

GUNTUR MUNICIPAL CORPORATION



Name of Work:- EXPRESSION OF INTEREST NOTIFICATION FOR 3rd PARTY QUALITY CONTROL ASSURANCE FOR WORKS IN GUNTUR MUNICIPAL CORPORATION

Appointment of 3rd Party Quality Assurance Agency for Engineering Works in Guntur Municipal Corporation (GMC) in Two Cover System

Roc.05/SE/GMC/ /2017-18

(TO BE SUBMITTED IN SEALED COVER 'A')

Last date for submission of EOI : 17-06-2021 at 2:00 PM

Last date and time for receipt of bids : 17-06-2021 at 2:00 PM

Time and Date of Opening Bids : 18-06-2021 at 3:00 PM

Place of Receipt and Opening of Bids : O/o Municipal Corporation,
Opp.Gandhi Park,
Guntur-522003

Name of the Agency to whom issued :

Cost of Bid Documents paid Rs.10,000/- in favour of Commissioner, Guntur Municipal Corporation drawn in Nationalized Bank vide Bearing No..... Dt.....
of Bank

Superintending Engineer,
Municipal Corporation,
Guntur.

TENDERER

SUPERINTENDING ENGINEER

GUNTUR MUNICIPAL CORPORATION



VOLUME-II

(TO BE SUBMITTED IN SEALED COVER 'B')

Name of Work:- EXPRESSION OF INTEREST NOTIFICATION FOR 3rd PARTY QUALITY CONTROL ASSURANCE FOR WORKS IN GUNTUR MUNICIPAL CORPORATION

Name of the Agency to whom issued :

Cost of Bid Documents paid Rs.10,000/- in favour of Commissioner, Guntur Municipal Corporation drawn in Nationalized Bank vide Bearing No..... Dt..... of Bank

Superintending Engineer,
Municipal Corporation,
Guntur.

TENDERER

SUPERINTENDING ENGINEER

3RD PARTY QUALITY ASSURANCE SCHEDULE FOR WORKS

I. GENERAL CONDITIONS OF CONTRACT

1. GENERAL PROVISIONS

1.1 Definitions

Unless the context otherwise requires, the following terms wherever used in this Contract have the following meanings:

- a) "Applicable Law" means the laws of India and the state of Andhra Pradesh.
- (b) "Contract" means the Contract signed by the Parties, to which these General Conditions of Contract (GC) are attached, together with all the documents listed in Clause 1 of such signed Contract;
- (c) "GC" means these General Conditions of Contract;
- (d) "Government" means the Government of India or Government of Andhra Pradesh as appropriate to the context;
- (e) "Local currency" means Indian Rupees;
- (f) "Party" means the Client or the Consultants, as the case may be, and Parties means both of them;
- (g) "Personnel" means persons hired by the Consultants or by any Sub consultant as employees and assigned to the performance of the Services or any part thereof;
- (h) "SC" means the Special Conditions of Contract by which these General Conditions of Contract may be amended or supplemented;
- (i) "Services" means the work to be performed by the Consultants pursuant to this Contract as described in the clause 3.0 of SC;

1.2 Law Governing the Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

1.3 Language - English

1.4 Notices

Any notice, request or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed as indicated in the agreement.

1.5 Authorized Representatives

TENDERER

SUPERINTENDING ENGINEER

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Client or the Consultants shall be taken or executed by the authorized representative of consultant.

2.0 COMMENCEMENTS, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

2.1 Commencement of Services

The Consultants shall begin carrying out the Services immediately after issue of work order or signing the contract.

2.2 Modification

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, may only be made by written agreement between the client and consultant.

2.3 Force Majeure

2.3.1 The terms and conditions mutually agreed upon this CONTRACT shall be subject to Force Majeure.

2.3.2 Neither Guntur Municipal Corporation nor the Consultant shall be considered in default in the performance of its obligations hereunder for such period, if such performance is prevented or delayed because of war, hostilities, revolution, civil commotion, general strike, epidemic, accident, fire, wind, flood, earthquake or because of any law or order proclamation, regulation or ordinance by any Government or of any sub division thereof or an order by Court of Law, any act of God and State or any other cause whether of similar or dissimilar nature beyond the reasonable control of the party affected.

2.3.3 Should one or both the PARTIES be prevented from fulfilling their contractual obligations by a state of Force Majeure lasting continuously for a period of one month, the parties shall consult with each other regarding future implications of this CONTRACT.

2.3.4 In the event of Force Majeure both parties shall put in their best efforts towards resumption of the works at the earliest and shall put in their best efforts towards mitigating the costs incurred by the other party.

2.4 Termination

2.4.1 By the Client

The Client may terminate this Contract, by not less than thirty (30) days written notice of termination to the Consultants, to be given after the occurrence of any of the events specified in paragraphs (a) through (d)

- (a) if the Consultants do not remedy a failure in the performance of their obligations under the Contract, within thirty (30) days of receipt after being notified or within such further period as the Client may have subsequently approved in writing;
- (b) if the Consultants become insolvent or bankrupt;
- (c) if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days;

TENDERER

SUPERINTENDING ENGINEER

- (or)
- (a) if the consultant, in the judgment of the Client has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause:

"Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution.

"fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among consultants (prior to or after submission of proposals) designed to establish prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.

2.4.2 By the Consultants

The Consultants may terminate this Contract, by not less than thirty (30) days' written notice to the Client, such notice to be given after the occurrence of any of the events specified below:

If, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than thirty (30) days.

3.0 OBLIGATIONS OF THE CONSULTANTS

3.1 General

The Consultant shall perform the Third Party Quality Assurance Services for all works costing more than Rs.1.00 lakhs or as specified by the client.

The Consultants shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate methods. The Consultants shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Client.

The Consultant shall take all steps to take action in accordance with the Agreement of works contract between Municipal Corporation and works contractor.

3.2 Conflict of Interests

The consultancy fee of the Consultants pursuant to Clause 5 shall constitute the Consultants' sole consultancy fee in connection with this Contract or the Services, and the Consultants shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract.

3.3 Confidentiality

The Consultants, and the Personnel of either of them shall not, either during the term or within one (1) year after the expiration of this Contract, disclose any proprietary or confidential information relating

TENDERER

SUPERINTENDING ENGINEER

to the Project, the Services, this Contract, or the Client's business or operations without the prior written consent of the Client.

3.4 Consultant's Actions Requiring Client's Prior Approval

The consultant has to obtain prior approval from the client

- i) For conducting special tests at any recognized laboratories at no extra cost and owning the responsibility for the correctness of the report
- ii) For engaging any retired / in service Government engineers of Andhra Pradesh

3.5 Reporting system

The Consultants shall submit the test reports with their remarks directly to the Clients on weekly basis as per TOR. The Consultant would collect the information from the project site through detailed formats by carrying out relevant tests and base information along with data will be submitted to the Commissioner and forward the same to the Superintending Engineer and concerned Executive Engineer. All the information, work wise, would be documented in a register.

3.6 Documents Prepared by the Consultants will be the Property of the Client

All plans, drawings, specifications, designs, reports and other documents submitted by the Consultants would remain the property of the Client.

4.0 CONSULTANTS' PERSONNEL

As per the terms of reference adequate manpower would be deputed on the project site to carryout necessary tests and preparation of reports. The consultant would depute adequate manpower and other resources at respective locations based on workload and specific requirement. All the liabilities of manpower working on the project would be with consultant.

5.0 PAYMENTS TO THE CONSULTANTS

The payment to the consultant along with service tax would be made to the consultant as specified in the payment schedule in the SC.

6.0 SETTLEMENT OF DISPUTES

Any dispute arising out of this contract, which amicably not settled between the parties, to solve it initially same would be presented to the Guntur Municipal Corporation committee comprising Commissioner, Chief Engineer, concerned Executive Engineer and Consultant. If the dispute is not solved in that case it shall be referred to adjudication/ arbitration in accordance with Indian arbitration and conciliation Act 1996.

II SPECIAL CONDITIONS OF CONTRACT

1.0 Brief Description of Task:

This task involves assisting the client in ensuring good quality of construction for the works being taken up in Guntur Municipal Corporation. Guide Lines issued by the APUFIDC, Hyderabad on Quality Assurance and Quality Control Measures Initiated for Creation of Sustainable Infrastructure.

2.0 Back Ground:

The Government of Andhra Pradesh has insisted the Municipal Corporations to have third party quality assurance check for the works taken up by the Municipal Corporations / other Grant works.

- a) Improvement of CC / BT and other roads
- b) Improvement to parks and play grounds
- c) Traffic dividers , footpaths, traffic islands
- d) Shopping Complex and markets
- e) Water Supply
- f) Under Ground Drainage
- g) Storm Water Drains
- h) Lighting and other electrical works.
- i) Solid Waste Management
- j) Infrastructure facilities in City
- k) Other works sanctioned under all schemes in addition to other Guntur Municipal Corporation

For ensuring good quality of construction and improving efficiency, it is proposed to provide third party quality assurance through an independent agency

3.0 SCOPE OF SERVICES

The tasks of consultants are:

- i Carry out all pre construction QA Checks**
- ii Carry out all QA checks during Construction**
- iii Carry out all QA checks after construction**

The role of Quality Assurance consultant shall be conducting detailed checks of activities of construction from the starting stage to the finishing stage. This would involve collection of samples

TENDERER

SUPERINTENDING ENGINEER

and arranging testing. The consultant would be reporting to the concerned officers level of through weekly report and suggesting interaction with various authorities as and when required. All the tests and quality assurance inspections would be conducted as per the laid down specifications.

- a. Establishment of central reporting station at Guntur for all kinds of communication and weekly reporting to the Commissioner, Guntur Municipal Corporation for all types of quality tests. The Q.A. reports in technical, systematic informative and qualitative manner.
 - b. The team would be working in Guntur town for conducting Q.C. tests.
 - c. Field Staff with required mobile testing equipment for on site inspections including all checks of the works.
- 3.1 The following tests to be conducted:

TESTS ON MATERIALS

1. Tests on Cement
 - a) Standard Consistency
 - b) Fineness
 - c) Initial and final setting times
 - d) Soundness
 - e) Compressive strength
 - f) Specific gravity
2. Tests on fine aggregate
3. Tests on coarse aggregate
4. Compressive strength of concrete (Cubes)
5. Tension test on steel rods
6. Tests on Bricks
7. Concrete Mix design
8. Sieve Analysis of Fine and Coarse aggregates.
9. GSB tests
10. WBM tests
11. Sand, Cement, Concrete, Cube testing and Bitumen content
12. Non-Destructive test for CC Works (rebound hammer)
13. Laying, jointing and refilling of pipeline testing (witness)
14. Any other tests, if required.

Tests on Soils:

1. Soil tests on bored samples including borings.
2. Pile load and plate load test.
3. Tests on undisturbed soil sample.
4. Compaction tests (Standard and Heavy)
5. Consolidation test.

6. Sieve analysis
7. Hydro meter analysis
8. Swelling pressure test.
9. Tests on disturbed samples.
10. Shear tests
11. Unconfined compression test.
12. Liquid Limit and Plastic limit.

Tests on Roads:

1. Tests on Bitumen
 - a) Penetration
 - b) Softening point
 - c) Flash & Fire point
 - d) Ductility test
 - e) Solubility test
 - f) Loss on heating
 - g) Specific gravity
 - h) Bitumen Extraction test
2. Tests on Coarse Aggregates
 - a) Impact value
 - b) Crushing value
 - c) Los Angles abrasion
 - d) Flakiness / Elongation Index
 - e) Water absorption
 - f) Specific gravity
 - g) Stripping value
3. Tests on Fine Aggregates
 - a) Specific gravity.
 - b) Bulking
 - c) Density
 - d) Soundness tests 5 cycles
4. Mix Design
 - a) Job mix formulae for any one of MB.
DMB, BC, Mix seal etc.
 - b) Pavement Quality Concrete
(PQC), RCC, PCC.
 - c) Marshal stability testing on Bituminous
Mixes or hardness test for Mastic Asphalt on prepared sample.
5. Field Test
Pavement design of sub-grade by CBR method.
6. Pips /Sewer line pipes
 - i. Hydraulic Testing of pipes/Sewer pipes
 - ii. Quality of pipes at factory and field

iii. Physical dimensions verifications of pipes

6.a. Field

i. Hydraulic testing of pipe lines

In addition, the consultant need to check the manufactures test certificates for the materials like pipes & fittings, electrical items, steel, cement, bitumen (for Grade) etc., the contractor will have to provide these certificates, to the consultants at the time of inspection and should arrange the pressure test for pipelines.

Tests on Water / Waste water :

- a) Determination of total, suspended and dissolved solids in water / sewage sample.
- b) Determination of fixed and volatile solids in water / sewage sample.
- c) Determination of turbidity of water / sewage sample.
- d) Determination of alkalinity of water sample.
- e) Determination of acidity of water sample.
- f) Determination of temporary and permanent hardness of water sample.
- g) Determination of chloride concentration of water / sewage sample.
- h) Determination of pH value of water / sewage sample.
- i) Determination of Biochemical Oxygen Demand (BOD) of waste water.
- j) Determination of Chemical Oxygen Demand (COD) of waste water.
- k) Determination of optimum dose of coagulant.
- l) Determination of chlorine demand and residual chlorine.
- m) Determination of dissolved oxygen of water / sewage sample.
- n) Determination of Iron in water sample.
- o) Determination of settle able solids by im-hoff cone.

In addition, the consultant need to check the manufactures test certificates for the materials like pipes & fittings, electrical items, steel, cement, Bitumen (for Grade) etc. The contractor will have to provide these certificates, to the consultants at the time of inspection. Some of the Q.C. reports proforms are enclosed.

3.2 The Consultant shall faithfully conduct tests/checks and sampling required to be executed as per Andhra Pradesh Standard specifications/ IRC Specifications/ IE rules/ MORTH/ IS/ PH&MED Specifications by the contractors.

3.3 The Consultant will be fully responsible for the authenticity of the test results and submit test results in original to the Commissioner, Guntur Municipal Corporation without any hindrance of work.

3.4 The technical information such as the acceptable limits of the respective tests.

- a) Assessment about the process involved in the construction , like curing ,pitting etc.,

TENDERER

SUPERINTENDING ENGINEER

- b) The interim quality assurance reports should also contain the assessment on the over all quality of work done.
- c) The reports shall be furnished in time to process the work bills for payment
- d) The quality assurance staff shall be made available whenever required o the works and site test reports.

3.5 The basic information whether the required equipment has been used during the work such as

- 3.5.1 8-10 tonnes roller(s)
- 3.5.2 Vibrator(s)
- 3.5.3 Paver(s)
- 3.5.4 Concrete Mixer(s)
- 3.5.5 Steel centering

3.6 The consultant shall conduct core cutting analysis for 3 cores for CC road works of Rs.3.00 lakhs and above.

INDICATIVE LIST OF EQUIPMENTS

1. Survey Instruments including total station
2. Equipment for condition survey on road and bridges
3. Sieves of all sizes i/c sieve shaker and balances of required capacity
4. Cube strength testing machine
5. Core cutting machine
6. Equipment for cement testing
7. USPV (Ultra Sonic Pulse Velocity) Meter
8. Moisture Meter
9. Hammer of all sizes require to e used in building work
10. Rebound hammer
11. Leak Detection Equipments
12. Other miscellaneous equipments such as Screw Driver, Plumb – bob. Ovens, Slump Cone, Graduated Measuring Cylinders of required capacity, Gauge Tape Vernier Calliper, Magnifying Glass, Sprit Level, Vibration Table, Dial Gauge etc.
13. Project Specific instrument, if required.

3.7 Assessment about the process involved in the construction, like curing, pitting etc.,

TENDERER

SUPERINTENDING ENGINEER

- 3.8 The L.S. sections, cross sections or both indicating final levels which are required for the work. Qualitative assessment about the finished work. For the above basic information of designs, drawings showing the level (pre/post levels) will be furnished by the respective Executive Engineer.
- 3.9 The interim quality assurance reports should also contain the assessment on the overall quality of work done till.
- 3.10 The reports shall be furnished in time to process the work bills for payment.
- 3.10.1 The quality assurance staff shall be make available whenever required on the works and site test reports.

4.0 SCHEDULE OF INSPECTION

The following inspection schedule shall be adhered by the Consultants' Field Quality Assurance team, Surprise checks every day or alternate day or depending upon the job requirements. The Manager/Consultants Engineer will identify the items and the location on site, which will be inspected upon by the Assistant Manager/Site Engineers for the next working day. The concerned engineer of the Guntur Municipal Corporation would be responsible for regular supervision of construction work & workman ship of all the construction works. The Contractor would be advised not to carryout important activities of construction without prior information to concerned Executive Engineer as well as representative of third party quality assurance consultants.

5.0 PROCEDURE OF INSPECTION

- 5.1 The Field Quality Assurance staff at the site, which will be headed by one Senior Manager/Engineer, would inspect the construction and other activities. Field Quality Assurance team would consist of Managers/Engineers from the discipline of civil engineering and one from the discipline of electrical engineering. The consultant would be provided schedule of works likely to be executed in the next week in advance concerned Executive Engineer, so that consultant may plan weekly programme in advance. Besides this, there would be Junior Engineers/Supervisors having similar specialization as mentioned above, Lab Technicians and Field Assistant. However its exact composition will depend upon the, scope of work and the workload based on number of contracts executed by Guntur Municipal Corporation.
- 5.2 After obtaining the construction programme and the work schedule from Superintending Engineer Office, a joint visit of the **Guntur Municipal Corporation** Engineers to the sites for inspection and overall appraisal shall be undertaken.
- 5.3 All Tests, checks are to be carried out as per relevant IRC Codes and IS Specifications, APSS and as per IE rules, Agreements and Drawings for qualitative and quantitative analysis.

TENDERER

SUPERINTENDING ENGINEER

5.4 The Consultant shall make its own arrangements for transport including local travel and for his Office accommodations.

5.5 The Consultants shall be supplied with all the latest construction drawings and Contractor's agreements along with technical specification and would interact directly with **the Guntur Municipal Corporation.**

6.0 Reporting System

Documentation of the reports on each work to be taken up in the Guntur Municipal Corporation work-wise photographs & Video, before commencing, during and after execution with final sets of report would be submitted to the Commissioner, Guntur Municipal Corporation with a copy to the Superintending Engineer.

7.0 Price & Payment Schedule

7.1 Consultancy fee:

The Consultant's fee for the Quality Assurance will be paid at the approved rate on the value of work done by the consultant.

7.2 G S T:

The Consultants would deposit the G S T (as applicable) on receipt of payment to the Central Excise Department and the copy of the remittance challan would be submitted to the Municipal Corporation as a proof of payment of G S T.

7.3 Payment Schedule:

The Consultant shall raise the invoice immediately after certifying the quality of work. The client would make the payment in favour of consultant within 4 (four) weeks time after submission of the invoice by the consultant.

7.4 Standard Deductions: Mandatory deductions from the consultancy fee would be made from time to time for Income Tax, G S T as applicable.

8.0 Indemnity:

In case the quality of any work if found inferior to the specification given to Quality assurance consultant, during the Quality check by the State Vigilance department or by any

other authority, the Consultant shall indemnify the Municipal Corporation to an extent of consultancy fee payable for that work.

8.1 Period : Two Year from the date of agreement

9.0 Other Conditions:

9.1 The Consultant's reporting shall be of recommendatory nature informing the Guntur Municipal Corporation, Guntur, Andhra Pradesh about the quality of materials, based on test results and field observations.

9.2 The construction schedule of various works for which Quality Inspection is required will be given to the Consultants by Guntur Municipal Corporation, Guntur, Andhra Pradesh will be given 15 days in advance. The programme of critical activities to be executed for the consequent month will also be given 15 days in advance.

9.3 In case of emergency consultant will have to submit specific report of that concerned work as indicated by the Client.

10.0 Period of Agreement:

Two year from the date of entering into agreement or extended from time to time on mutual agreed.

11.0 Security Deposit:

The successful consultant/ agency for Third Party Quality Assurance services should submit Security Deposit of Rs.1,00,000/- (Rupees One Lakh) drawn in favor of Commissioner Guntur Municipal Corporation, in shape Demand Draft Drawn from Scheduled national Banks. Security Deposit will be refunded after successful completion of Agreement period of 2 Years.

ELIGIBILITY CONDITIONS

1. The consultant Agency/Firm/Engineering Educational Institutions/Universities should be registered and Non-Political in nature and also should not be black-listed by any central/state government /PSUs Agencies.,
2. The consultant shall submit list of lab calibrated equipment's having with them.
3. The consultant shall submit list of technical persons employed on the work with their qualifications and experience.
4. Experience certificates for the last 5 years in similar nature of Quality Assurance issued by the Government or Semi-Government/ Corporations/ Municipalities and Municipal corporations and Urban Development Authorities (UDA) shall only be considered. The Experience Certificate shall be certified by the Engineer of the concerned Department not below the rank of Executive Engineer and counter signed by the next higher Authority. Attach certificates issued by the Executive Engineer concerned and counter signed by the next higher authority duly showing in a statement work wise, year wise, Nature and value of the services provided by the bidder during the last five years..
5. The consultant must produce PAN and latest Income Tax Returns Acknowledgement.
6. The tender must produce GST & Labour registration and EPF & E S I Registration to participate in tender.
7. The bidder should have average turnover of at least INR 1.75 Cr from last 3 audited financial years as on 31/03/2020
8. The Firm shall have owned the laboratory at Guntur that has accreditation by National Accreditation Board for Testing and Calibration Laboratories (NABL) for testing and verify the quality of the construction materials and ISO certification to participate in the Tender.
9. Consortium / Joint ventures tenders will be duly rejected without prior notice

SCHEDULE - 'A'

NAME OF WORK:- Expression of Interest for Quality Assurance of Engineering Works.

Rate / Words
Percentage _____ % (words _____)

TENDERER

SUPERINTENDING ENGINEER

GUNTUR MUNICIPAL CORPORATION

PRICE BID

Name of the Work : APPOINTMENT OF 3rd PARTY QUALITY ASSURANCE AGENCY FOR ENGINEERING WORKS IN GUNTUR MUNICIPAL CORPORATION (G.M.C.)

S.No.	Description of work	Unit
1	<p>Carrying out 3rd Party Quality Assurance for Engineering works in Guntur Municipal Corporation including collection of samples as per codes, testing of samples, testing of material, verification of levels including testing of all materials as pre-construction, during construction and post construction stages. Advising GMC for improving the quality and durability of the works.</p> <p>Supporting GMC in technical direction.</p> <p>Consultant should guide the contractors for proper implementation of the works and for improving the quality standards. The rate is inclusive of taxes, service tax, incidental charges, ground transportation, testing charges, lab equipment, salaries for professionals, documentation charges, communication charges and all sundries for a period of Two year.</p>	1 Job

Total percentage of Price offered by M/s. _____ over the value of work done _____ (in figures) _____ (in words).

TENDERER

SUPERINTENDING ENGINEER