sewage flow should come to STP).
7. 2 % shall be payable after Submission of as Built Drawing.

##### **B) Mechanical works (20%)**

1. 3 % shall be payable after Approval of Design & Drawing
2. 50% shall be payable after supply of all Mechanical equipment's.
3. 30% shall be payable after erection, installation of all mechanical items.
4. 10% shall be payable on Successful Testing.
5. 5% shall be payable after completion of the whole work and trial run for a period of 3 month
6. 2 % shall be payable after Submission of as Built Drawing

##### **C) Electrical and SCADA works (10%)**

1. 3 % shall be payable after Approval of Design & Drawing
2. 50% shall be after supply of all Electrical equipment.
3. 30% shall be payable after erection, installation of all electrical items.
4. 10% shall be payable on Successful Testing.
5. 5% shall be payable after completion of the whole work and trial run for a period of 1 month
6. 2 % shall be payable after Submission of as Built Drawing.

#### **For HT Feeder line and Transformer for ISPS (2.42 % of the total sanctioned cost) (S.No. 7 & 8)**

1. Payment for HT feeder connection upto Sewage treatment plant/pumping station shall be made as per actual work done on site.

#### **House Service Connections (7.93 % of the total sanctioned cost) (S. No.- 6)**

1. Payment for house service connection work shall be made as per actual work done on unit rate basis.

**Excavation, pipe bedding, refilling, Road restoration work for Sewerage Network (40.43% of the total sanctioned cost) (S. No.- 3.0)**

**Payment on trench backfilling**

- The 75% payment can be made to the contractor after filling of trench and balance 25% after complete road restoration.
- Payment for Excavation, pipe bedding, refilling, road restoration work shall be made as per actual work done on unit rate basis.

**Railway Crossing and Nalah Crossings (1.05% of total sanctioned cost) (S. No.-9)**

Payment for shall be made as per actual work done on site.

**Note:**

Billing Break-up (Payment Schedule) for various components specified in Section-6 of bid document may be further break-up in terms of percentage of weightage, if required, after signing of agreement during construction period to complete work by Employer after approval of Chief Engineer/Engineer-In-Chief, UADD, Madhya Pradesh, Bhopal. However, the lump sum approved cost shall remain unchanged.

**Operation and Maintenance**

The Bidder shall be responsible for the operation and maintenance of the project for a period of 5 years from the date of successful completion of the work. During O&M, all the expenses for repairs, replacements & consumables for the proposed sewerage system except all Chemical & electricity consumption (to be borne by ULB up to the limit as given below) shall be on the part of Bidder. Chemical consumption reimbursement shall be as per actual. It shall be the responsibility of Bidder that the system runs at desired capacity and efficiency during the O&M period. ULB shall extend all the necessary support to the Bidder for fulfilling the Obligations for operating and maintaining the system successfully. During O&M the scope of Contractor shall be to operate and maintain the sewerage system and Sewage Treatment plant to deliver the desired effluent parameters.

Details of the operation and maintenance are given below

1. Repairs and replacements in each and every component of proposed Sewerage system of NAGAR PALIKA PARISHAD BETUL town including Sewerage network, sewerage treatment plant, pump houses, pumping main/ gravity main, so that desired quantity of waste water should be collected from 17655 Household.
2. Consumables in the form of any chemicals as may be required for treating waste water will be certified by Employer authority. The actual quantity will be determined as per the detailed engineering recommended by PDMC and VETTED by Engineering college and approved by employer. However, expenditure will be borne by NAGAR PALIKA PARISHAD BETUL town as per actual.
3. Guaranteed Power Consumption quoted by contractor will be determined as per the detailed engineering recommended by PDMC and VETTED by Engineering college and approved by employer. However, expenditure shall be borne by NAGAR PALIKA PARISHAD BETUL town as per actual. Bidder shall ensure that the combined efficiency of motor and pumps used in any component should be IE 3 norms. However in the failure of guarantee power consumption during O&M, the electricity bill above the guaranteed power consumption will be borne by contractor as an actual.
4. Bidder shall keep the premises of STP, pump houses and IPS clean and tidy.
5. Suitable penalties for non-adhering service level benchmark shall be imposed on the bidder.
6. Bidder shall handover the project facilities to the Municipality/ NAGAR PALIKA PARISHAD BETUL after the completion of O&M period as per original condition as constructed on 1st day after execution
7. It shall be the responsibility of bidder that the wastewater collected at inlet of STP should be made at desired quantity & STP shall run at desired efficiency as per CPHEEO manual.
8. Any penalty or additional electrical expenses for non-adhering of Power Factor (PF), non-installation of capacitor banks, for achieving power factor less than 0.99, less combined efficiency of motor and pumps shall be chargeable to bidder as an actual.
9. Electrical expenditure shall be borne by Nagar palika parishad as per actual. However, bidder shall ensure that the combined efficiency of motor and pumps should not be less than 70% during O&M period.
10. The contractor shall use road cutter instrument only for laying of sewerage network. In case the contractor fails to provide road cutter, then penalty of Rs. 1.00 Lakh per Km shall be imposed, and payment shall be deducted from there running bill of the contractor.
11. The Contractor shall ensure the availability of all qualified staff required for operation and maintenance of networks, Treatment and other assets such as desludging, sewer cleaning vehicles, and other equipment's, maintenance of all types such as routine, breakdown, periodic and repair maintenance, replacement of damaged/ unserviceable sewers, maintenance of house service connections.

12. The contractor must deploy the minimum manpower, machinery etc. as per latest CPHEEO manual for operation and maintenance work. In case the contractor fails to deploy the same, then penalty shall be imposed equal to the remuneration of that personnel.
13. During operation and maintenance, if Road/Pipeline is damaged by the third party or in case of Line Shifting by third party, then the contractor must repair road/pipeline on approved tender rate with price adjustment. If contractor fails to do so, then ULB can engage any maintenance contractor for the same on the same rate.
14. Treatment of the sewage shall be done as per prevailing standards and as per latest NGT/CPCB norms so that the treated water may be reused / disposed of. In case, if the required standard of all parameters is not achieved continuously for 10 days then penalty of 0.05% of project cost per week shall be imposed by employer. If the effluent parameters does not meet the standards continuously for 3 months, then the contractor shall redesign and reconstruct the STP at his own cost.
15. All costs including costs of all the materials, equipment's, etc., required for operation and maintenance (preventive and / or breakdown) shall be borne by the contractor.
16. Minimum trial and run period shall be 3 months from date of start of trial and run of STP, however if the desired parameters of treated sewage as specified do not meet out for 03 months, then the trial and run period will be extended. It will end on the date when the effluent quality meet out the desired parameter's continuously by for three Months.
17. During specified trial and run periods of 03 months electricity charges shall be burn by concerned Municipality/ Municipal Council. If desired parameters of treated sewage does not meet out within the 03 months of trial and run period, then contractor shall be responsible to pay the electricity charges till the date up to which desired parameters meet out. The payment of electricity charges shall be deducted from contractor's running/ final bill.
18. The contractor shall conduct the test at laboratory developed by him at STP location under the contract. The contractor shall submit sample of sewage coming at inlet and sample of treated sewage coming at outlet to the laboratory of Pollution control board, Madhya Pradesh or any government engineering college or any NABL certified laboratory for testing of various parameter as specified in contract agreement. If the parameter of treated sewage at outlet are found within the limit specified in agreement, the date of taking sample of outlet sewage shall be treated as the end date of trial and run period. The engineer in charge shall issue a certificate showing start of trial and run period and issued another certificate showing end of trial and run period.
19. The contractor shall install the noise pollution control device wherever required for controlling the noise pollution.
20. The contractor shall provide SCADA-PLC for Controlling and Monitoring of process treatment with online Continuous Effluent Monitoring system (OCEMS) (Spectrum measurement in the UV-VIS range 200-750 nm, double beam with entire spectrum Scanning) and IPPTZ Camera at Inlet and Outlet of all STPs as per latest CPCB guidelines.
21. Labor laws and special condition of contract which are applicable during the O&M period shall be binding of the contractor.
22. The Contractor shall conduct training program to impart desired knowledge of O&M works of Scheme to the staff /personnel deployed by him and to make them acquainted with the

provisions of Manual on Operation and Maintenance of Sewerage Systems issued by Central Public Health and Environmental Engineering Organization (CPHEEO), New Delhi and relevant BIS Standards before the commencement of Trial and Run period.

23. During 5 years mandatory Defect Liability Period, Contractor shall Operate and Maintain the entire proposed Scheme and provide minimum staff given as under for which no extra payment shall be made separately to the bidder

A brief detail is given in Service level agreement.

#### Operation and Maintenance of STP and Sewerage Networks

Salary & Wages					
S.No	Description of Staff	Number	Monthly Remuneration (in RS.)	Total Amount (Rs/Monthly)	Annual Cost (in Rs.)
16 MLD STP Plant					
1.0	Project Manager cum Sewerage Filed Engineer	1	50000	50000	600000
2.0	Pump Operator (Mechanical)	1	15000	15000	180000
3.0	Operator assistant (Electrical)	1	15000	15000	180000
4.0	Lab Technician (Chemist)	1	15000	15000	180000
5.0	Lab Assistant	1	15000	15000	180000
6.0	SCADA Operator + Assistant	2	15000	30000	360000
7.0	Watchman (Gate Keeper)	3	10500	31500	378000
8.0	Gardener	2	10500	21000	252000
9.0	Unskilled Labours (Helper)	2	10500	21000	252000
Sewerage Networks					
10.0	Safety/Quality Engineer	1	35000	35000	420000
11.0	Plumber	1	15000	15000	180000
12.0	Sweeper	4	15000	60000	720000
13.0	Store keeper	1	10500	10500	126000
Total Annual Cost =					4008000.00

#### Chemical Consumption and Cost

S.No	Chemicals	Kg/day	Rate (Rs/Kg)	Total Amount (Rs/day)	Annual Cost (in Rs.)
1.0	Chlorine Consumption	56	15	840	306600
2.0	Polyelectrolyte	3.78	250	945	344925
Total Annual Cost =					651525

#### Annual Cost for Transportation of Sludge

S.no.	Item	m3/day	Rate (Rs/Cum)	Amount (Rs/day)	Amount per Annual (Rs)
1	Sludge	5	93.35	466.75	170364

#### Maintenance of Sewerage Network

S.No	Description	Number	Monthly Remuneration (in RS.)	Total Amount (Rs/Monthly)	Annual Cost (in Rs.)
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1	Office setup and complaint redressal system	1	Lumpsum	10000	120000
2	Provision for vehicle for maintenance- 1 vehicle for each zone	4	15000	60000	720000
3	Miscellaneous items - Fuel, Road cutter, safety equipment, tools etc.		Lumpsum	5000	60000
4	Driver- 1 for each vehicle	4	10500	42000	504000
<b>Total Annual Cost =</b>					<b>1404000</b>

**Staff for Operation & Maintenance of IPS**

S.No	Description	Number	Monthly Remuneration (in RS.)	Total Amount (Rs/Monthly)	Annual Cost (in Rs.)
1	Pump Operator + Assistant	6	15000	90000	1080000
2	Watchman (Gate Keeper)	9	10500	94500	1134000
<b>Total Cost =</b>					<b>2214000</b>

<b>Total amount of O &amp; M =</b>	<b>84,47,888</b>
<b>Percentage of Tender Cost</b>	<b>0.99%</b>

The Bidder shall employ following minimum Manpower for the O&M of the project. Prior approval of ULB is required before deployment. Bidder shall accommodate the man power available with ULB, If any (Bidder shall be employing other staff as per requirement). In case of non-deployment of ULB staff, suitable deduction shall be made thereof @ minimum wages prescribed below. Following is the minimum staff required for the assignment.

Details of minimum Staff to be deployed by Bidder for Operation and maintenance of the project,

S.No.	Particulars	Minimum Qualification	Experience	Remuneration (In Rs.)	Nos.
1.0	Project Manager Cum Sewerage Field Engineer	B.E.(Civil/Chemical)	5 years	50,000	1
2.0	Mechanical Engineer	Diploma (Mechanical)	5 years	25000	1
3.0	Chemist	BSc. (Chemistry)	3 years	15000	1
4.0	Electrical Engineer	Diploma (Electrical)	3 years	25000	1
5.0	Plumber	12 <sup>th</sup> pass/ITI	2 years	15000	1
6.0	Sweeper	10 <sup>th</sup> pass	2 years	12,000	4

For the deployment of manpower from the serial number 1 to 5, the experience shall be considered of the relevant field i.e. sewerage. Power consumption shall not exceed as provided in tender document. If power consumptions exceed from the values as given in the tender document  $\pm 10\%$ , then charges of the same shall be recovered from the contractor.

A brief details of power consumption is given bellow.

As per CPHEEO table 5.21, approx.. daily energy consumed (kWh) for 16 MLD is 7320 kWh.

The payment against the O&M shall be made every year on satisfactory upkeep and running of the system @ **0.99%** of the sanctioned Bid cost with an increment of 6 % every succeeding year from 2<sup>nd</sup> year. All the materials, consumables, repairs/ replacement, man power required during O&M are included in O&M cost, no additional payment shall be made to the contractor.

S. No.	Year	% of amount to be paid by NAGAR PALIKA PARISHAD BETUL
1	1 <sup>st</sup> Year	0.99
2	2 <sup>nd</sup> Year	1.05
3	3 <sup>rd</sup> Year	1.11
4	4 <sup>th</sup> Year	1.18
5	5 <sup>th</sup> Year	1.25

The payment against the O&M shall be made in 4 equal installments after completion of each quarter period of Operation and Maintenance can be extended up to 15 years on the same terms and conditions as mentioned in this Bid. If the contractor does not deploy the required no. of staffs shown, then proportionate deduction shall be made accordingly.

The Bidder shall be responsible for the operation and maintenance of the project for a period of **5** years from the date of successful completion of the work. During O&M all the expenses for repairs, replacements & consumables except electricity (to be borne by **NAGAR PALIKA PARISHAD BETUL** upto the limit as given above) shall be on the part of Bidder. It shall be the responsibility of Bidder that the system runs at desired capacity and efficiency during the O&M period”.

#### **Assignment or Sub-Contracting**

- I. The Bidder shall undertake operation and maintenance of sewerage scheme (**NAGAR PALIKA PARISHAD BETUL**) by itself or through any other financially capable contractor, possessing requisite technical and managerial expertise, but in either case, the Bidder shall remain solely responsible to meet the O&M requirements.
- II. The Bidder will not be entitled to subcontract any part of its obligations to any third party without prior approval of the Employer. Neither party may assign their rights and obligations without the consent of the other party.
- III. If the Bidder desires to sublet the O&M works to any other Contractor he shall submit details of Subcontractor to seek permission from Employer in writing and thereafter work of O&M will be subcontracted. No payment will be made to the sub- contractor. Payment will be made to the Bidder as per provisions of Contract.
- IV. The Sub-contractor shall also be required to have registration under Madhya Pradesh Public Works Department. If Sub-contractor is not registered under Centralized System of Registration of Madhya Pradesh Public Works Department, then at the time of subletting of works, he has to register himself accordingly and copy of registration of Sub-contractor will be submitted by the Bidder to the Employer within one month from the date of signing of agreement for subletting of works.
- V. The Employer or Engineer-in-Charge or Engineer or any Employer's Representative shall have right to issue instructions to appointed Sub-contractor and if compliance of instructions are not being made by him or in case it is found that Sub-contractor is not capable to perform O&M obligations due to any reason, the contractor shall take all works in his on control within 15 days from the date of notice of the Employer/Engineer-in-Charge.

#### **O&M Obligations of Bidder**

- I. The Contractor shall undertake all services relating to operation and maintenance of proposed / Entire sewerage system under the contract during the O&M Period (Post commissioning period) in conformity with O&M requirements set out in “Manual on Operation and Maintenance of sewerage Systems issued by Central Public Health and Environmental Engineering Organization (CPHEEO), New Delhi” and shall also ensure compliance of applicable BIS Standards for O&M works.
- II. The Contractor shall keep Hard Copy of latest Manual on Operation and Maintenance of sewerage Systems issued by Central Public Health and Environmental Engineering Organization (CPHEEO), New Delhi and relevant BIS Standards at laboratory proposed to be developed within the premises nearby STP.

#### **Minimum staff/personnel**



The Contractor shall employ following minimum staff/personnel for the execution of the Scheme/ Project. The Contractor shall make payment of wages to the deployed staff/personnel as per State/ Central Government guidelines.

S.No	Description of staff	Minimum Qualification	Experience	Minimum (Nos.)
A.	Staff Requirement			
1	Project Manager	B.E (Civil/Chemical)	10 years	1
3	Mechanical Engineer	BE/ Diploma (Mechanical)	5 years	1
4	Civil Engineer	Diploma (Civil)	7 years	4
5	Electrical & Instrumentation Engineer	BE/ Diploma (Electrical/ Instrumentation)	5 years	2
6	Electrician & Fitter & Welder	ITI	5 years	10
7	Store keeper	12 <sup>th</sup> Pass /ITI (Civil)	3 years	1
8	Co-Ordinator	BE/Diploma	3 years	1
9	Process Engineer	BE	5 years	1
10	Chemist	BE Chemical/ MSC Chemistry	5 years	1
11	Safety/Quality Engineer	Degree/Diploma	3 Years	1

**Notes:**

- (i) The Bidder shall employ staff/personnel as per requirement as in the table.
- (ii) The Bidder shall have additional staff/personnel in reserve, if any staff goes on leave for more than two days and the bidder shall follow the applicable labor laws.
- (iii) Whenever any deployed staff/personnel leaves the job assigned under this contract or replaced by the Bidder, another competent and experienced staff, having prescribed minimum qualification and experience shall be appointed by the Bidder within seven (07) days.
- (iv) If Bidder fails to arrange alternate staff within three days, the Employer will have right to deploy alternate staff at the risk and cost of the Bidder and the amount against the wages of the deployed alternate staff shall be deducted from the Bidder's bill of O&M works.
- (v) The Bidder shall submit CV of all staff/personnel with their scanned copy of Aadhar Card, Mark Sheet/Degree, Experience details, passport size colour photo and mobile number to the Employer before the commencement of trial and run period. The Bidder shall submit CV of replaced staff with afore said documents within seven days from the date of deployment.
- (vi) Manual cleaning of sewerage system shall not be allowed.

1

### **Service Level Agreement**

The variations allowed in treated effluent quality during O & M period of **5 yrs** and during Defect Liability Period, and penalty for not maintaining the standards are as below:

The treated water quality and other key deliverable standards shall be demonstrated by the Contract at,

- the nominal design flow
- 25% of nominal design flow\*
- 10% above the nominal design flow\*
- the pollutant concentration of all incoming pollutants as freight (i.e. kg/day in terms of flow received) in a range of 75% to 110% of the pollutant freight calculated at the design pollutant concentration and nominal design flow.

*\*On some occasions during the year like festivals, excessive rain, extreme weather conditions etc.*

<b>Parameter</b>	<b>Maximum Allowed Concentration (MAC)</b>
<i>pH</i>	5.5 – 9.0
<i>BOD</i>	10 mg/l
<i>COD</i>	50 mg/l
<i>TSS</i>	20 mg/l
<i>Fecal Coliform</i>	Desirable-100MPN/100 ml, Permissible-230 MPN/100 ml
<i>Total Nitrogen as N</i>	10 mg/l
<i>Ammonia Nitrogen as N</i>	2 mg/l
<i>Total Phosphorus as P</i>	1 mg/l

Non-compliance to demonstrate the plant performance during the completion tests with respect to treated water quality and sludge quality for a continuous period of 72 hours, is not acceptable and the Contractor shall rectify the facility to demonstrate the performance. Not being able to demonstrate the plant performance shall render the plant as “Non-Acceptable” leading to a liquidity damage of 10% and shall forfeit the performance securities.

Contractor to maintain guarantee parameters for treated effluent quality during **O&M period and** Defect Liability Period. These quality parameters are subject to presumptions that actual pollutant Pollutants like BOD, SS, Nitrogen etc. in kg/day) load will not exceed design pollutant load (kg/day) per day for every parameter and as per NGT Parameter. However, on some occasions during the year (i.e. festivals, excessive rain, extreme weather conditions), individual pollutant concentration (mg/l) can exceed up to 10% of design parameters, and total sewage flow can exceed up to 10% design flow.

The treated effluent parameters shall be demonstrated with 24hour composite samples with 95% compliance on monthly basis i.e. not more than 5% cumulative samples during the month can be off specifications.

The Maximum Allowed Concentration (MAC) on individual grab samples shall not be more than 2 times of the above specified 95 percentile value.

If any parameter of any grab sample exceeds the MAC values, the sample shall be considered as “non-Complaint”.

Guarantee for Fecal Coliform shall be based on 30 days geometric mean value. However, if pollutants load (kg/day) exceeds the design pollutant load per day basis, or total flow exceeds the design capacity above 10% (24 hr basis), no penalty shall be applicable.

During trial run and commissioning, no penalties will be applied and Contractor will rectify the plant to ensure successful commissioning.

*However, during DLP of 60 months and O & M period of 5 yrs, will impose following penalties/liquidated damages for not maintaining the guaranteed parameters, as described below*

**Condition A:-**

*Penalty against non-achieving of effluent parameter as per NGT/CPCB norms:*

- *Chemical consumption cost during DLP and Variable cost of DLP (if any) will not be paid to bidder of that time period If NGT standard parameter will not achieve.*
- *Electricity cost will be borne by bidder of that time period, If NGT standard parameter will not achieve.*
- *If NGT will impose any penalty to NAGAR PALIKA PARISHAD BETUL for these individual unit against non-achievement of effluent standard parameter of NGT of that time period than same penalty will be recovered from bidder.*

**Liquidated Damages for non-compliance of treated effluent standards**

<i>Event Triggering the recovery of Liquidity Damages</i>	<i>Liquidated Damages</i>	<i>Frequency</i>
<i>Non-conformance with MAC for BOD Standard</i>	<i>Rs. 2000/-</i>	<i>For every event of non-conformance*</i>
<i>Non-conformance with MAC for COD Standard</i>	<i>Rs. 2000/-</i>	<i>For every event of non-conformance*</i>
<i>Non-conformance with MAC for TSS Standard</i>	<i>Rs. 2000/-</i>	<i>For every event of non-conformance*</i>
<i>Non-conformance with MAC For Total Nitrogen</i>	<i>Rs. 2000/-</i>	<i>For every event of non-conformance*</i>
<i>Non-conformance with MAC for Ammonia Nitrogen</i>	<i>Rs. 2000/-</i>	<i>For every event of non-conformance*</i>
<i>Non-conformance with MAC for Fecal Coliform Standard</i>	<i>Rs. 2000/-</i>	<i>For every event of non-conformance**</i>

*\* An event is defined as online reporting duration, not exceeding 3 minutes i.e. a maximum of total 30 minutes a day i.e. 98% system reliability.*

*\*\* An event is defined as daily composite sample, not exceeding one non-conforming sample in 30 days i.e. 97% system reliability.*

The cumulative of above liquidated damages shall not exceed the monthly **O&M** cost (Maximum liquidated Damages).

**Condition-B: Breakdown of Equipment:**

*In case of breakdown of equipment for more than the stipulated time period as below, on discretion of Engineer-in-Charge, the Contractor shall be penalized as mentioned below:*

<b>Equipment</b>	<b>Breakdown Time Period</b>	<b>Penalty Imposed</b>
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Equipment	Breakdown Time Period	Penalty Imposed
Critical Equipment/ Instrumentation (Critical equipment shall mean those equipment's / systems which are essential to ensure the plants performance and it shall include all flow and treated water quality measuring instruments and systems including submersible mixers, blowers, sludge and MLSS recirculation pumps, disinfection (chlorination system), filters electrical systems such as critical electrical system such transformers, electrical panels etc.)	beyond 72 hours i.e. 72 hours	3% of Monthly O&M Cost per day of default beyond permitted breakdown time period

Semi-Critical Equipment		
Semi Critical equipment shall mean those equipment's / systems which are normally necessary to ensure the plants performance and they shall include all screens, grit removal systems, primary clarifiers, bio reactors (aeration system), secondary clarifiers, sludge thickening, and digestion systems etc.	beyond 7 days	2% of Monthly O&M Cost per day of default beyond permitted breakdown time period
Non-Critical Equipment Non-Critical equipment shall mean those equipment's/ systems which have been provided at the plant are but are not critical in for delivering the plants performance, such as area lighting, air conditioners, Instruments not critical towards operation of the plant.	beyond 10 days	1% of Monthly O&M Cost per day of default beyond permitted breakdown time period

The cumulative of above liquidated damages shall not exceed the monthly O&M cost (Maximum Liquidated Damages).

**NOTE:** In case the non-conformance, on a continuous basis, due to Condition A and Condition B becomes equal to or more than 50% of the monthly O&M value for a period more than 3 months in a year i.e. 90 days in a year, then the Employer reserves the right to terminate the Contractor after in cashing all the Security Deposits, retention Money and Performance Guarantees.

**Condition- C:** In any case if the grid power failure is more than 8 hrs in a single occasion in a day or cumulative grid power failure is more than 8 hrs in a day

a) No treatment standards will be compulsory. However, contractors are encouraged to maintain standards as far as possible. No penalties will be imposed on contractor. Above relaxation shall be applicable only for a period of 24 hours after resuming regular grid power.

**Condition-D: Cost of Electrical Energy/Guaranteed Power Consumption:**

Contractor shall give complete details of total power consumption, guarantee power generation and net grid power consumed by the contractor during O&M & defect liability period.

During Operation and Maintenance, & Defect Liability Period (DLP), damages payable by Contractor to Employer on excess consumption of net electrical energy above guaranteed power consumption shall be equal to the actual cost of the excess energy used for O&M and DLP of the Works for WWTP under the Contract, based on the guaranteed consumption provided by the Contractor and the current rates charged to the Employer for electricity consumed. Such payable will be assessed for each month during the O&M and DLP Period in which the actual power consumption exceeds the guaranteed power consumption calculated on a "kilowatt-hour consumed per litre of sewage" basis.

During Operation and Maintenance, damages payable by Contractor to Employer on reduction in Power Generation from WWTP shall be equal to the value of the power generation deficiency, based on the guaranteed Power Generation provided by the Contractor for WWTP and the current rates charged to the Employer for electricity consumed. Such payable by Contractor will be assessed for each month during the O & M Period in which the actual power generation is less than the guaranteed power generation calculated on a "kilowatt-hour generated per litre of sewage treated" basis.

After the Completion Test, the guarantees would come into effect for power generation consumption and generation.

**Condition-E: Residual Handling & Disposal**

The Plant Residuals shall conform to the following specifications:

**Screenings**

The screenings shall comprise of all particles of an effective size in excess of 5 mm and be "free of dripping water" i.e. the screenings on collection does not contain any dripping water when disposed from the plant

**Grit**

The grit removed shall contain less than 3% organic matter on dry basis of an average particle size between of more than 100 microns but less than 1000 microns and be free of dripping water

**Excess Bio Solids (Sludge)**

The excess bio solids (Sludge) produced shall contain approximately 20-22% of Solid Content Concentration with VSS/TSS ratio of not less than 48%, for "spadable" or "open body truck able" consistency for easy transportation and disposal.

The wastewater treatment residuals i.e. Screenings / Grit and Dewatered Bio Solids shall be handled and transported by the Bidder in a nuisance free manner following environmental guidelines. If the performance of the Bidder is not found satisfactory in respect of processing, handling and transportation of the sludge, the Employer shall have the liberty to recover from Bidder two (2) times the cost incurred for handling and transportation of the residuals. The residuals shall be disposed by the bidders as per the guidelines provided by the employer

Screenings & Grit: Disposal to the Sanitary Land fill (the tipping charges shall be borne by the Contractor)

Dewatered Sludge: Ultimate Disposal of dewatered sludge shall be the responsibility of the Contractor. Sludge shall be disposed within the battery limit of plant area.