

---

**TOR FOR ENGAGING SURVEY AGENCY FOR  
UNDERTAKING GEOTECHNICAL INVESTIGATIONS**

**DEVELOPMENT OF SEWERAGE SYSTEM FOR MTMC**

---

January 2025

ANDHRA PRADESH URBAN INFRASTRUCTURE ASSET MANAGEMENT LIMITED, VIJAYAWADA

## I. Background

APUIAML is JV company of Government of Andhra Pradesh (GoAP) and is under Municipal Administration & Urban Development department of GoAP.

Mangalagiri Tadepalli Municipal Corporation (MTMC) is second largest municipal corporation in Andhra Pradesh (after GVMC) and envisages to develop sewerage system for entire MTMC area (excluding villages under CRDA). In this regard, they have approached APUIAML to prepare DPR for sewerage system for MTMC area. APUIAML is now in the process of preparing DPR and gearing up for issuance of tenders.

## II. Solicitation

In this context, it is required to carry out Geotechnical survey for preparation of DPR. In this regard, financial quotes are solicited to engage a survey agency for conducting the survey. The financial quote format is enclosed as **Annexure-I**.

## III. Instructions to Agencies

- a) The agency shall be in similar field of activity and should have experience in undertaking similar works previously.
- b) The quotes provided shall be exclusive of applicable taxes.
- c) The survey agencies are to submit their quotes in sealed envelopes at the following address on or before **18.00 Hrs, IST, 30.01.2025**.

The Divisional Head (Urban Infrastructure Development)

Andhra Pradesh Urban Infrastructure Asset Management Limited (APUIAML)

4<sup>th</sup> Floor, NTR Administrative Block, Pandit Nehru Bus Station, Vijayawada, Andhra Pradesh

The subject on the envelope should be – **Quote for carrying out Geotechnical investigations for MTMC sewerage system.**

- d) The quotes should be submitted on agencies' letterhead duly signed by the competent authority and shall have the following contact information: (i) Contact Person Name (ii) Contact Mobile No (iii) Contact email ID (iv) Contact Address.
- e) For further clarifications, the agencies may contact Mr. P Krishna Chaitanya on 7731830180, [krishna.chaitanya@apurban.in](mailto:krishna.chaitanya@apurban.in) /Mr. O Rajesh Babu on 8989096923, [rajesh.onteddu@apurban.in](mailto:rajesh.onteddu@apurban.in)
- f) This document is also available on the website – <https://www.apurban.com/>

**TOR FOR CONDUCT OF GEO TECH SURVEY**

|   |   |
|---|---|
| <b>Survey Type</b>  | <b>Geotechnical Survey</b>  |
| <b>Location</b>   | Mangalagiri Tadepalli Municipal Corporation   |
| <b>~Est. Quantity (Indicative)</b>  | Up to 10 m – 25 nos.<br>Up to 20 m – 10 nos.<br>Total 35 Locations  |
| <b>Proposed Scope</b>   | As under  |
| <b>Deliverables</b>   | Submission of Geo-Technical Investigation Report along with recommendations of foundations, water characteristics, use of soil for backfilling purpose, SBC at various depths etc.  |
| <b>Proposed Payment Terms</b>   | <ul style="list-style-type: none"> <li>• Estimated quantity is indicative.</li> <li>• Agency shall quote the rate per running ‘m’ cost for In different soils <ul style="list-style-type: none"> <li>▪ Normal Soils</li> <li>▪ In weathered rock/SDR etc.</li> <li>▪ In hard rock</li> </ul> </li> <li>• Agency shall also indicate the rate <ul style="list-style-type: none"> <li>○ Shifting cost with in the project area</li> <li>○ Mobilisation of equipment each time</li> <li>○ Cost of sample</li> </ul> </li> <li>• Since the quantity (number of locations) is more, the work may be entrusted to survey agency in different lots and Payments also shall be based on ‘Lot’ basis.</li> <li>• A ‘Lot’ is a collection of locations that have to be surveyed together at a time. APUIAML shall finalize ‘Lots’ considering priority of projects. The following terms for payments are for each ‘Lot’. <ul style="list-style-type: none"> <li>○ 50% payment upon completion of survey on ground</li> <li>○ 50% payment upon acceptance of Deliverables</li> </ul> </li> <li>• Initial payment of Rs.1,00,000 shall be made upon mobilization of equipment at site.</li> <li>• This payment shall be adjusted against first milestone payment</li> <li>• Rest of the payments shall be made based on milestones as mentioned above.</li> </ul> |
| <i>APUIAML shall facilitate in obtaining any permissions if required.</i> |   |

**Proposed Scope**

The survey agency shall carryout the flowing tasks:

- a. Mobilization of equipment and personnel to the project site, setting up the equipment and carrying out the field investigation and demobilization of the same after completion of fieldwork
- b. All the labor, rig, water or any other equipment/infrastructure/material required for making borehole, transportation to site/ laboratory has to be arranged by the agency.
- c. The Survey Agency shall carry out borehole drilling work in all types of strata including hard rock and will take out of samples. All the samples collected from borehole needs to be stored in standard procedure/s.
- d. Drilling of Bore holes up to 15 m depth of 100-150mm/100mm diameter boring (or refusal) in all types of soil, soft disintegrated rock, rock at the identified locations in Tadepalli & Mangalagiri.
- e. Conduct of Standard Penetration test at regular depth intervals of 1.5 m upto the refusal and collect samples for further testing.
- f. Calculate the Safe Bearing Capacity of Soil for determining type and size of foundations of structures
- g. Borehole drilling and sampling for determining various parameters of foundation
- h. Recording the depth of Ground Water Table
- i. Carrying out Laboratory Investigations on representative soil samples recovered from the Borehole
- j. Submission of Report including field investigation, borehole log showing soil profile, laboratory investigations, test results, interpretation of test results, datasheets, graphical representation of soil parameters, relevant maps and drawings, conclusions and recommendations for ground improvement, net safe bearing capacity of soil, type of foundation etc.
- k. The method of taking samples and the tests on soil samples shall be conducted as per relevant Indian Standard Code of practice.
- l. It is to be noted that visual examination of the soil exposed in suitably located trial pits at the site, combined with already established data for different types of soil is commonly used for deciding on the safe bearing capacity. While this procedure may be adequate for light or less important structures under normal conditions, relevant laboratory tests or field tests are essentially to be carried in the case of unusual soil types and for all heavy and important structures.
- m. All investigations should be done with the directions of APUIAML

**GENERAL TOR FOR SURVEYS (as applicable)**

---

**1. General Instructions**

- a) All survey work locations shall be identified and data collection shall be carried out by the survey agency in the prescribed format agreed with APUIAML.
- b) The Calibration Certificate for the instruments used shall be submitted to APUIAML
- c) All survey data sheets shall be provided to APUIAML upon completion of survey.
- d) All survey data needs to be entered by the survey agency in the format agreed with APUIAML.
- e) APUIAML representatives visiting the site shall be extended full cooperation and they shall be explained about methodology adopted and shall be appraised about the measures adopted for accuracy of work.
- f) The schedule of surveys should be approved by APUIAML before commencement of survey.
- g) The quoted rates shall be inclusive of the cost of labour, materials, equipment, transport, punching of data in prescribed format, and reports etc. and no other charges whatsoever shall be entertained in any circumstances.
- h) The number of survey locations is subject to change at the time of issue of work order.
- i) The survey agency at his cost shall ensure all safety measures and APUIAML shall hold no responsibilities in this regard.

**2. Deliverables**

- a) Survey data shall be submitted by the survey agency in the agreed format in agreed software.
- b) All field survey sheets, observations, drawings and other documents containing field data gathered during survey shall be handed over to the client and survey agency shall have no claim or use whatsoever. The survey agency shall not reproduce any data collected from the work in any form.
- c) Survey Data Analysis Report shall be submitted by the survey agency in the agreed format
- d) The soft copy of the drawings, database and report in Word /Excel /PPT/Dwg/PDF /shape/Dbx. Etc. format needs to be submitted at each stage along with the above.
- e) The format for submission of the data and report shall be discussed and agreed with the client and the reports shall be in submitted in the format agreed upon.
- f) No other payment shall be made towards out of pocket expenses.

**3. Effecting Payment to the Survey agency**

- a) The payment due to the survey agency for various milestones shall be paid once APUIAML approves all the deliverables for respective milestones.

- b) If services of survey agency are required for any work, not covered under this assignment, the scope and payment for the same shall be decided on mutually acceptable terms.

**4. Deduction**

All payments to the survey agency under the terms of engagement are subject to tax deduction at source under Income Tax Act and any other enactment that may be in force from time to time. The client will also be entitled to deduct from the payment due to any dues payable by the survey agency to the client. The client shall provide to you within prescribed time limit the appropriate tax deduction certificate evidencing payment of such taxes.

**5. Execution of the Assignment**

The survey agency shall keep the client informed about the progress of work.

**6. Ownership of Copyright**

Any deliverable prepared as part of this assignment shall be the intellectual property of the APUIAML. The drawings, specifications, documents and reports, survey formats, filled data sheets etc. prepared as instruments of service shall be the property of APUIAML whether the project, for which they are made, is executed or not. APUIAML shall retain copies of the survey agency's drawings, specifications and other documents for information and use in connection with the projects.

**7. Arbitration**

All disputes or difference which may arise between APUIAML and the Survey agency with regard to the meaning or interpretation or things done in pursuance of executed workorder, such disputes and difference shall be resolved mutually and if required and called for the same shall be referred for arbitration, which shall be conducted as per the provisions of the Arbitration and Conciliation Act 1996. Any dispute submitted to arbitration shall be considered by a mutually acceptable sole arbitrator. In case the Parties are unable to agree & decide on a sole arbitrator, then the dispute shall be considered by three arbitrators one to be appointed by APUIAML and one to be appointed by Survey agency and the third arbitrator to be appointed jointly by the arbitrators of the Client and the Survey agency. Each Party shall bear their respective cost to be incurred on the arbitration proceedings. The decision and award of the arbitrator shall be final and binding on the Survey agency and the Client. Place of arbitration shall be Vijayawada, Andhra Pradesh

**8. Indemnity**

In case of any dispute, controversy, litigation, public agitation etc. connected with the with the services rendered/ being rendered by Survey agency or arising out of any matter connected with or incidental to the services provided/ or being provided by Survey agency or for any other reason, the Survey agency



**TOR FOR CONDUCTING GEOTECHNICAL INVESTIGATIONS FOR THE PROJECT**  
**DEVELOPMENT OF SEWERAGE STSTEM FOR MTMC**

---

shall indemnify and keep indemnified and hold APUIAML, its employees, authorized representatives, agents harmless from and against all costs, claims, damages, proceedings, liability, including fees paid to legal counsels etc. in this behalf.

**9. Confidentiality**

Survey agency shall not disclose to anyone either during carrying out the services or within two years after completion of this assignment, any confidential or proprietary information relating to the Project or the APUIAML's business affairs or operations without the prior written consent of APUIAML.

**10. General**

APUIAML may make such rules and/ or lay out such procedures as may be deemed necessary for the implementation/ administration of the terms and conditions of your employment as stated in this work order with due intimation to you and the same will be binding on you.

**ANNEXURE I**

**FORMAT FOR SUBMISSION OF FINANCIAL QUOTE**

| SURVEY QUOTE |  |          |                          |
|--------------|--|----------|--------------------------|
| #            | Survey Type  | Unit     | Unit Cost<br>(in INR Rs) |
| <b>1</b>     | <b>GEOTECHNICAL</b>  |          |                          |
| 1.1          | Mobilization of Hydraulic drilling rig with all accessories like drill rods, casing pipes, S.P.T. equipment etc., which are required for boring and sample collection.                         | Each Rig |                          |
| 1.2          | Shifting of equipment from one location to another location per 'Lot'  | Each     |                          |
| 1.3          | Drilling of bore holes upto 15m depth of 100-150mm/100mm diameter Boring in all types of:  |          |                          |
|              | Soil   | Per RMT  |                          |
|              | Soft Rock or Gravel (SDR)  | Per RMT  |                          |
|              | Hard Rock  | Per RMT  |                          |
| 1.4          | Carrying out standard penetration test (SPT) as per IS: 2131-1963, at site at every 1 ½ m depth up to the refusal.   | Each     |                          |
| 1.5          | Conducting laboratory analysis with Applicable tests on the collected samples<br>a) Grain size analysis<br>b) Atterberg Limits, N.M.C & Density<br>c) Specific gravity<br>d) Direct shear test | LS       |                          |

**NOTE:**

1. The quotes provided shall be exclusive of applicable taxes
2. The quotes should be submitted on agencies' letterhead duly signed by the competent authority and shall have the following contact information: (i) Contact Person Name (ii) Contact Mobile No (iii) Contact email ID (iv) Contact Address