

GOVERNMENT OF TELANGANA
MUNICIPAL COUNCIL, NARSAMPET

TENDER DOCUMENT

Name of work: PROVIDING THIRD PARTY QUALITY ASSURANCE
FOR THE DEVELOPMENT WORKS IN NARSAMPET
MUNICIPALITY

Tender Reference: Roc.No. AE/NSPT/1/QC/2021-22, Dt:31-03-2021

Issue to : -----

**Commissioner,
Narsampet Municipality**

Contact:
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INSTRUCTIONS TO TENDERERS

A – GENERAL

NAME OF WORK: PROVING THIRD PARTY QUALITY ASSURANCE FOR THE DEVELOPMENT WORKS IN NARSAMPET MUNICIPALITY.

Scope of work: To provide third party quality assurance and quality control for the Infrastructure works like Buildings/Roads/water supply lines/ Sewer lines /storm water drains/Bridges/Electrical items like cable for service connections, central lighting, Borewell parts etc in NARSAMPET MUNICIPALITY limits,

Period of contract: 12 months i.e., (01-04-2021 to 31-03-2022) 1 year and It can be extended for another (12) months based on the performance.

1. The tender will be opened by the Commissioner, Narsampet Municipality or his nominee at his office in the presence of tenderers or their authorized representatives, on the dates mentioned in tender notice. If the Office happens to be closed on the dates, the opening of tenders gets automatically postponed to the next working date, the time being unaltered, unless extended by due initiation by phone/fax message to all those who purchased the tender documents.
2. The successful (L1) tenderer shall furnish the original hard copies of all the documents / certificates / statements before concluding agreement.

Eligibility Criteria:

1. The Sealed tenders are invited from reputed firms/agencies for “3rd party to conduct appropriate tests at different stages of civil works, for achieving quality of works.
2. The consultancy firm should have a own approved laboratory in the state of Telangana that has accreditation by “NATIONAL ACCREDITATION BOARD FOR TESTING AND CALIBRATION LABORATORIES (NABL)”.
3. The Agency should submit the financial capability and Technical Competency to perform this assignment in the technical proposal to be submitted for the work.
4. The experience in the field of job in similar nature of work should be submitted along with the technical proposal. The Experienced Agency in the field of job will be preferred.
5. Consultancy Firm should be in existence and have experience of at least for (FIVE) years in providing TPQC/TPQA consultancy services for Civil Works.
6. The personnel to be deployed should also be mentioned in the Technical proposal.
7. The financial bid will be opened only of those bidders, who are technically qualified.
8. The consultancy firm should have valid GST Registration.
9. The firm should submit latest IT Returns of their firm and proof of registration of the firm along with the technical bid.
10. Consultant should have experience of Third-Party control services for Civil Engineering works in Govt. Sector / Municipalities at least for (2 years) during the preceding 5 year.
11. The average Financial Turnover of the firm on civil engineering consultancy works should not be less than Rs. 50.00 lakhs in the last five years. The bidders should submit the Audited Balance Sheets duly certified by the Chartered Accountant in respect of the above.

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12. The successful agency should establish of their office with sufficient equipment in Narsampet.

The submission of bids should be submitted in two cover system i.e., Technical and Financial in separate covers put in a single cover.

The tender document for the work will be provided to the interested parties on payment of Rs. 500/- (non-refundable) in the form of DD drawn in favour of the Commissioner, Narsampet Municipality.

Sale of document from : **01-04-2021 to 03-04-2021 up to 4-00 PM.**
Last date / time for submission of bids : **03-04-2021 up to 4-30 PM.**

3. Qualification data of the Tenderers and qualification criteria

The tenderer shall furnish the following particulars enclosed, supported by documentary evidence.

- a) Copies documentary evidence for minimum qualification criteria.
- b) Security Deposit **(EMD) of Rs. 10,000/-** in the form of DD in favour of Commissioner, NARSAMPET MUNICIPALITY.
- c) The testing facility and equipment and manpower for conducting the field test/lab test for all type of tests required for TPQA for the similar nature of works should be established in NARSAMPET MUNICIPALITY limits within 7 days from date of award of tender.

Scoring Methodology: TECHNICAL PROPOSAL

- i) The Total Maximum score under evaluation of Technical Proposal is 100
- ii) This Score shall be based on an assessment of the Technical Proposal of the Bidder.
The Technical Proposal submitted by the Bidder would be assessed through rating of various parameters set out in the table below:

i)	Specific experience of the Consultant relevant to the assignment / job	64 Marks
	SUB CRITERIA	
a	Experience as TPQC/TPQA consultant on Civil works / Similar Nature of assignments successfully completed during the last 5 years 3 marks for each TPQC/TPQA consultancy assignment (No. of assignments completed with minimum project / work value of Rs. 50.00 lakhs) subject to a maximum of 30 marks	30 Marks
b	Experience as TPQC/TPQA consultant of Civil works / Similar nature of assignments successfully completed in Government Sector / Municipalities during the last 5 years 5 marks for each TPQC/TPQA consultancy assignment (No. of assignments completed with minimum project / work value of Rs. 20.00 lakhs) subject to a maximum of 20 marks. Note: It shall be noted that experience in item a) and b) are mutually exclusive	20 Marks

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c	Annual Turnover (updated to FY 2019-20) of the consultancy firm during the last 5 FY for turnover above Rs. 20.00 lakhs, marks will be awarded in proportion to the turnover i.e., Annual turnover (updated / 20 lakhs x 2 subjects to a maximum of 14	14 Marks
ii)	Proposed methodology and work plan in response to the Terms and Reference.	31 Marks
	Sub-Criteria	
a	Technical approach & methodology (6m) + Works plan (5m)	11 Marks
b	Own lab facilities in Narsampet (10m) + Mobile lab (10m)	20 Marks
iii)	Key professional staff: Qualification & Competency for the assignment / Job experience of QC Manager above 5 years (1 mark each will be awarded for each additional year of experience) subject to Maximum of 5 Marks	5 Marks
	TOTAL	100 Marks

4. Cost of Tendering

The Tenderer shall bear all costs associated with the preparation and submission of his Tender and the tender inviting authority will in no case be responsible and liable for those costs.

5. Site Visit.

The Tenderer, at the Tenderer's own responsibility and risk is advised to visit and examine the location and nature of Works taken up by NARSAMPET MUNICIPALITY and obtain all information that may be necessary for preparing the Tender. The costs of visiting the site shall be at the Tenderer's own expense.

6. Bid Offer:

The bid offer accompanies the tender document as "Financial Proposal". The tenderer should be the over all percentage on the amount of work for which TPQA services offered. The amount of work shall be calculated based the estimated rated rates only. Service tax shall be mentioned separately.

7. Security Deposit

- a. The Tenderer shall furnish, security deposit (EMD) of Rs. 10,000/- in the form of DD drawn in favour of Commissioner., NARSAMPET MUNICIPALITY , from a Nationalized Bank.
- b. The EMD of tenderers will be returned no sooner the tenders are finalized or end date of the tender validity period whichever is earlier.
- c. The Security deposited (EMD) by the successful tenderer will not carry any interest and it will be dealt with as provided in the conditions stipulated in the tender.

C. SUBMISSION OF TENDERS

8. Submission of Tenders:

10.1 Cover 'A' - Technical

The Bidder shall place all the information as specified in “Qualification criteria for opening the price bid” in a sealed envelope, which shall be inscribed as under:

Cover A - Technical bid

Submitted by: _____(Name of Bidder)

Name of Project: _____

10.2 Cover 'B' - Financial

The Bidder shall place the tenderers’s bid offer with authorized signature in the prescribed form enclosed with the tender document in a sealed envelope, which shall be inscribed as under:

Cover B – Financial bid

Submitted by: _____(Name of Bidder)

Name of Project: _____

Note : The cover A and cover B shall be enclosed in a separate sealed cover, which shall be inscribed as under :

Submitted by: _____(Name of Bidder)

Name of Project: _____

9. Last date / time for submission of the tenders.

10.1 Tenders must be submitted not later than the date and time specified in tender notice. In the event of the specified date / time for the submission of bids declared as holiday, the bids will be received on the next working day.

10.2 The Commissioner, NARSAMPET MUNICIPALITY may extend the dates for issue and receipt of Tenders by issuing an amendment in which case all rights and obligations of the Commissioner, NARSAMPET MUNICIPALITY and the Tenderers will remain same as previously.

D. TENDER OPENING AND EVALUATION

10. Tender opening

- a. The tenderers or their authorized representatives can be present at the time of opening of the tenders
- b. The technical bid containing qualification requirements will be evaluated by the tender opening authority and recorded which will be signed by the tender opening authority as well as tenderers or their authorized representatives present.

11. Clarification on the technical bid

- a. The tender opening authority may call upon any tenderer for clarification on the statements, documentary proof relating to the technical bid. The request for clarification and response thereto shall be in writing and it shall be only on the qualification information furnished by the tenderer. The clarification called for from the tenderers shall be furnished within the stipulated time, which shall not be more than a week.
- b. The tenderer if so desirous, shall agree in writing to furnish the clarification called for within the stipulated time and, for disqualification and rejection of his tender in the event of failure to do so.

12. Examination of technical bids and determination of responsiveness

- a. The Commissioner, NARSAMPET MUNICIPALITY or his nominee will evaluate whether each tenderer is satisfying the eligibility criteria prescribed in the tender document and declares them as a qualified tenderer.
- b. If the technical bid of a tenderer is not satisfying any of the eligibility criteria it will be rejected by the Commissioner, NARSAMPET MUNICIPALITY.

13. Price bid opening

Only the price bids of qualified tenderers whose technical Bids are found satisfying the eligibility criteria shall be opened in the presence of the qualified tenderers or their authorised representatives present on the date and time fixed. The bid offers are read out and minutes recorded and the signatures of the tenderers present are taken in the minutes.

E. AWARD OF CONTRACT

14. Award Criteria

- a. The Commissioner, NARSAMPET MUNICIPALITY will award the contract to the successful tenderer who is found technically qualified as per the tender conditions and whose price bid is lowest.
- b. The Commissioner, NARSAMPET MUNICIPALITY reserves the right to accept or reject any tender or all tenders and to cancel the tendering process, at any time prior to the award of contract, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the reasons for such action.

15. Notification of award and signing of agreement

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- a. The Tenderer whose Tender has been accepted will be issued “letter of acceptance” by the Commissioner, NARSAMPET MUNICIPALITY prior to expiration of the Tender validity period. (90) days
- b. The successful tenderer shall attend the office of the Commissioner, NARSAMPET MUNICIPALITY concerned on the date fixed in the Letter of acceptance. Upon intimation being given by the Commissioner, NARSAMPET MUNICIPALITY and sign an agreement in the form prescribed by the department for the due fulfillment of the contract. Failure to attend the Commissioner, NARSAMPET MUNICIPALITY office on the date fixed, in the written intimation, to enter into the required agreement shall entail forfeiture of the security deposit

II. GENERAL CONDITIONS OF CONTRACT

1. GENERAL PROVISIONS

1.1 Definitions

Employer/Client means the Commissioner, NARSAMPET MUNICIPALITY

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

Any action required or permitted to be taken, and any documents required or permitted to be executed, under this contract by the Employer or the Consultant shall be taken or executed by the authorized representative of the Consultant only.

2.0 COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

2.1 Commencement of Services

The Consultant shall begin carrying out the Services immediately after signing the contract

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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 Employer 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 Employer 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 order proclamation, regulation or ordinance by any Government or 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 Majored 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 Majored 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 Employer

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

(a) If the Consultant 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 Employer may have subsequently approved in writing;

(b) If the Consultant become insolvent or bankrupt;

(c) If, as the result of Force Majeure, the Consultant are unable to perform a material portion of the Services for a period of not less than Sixty (60) days; and

- (d) If the Consultant, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract or in carrying out their legitimate duties.

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 of the execution of a contract to the detriment of the Borrower, and includes collusive practice among Consultant (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 Consultant

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

If, as the result of force majeure, the Consultant 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 CONSULTANT

3.1 General

The Consultant shall provide Quality Assurance Services and Quality Control services for all the works taken up by NARSAMPET MUNICIPALITY.

The Consultant 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 Consultant shall always act, in respect of any matter relating to this contract or to the Services, as faithful advisers to the Employer.

The Consultant shall take all steps to take action in accordance with Agreement of works contract between the Commissioner, NARSAMPET MUNICIPALITY and the works contractor.

3.2 Conflict of Interests

The consultancy fee of the Consultant pursuant to Clause 5 shall constitute the Consultant's sole consultancy fee in connection with this contract or the services, and the Consultant 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 Consultant, 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 to the Project / Works, the Services, this Contract, or the Corporation's business or operations without the prior written consent of the Corporation.

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 in service Government Engineers (of any cadre of Andhra Pradesh.
- iii) For presenting any case study in any magazines, conferences etc., from the works done under this contract.

3.5 Reporting System

The Consultant shall submit the test reports to the Employer on 1st and 16th of every calendar month as per the Terms of Reference (TOR). The Consultant should collect the information from the work site by carrying out relevant tests and compile the information. The report shall consist of up-to-date progress of work, the tests conducted and their results, the recommendations, and the specific actions to be taken and by who etc., and shall be submitted to the Executive Engineer / Commissioner. Any information that needs urgent follow up action for assuring Quality Standards shall be sent to Executive Engineer / Commissioner immediately and any confidential information shall be sent directly to The Commissioner in the named cover. All the information work wise, would be documented in a register and shall be submitted on monthly basis to the Employer.

3.6 Documents Prepared by the Consultant will be the property of the Employer.

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

4.0 CONSULTANT PERSONNEL

As per the terms of reference adequate manpower would be placed by the Consultant on the Work Site to carryout necessary tests and preparation of reports. The Consultant would depute adequate manpower and other resources at respective locations based on the workload and specific requirement. All the liabilities of manpower working on the quality assurance inspection would be with the Consultant. The manpower shall necessarily have one qualified & experienced B.Tech / BE Professional.

5.0 PAYMENT TO THE CONSULTANT

The payment of consultancy charges including service tax would be made to the Consultant duly deducting all other taxes as applicable as specified in the payment schedule.

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 department committee appointed by the government. If the dispute is not solved, it shall be referred for adjudication / arbitration in accordance with the Indian arbitration and conciliation Act, 1996.

III SPECIAL CONDITIONS OF THE CONTRACT

1.0 PROCEDURE FOR INSPECTION

1.1 The Field Quality Assurance Staff at the site, which will be headed by one Engineer, would inspect the materials, construction and related activities; Field Quality Assurance team would consist of Engineers from the discipline of civil /electrical/mechanical engineering depends up the nature of work as per requirement. Besides this, there would be Junior Engineers / Supervisors having similar specialization as mentioned above, Lab Technicians and Field Assistant. The detailed composition of the team – name, qualification, etc – for each work will be submitted to the Employer by the Consultant within 15 days of signing this contract. The Consultant shall not make any changes to the composition of the team without obtaining the prior concurrence of the Employer.

- 1.2 Soon after signing this contract, the Consultant shall obtain details of construction Programme and the work schedule from the Executive Engineer or his representative and undertake joint visit to the work site along with the field Engineers for inspection and overall appraisal of the work. The first inspection report shall be submitted to the Employer and the Executive Engineer within a week of signing of the contract. This report shall detail the current status of the work and specific observations on various parameters that would have an impact on the overall quality of work.
- 1.3 All Tests, checks, and inspections shall be carried out in accordance with the IRC codes and IS Specifications, APDSS and IE Rules, Agreements and Drawings for qualitative and quantitative analysis.
- 1.4 The Consultant shall make its own arrangements for transport including local travel and for his office accommodations.
- 1.6 The Consultant shall obtain the latest construction drawings and contractor's agreements along with technical specifications from the Executive Engineer or his representative. The Consultant should interact periodically with the Executive Engineer and Commissioner, NARSAMPET MUNICIPALITY.
- 1.7 In any case, the Consultant fails to conduct tests /inspection within a stipulated time prescribed by the Employer as per his work order and agreement, the Employer shall entrust the work to any other institution deemed appropriate and no further negotiations will be entertained with the Consultant in such a case.

2.0 Schedule of Inspection

- 2.1 The Consultant shall prepare a detailed schedule for field inspections and material testing of the civil works and submit the schedule to the Commissioner and the Executive Engineer within fifteen (15) days of signing of this Contract. The Consultant shall adhere to this schedule and any changes in the schedule should be intimated to the Commissioner and Executive Engineer within a week of such a change.
- 2.2 In addition to the pre-notified schedule of visits, tests, and inspections, the Consultant's Field Quality Assurance Team shall conduct 'surprise checks' at an appropriate frequency depending upon the job requirements.
- 2.3 In addition to the Consultant's oversight, the head of the field engineering wing/Construction Supervision Consultant would be responsible for regular supervision of the construction quality and the workmanship of all the construction works.

- 2.4 The contractor would be advised not to carryout important activities of construction without prior information to the Executive Engineer and the Consultants.

3 Reporting System

In addition to the reporting requirements detailed at Clause 3.5 of the General Conditions, the Consultant shall make digital photographs of all works before commencement, during execution and after completion of the work along with pictorial documentation of the materials used in the construction. These photographs – in both digital format and printed version – shall be submitted to the Commissioner and Executive Engineer.

Price & Payment Schedule

4.1 Consultancy Fee

- 4.1.1 The Consultant's fee for the Quality Assurance Service will be payable as per the rates agreed by the Consultant and the Commissioner as detailed in the Appendix B.
- 4.1.2 The Commissioner shall effect payments to the Consultant after acceptance of the invoices duly supported by the reports submitted from time to time by the Consultant and based on independent review of the work of the Consultant by the Executive Engineer or his representative. All invoices shall be submitted by the Consultant to the Commissioner, NARSAMPET MUNICIPALITY.
- 4.1.3 Payments effected by the Commissioner to the Consultant shall be deemed neither to relieve the Consultant of its obligations under this Contract nor as acceptance by the Commissioner of the Consultant's performance of the services.

3.2 Submission of invoices

An original invoice shall be submitted by the Consultant for each payment under the contract to the Commissioner, NARSAMPET MUNICIPALITY.

3.3 Time and manner of payment

Payment will be made to the consultant in very 3rd month after receipt by the employer on due verification.

All payments shall be made by the employer in the form of cheque in favour of the consultant.

3.4 Service Tax

The unit prices determined and agreed to by both the Employer and the Consultant to provide quality assurance services are inclusive of all taxes apart from the consultancy fee and the Consultant is responsible to pay to the Central Excise department and to enclose a self attested copy of it with the invoice of next immediate payment to process for the payment.

3.5 Standard deductions

Standard deductions from the consultancy fee would be made as per the Income Tax law applicable in India.

4 Other Conditions

- a. The Consultant shall carry out the assignment in accordance with the highest standard of professional and ethical competence and integrity, having due regard to the nature and purpose of the assignment.
- b. The Consultant shall not assign this Contract or sub-contract or any portion of it without the prior written consent of the Employer.
- c. The Consultant's reporting shall be critical, constructive and of recommendatory nature informing the Executive Engineer / Commissioner about the quality of materials based on test results and field observations.
- d. The Consultant shall submit special reports to the Municipal Assistant Engineer on any issue relating to the Quality of works under execution at any stage as and when asked by the Employer.
- e. The Contract shall become effective from the date of signing of the Contract by both the parties. This Contract between the Employer and the Consultant shall remain in force for a period for another (12) months based on the performance and accepted by the competent authority.
- f. The Employer reserves the right to have the work of the Consultant reviewed by any agency it deems appropriate at any time with or without prior consultation with the Consultant. The Consultant shall make available all information to such an entity upon due authorization by the Employer.

- g. All materials produced or acquired under the terms of this Contract written, graphic, film and magnetic tape etc., shall remain the property of the Employer. The employer retains the exclusive right to publish or disseminate reports arising from such material. The rights and duties provided for in this paragraph shall continue, notwithstanding the termination of this Agreement or the execution of its other provisions.

APPENDIX - A
Terms of Reference (TOR)
SECTION I

1. Background

1.1 The Client is planning to provide Infrastructure works like **Buildings/Roads/water supply lines/ Sewer lines / storm water drains / Bridges/Electrical items like cable for service connections, central lighting etc** in NARSAMPET MUNICIPALITY limits of NARSAMPET. The Consultant firm shall provide Third party Quality Assurance and Quality Control services within the scope of TOR. The Project is to follow all rules, regulations and bye-laws of Urban local bodies and Government. It is proposed to engage qualified consultant with proven relevant experience in QA & QC of the projects of similar nature.

1.2 The Client will be the Commissioner, NARSAMPET MUNICIPALITY and Executive Engineer will be his authorized representative, who will be acting on behalf of Client in day-to-day contract administration.

2. Objective

The objectives of the consultants' services are:

- (i) To ensure that high quality construction is achieved and to ensure that all works are carried out in full compliance with the engineering design, technical specifications and other contract documents within the stipulated time period.
- (ii) To demonstrate the efficacy of Quality Assurance and Quality control by independent external agencies experienced in this field of work.

3. Scope of Services

The tasks of the Consultant are to:

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

3.1 The role of Quality Assurance Consultant will be to conduct random inspection of the works from the stage of inception to the stage of completion and commissioning. This would include inspection of every part of work, collection of samples and quality testing. The Consultant would be required to report to the Executive Engineer and Commissioner through weekly reports. All the tests and quality assurance inspections would be conducted as per the laid down specifications and standard Engineering practice. The Consultant would be required to :

- a) Establish a reporting station at NARSAMPET for all kinds of communication and weekly reporting;
- b) Establish a local team for conducting Q.C tests and field Staff with mobile testing equipment (or) local testing laboratory for on site inspections including random checks of the works.

3.2 The specified tests relating to the following items of work shall be conducted by the Consultant at the frequency specified by MORTH / IRC / APDSS / ISI / Water supply and sewerage manual or as agreed by both parties based on the requirement for each package:

- GSB Tests
- WBM Tests
- Tests for aggregates
- Sand, Cement, Concrete cube Testing and Bitumen content. CC core cutting and strength test.
- Non-Destructive tests for CC works (rebound hammer/ultrasonic pulse velocity meter)

Only concrete core tests, if required as per site inspection and as requested by the Commissioner / Executive Engineer shall be conducted and the actual charges for conducting that test will be paid in addition to the agreed consultancy charges

The following mandatory tests shall be conducted:

I. For B.T Road works

- a. B.T. Extraction Test for B.T content in B.T Sample.
- b. Gradation Test for B.T Mix
- c. Thickness of the B.T overlays at different locations.
- d. Quality of the finished road surface.

II. For C.C Road Works

- a. Sieve Analysis of coarse & fine aggregate
- b. Testing of crushing strength of standard cubes.
- c. Quality of the finished road surface.
- d. Non-Destructive testing and thickness.
- e. Core cutting and testing as and when directed by the departmental officers.

III. For Buildings Works:

Tensile strength for steel
Testing of cement
Testing of concrete (for critical elements) being used.
Brick / Stone Masonry works.
All Q.C. checks required for buildings.

IV) WBM Roads.

Thickness of layer, testing of materials, density test (0.5mx0.5m pit test) on selected roads, comments on surface & camber.

V) Filing works.-CBR value test, Soil tests.

VI) Water supply- Factory tests, Field Test

VII) Sewerage works - Factory Test, Field Test

VIII) Mechanical works – relevant tests as per the items

IX) Electrical works - relevant tests as per the items / Verification and certification of the items with specifications

X) Drinking water quality chemical and bacteriological test.

In addition to the above, the Third-Party Quality Assurance consultants shall perform their duties in accordance with MORTH / ISI / IRC and normal practice followed in Government Departments. The method of sampling and test frequency are indicative and not exhaustive. The concerned Officer Incharge shall order for as many tests as required for quality assurance to his satisfaction within the ambit of codes provision and agreement.

B.T. ROADS

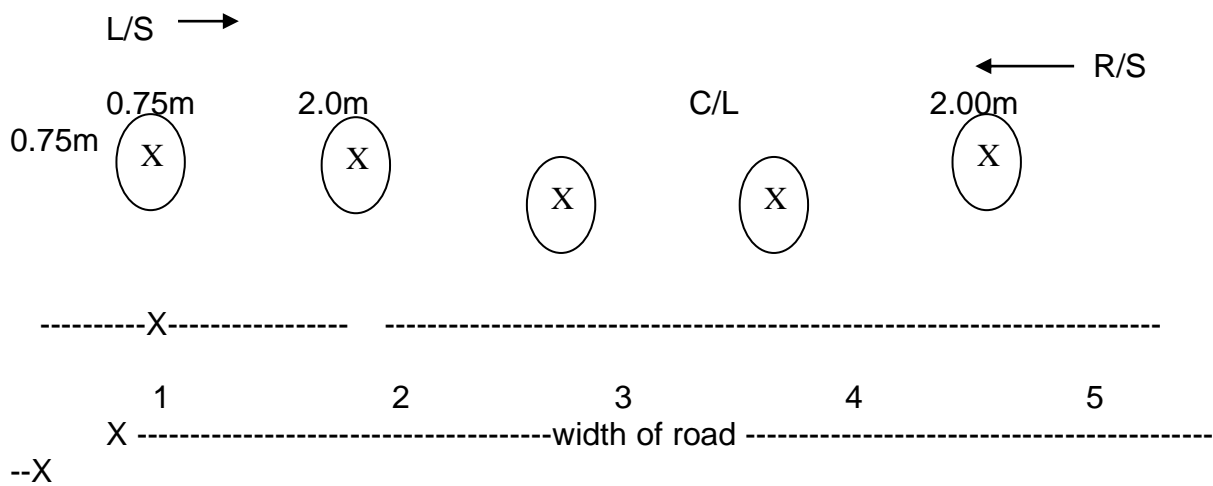
1. The sample collection for BM/DBM/SDBC/BC should be done by taking from a trial pit of 150 mm x 150 mm with the full depth of the layer. The sample thus taken shall be thoroughly mixed and divided into four parts and one part (around 500 gms) needs to be taken for Bitumen Extraction. It is preferable to soak the sample in Benzene for 24 hours to get proper results. The sampling needs to be proper as few higher size aggregates make a lot of change in BT percentage.
2. The location and chainage of the point where sample is collected shall be mentioned for verification in case of claims from Contractors.

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3. The depth of layers of BT road laid shall be taken only in cross-sections at random clearly mentioning the chainage / permanent land mark, for each cross-section. There is no need to average the thickness at different cross sections as Third-Party Check is a random check and cannot be generalized for arriving at average.
4. The number of pits for each cross section depends on the width of the road. For a road width up to 7.5 mts, three pits with two at 0.75 m each from the edges and the third at the center of the road. Similarly, for a road width between 7.5 mts to 11.0 mts, 5 pits at the cross-section as follows should be taken.



The same analogy should be maintained for widths more than 11.0 m by having trial pits in each paver width treating the same as a minimum of 2.75 mt.

5. The possible water stagnation on the BT road surface should be viewed seriously and a mention shall be made in report regarding the same if any. Further the quality of Riding Surface, Disturbed Surface, Settlements in Road Cuttings, should also be mentioned.
6. The Aggregate gradation analysis should be carried out strictly in accordance with relevant tables of MORTH. There should not be any other irrelevant graphs / comments, not justified by MORTH, present in the report.

C C. ROADS/ CC WORKS

1. The inspecting officer during progress shall be a graduate Engineer who should have sufficient command in the subject. The check should be surprise and make all the observations as mentioned below.
 1. Whether departmental A.E.E., /A. E present.
 2. Whether Technical Person of Agency present.
 3. Whether Measuring Boxes being used. (This should be verified before entering the site from distance)
 4. Whether Mastic Pads being used is as per (This can be verified by Standards specification removing a Mastic Pad from the recently laid concrete Portion)
 5. Whether water cement ratio maintained.
 6. Whether lean is laid separately at least for a slab panel before starting rich mix. The compaction to lean to be verified.
 7. Verification of depths of rich mix & lean mix at 3 points in a cross-section for the slab panel being paid.
 8. Verification of date of manufacturing of Cement bags, silt content of sand etc.
 9. Verification of 20 mm metal stacks
 10. Collection of samples of aggregate and the cubes for 7 / 28 days compressive strength.
 11. Comments on curing to the extent of work completed by that time.
2. After completion of work of CC road and cleaning of surface, the site shall be inspected again and observations on the surface should be made. The joint filling should also be verified.
3. In case samples are not collected and compressive strength is arrived at using NDT then the QC charges will be reduced by 50% and the Agency is advised not to repeat such practice otherwise necessary action will be taken against them.

R.M.C ROADS / RMC

The work of laying CC road with RMC when inspected during progress the following needs to be verified.

1. The slump of the RMC before laying.
2. The computer printout about the details of mix and the time of departure. Any RMC can be allowed to be laid within a maximum time of 4 hours.
3. Whether Screed Vibrators are used or not.
4. The slab panel width should be verified which should be less than the width of Screed Vibrator or 4.5 mts., whichever is less.
5. The cubes of RMC to be cast by taking the mix directly from the transit mixer.
6. The re-handling of RMC is not allowed by using shovel and the same is to be noted.
7. The surface of CC road to be verified for joint filling and other defects if any

DESIGNED MIX CC WORKS.

- 1) Check the design mix details with reference to the raw materials available at site vis-à-vis the designed materials. Conduct the sieve analysis for coarse and fine aggregate.
- 2) Check the calibration of the weigh batcher/ verification of the corresponding volumetric proportions for normal practice.
- 3) Verify the slump before use of concrete.
- 4) Cast CC Cubes as per the frequency mentioned in the IS Codes.

W.B.M. ROADS

The metal used for WBM roads should conform to the relevant grade as per MORTH. Sieve Analysis shall be carried out by taking proper samples (not less than 20 kg). The thickness of WBM layer wise should be checked by taking cross-section only. The density of metal in the trial pits need to be checked along with oversize percentage. There can be minimum three density trial pits in each work. The density of metal each layer of WBM a trial pit size of 0.5 m x 0.5 m shall be 35 Kgs., as per orders of the Government.

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The camber of WBM roads should be 1 in 48 and in case of widening portion the existing camber needs to be extended leaving provision for wearing course.

Water supply works :

Factory Tests

Random factory inspection during manufacturing process for different type of pipes as per IS specifications

In General for all the above pipes the factory test broadly as follows

- Raw materials check for its suitability as per specifications.
- Check of design parameters during manufacturing process.
- Dimensions of Pipes
- Physical and chemical characteristics
- Mechanical properties/ Hydrostatics characteristics/ impact strength
- Marking and other respective test as per relevant IS
- Sampling shall be done as per relevant IS method.

Field Tests :

- To check all Water supply pipelines for their quality of material used, sizes, alignment, trench sizes, gradient, laying and jointing, cushion, backfill, and testing for required pressure for the duration.
- To check the construction quality of intake works including pumping plants, Filtration beds, Water softening plants, miscellaneous water treatment plants.
- Physical and hydro inspection, visual inspection for functionality of Valves, Fittings and Specials as per the estimate.
- Physical inspection, visual inspection and proper function of Orifices, Gauges and Chlorination plants.
- To check the construction quality of Service reservoirs like GLSR , ELSR and other tanks .

Sewerage Works:

Factory Tests

- Random factory inspection during manufacturing process for different type of pipes as per IS specifications.

In general for all the above pipes the factory test broadly as follows

- Dimensions of Pipes.
- Physical and chemical characteristics.
- Crushing strength, visual inspection for Glassiness and hammer touch for cracks. Marking and other respective test as per relevant IS

Field tests :

- Random checking of laying as per gradient and jointing, dimensions of trench, backfill, Sewerage Line test for leakages, witnessing the Smoke test etc. and manhole construction.
- Detail checking of Manhole construction activity.
- To check the construction quality of sewerage treatment plants such as Screening & Skimming tanks, Sedimentation tanks, flocculates, clarifiers, Sewerage filters, Contact beds, Trickling filters, Sludge tanks, Digestion tanks, Oxidation ponds and miscellaneous treatment plants with respect to the estimates.

Mechanical works

Physical inspection, visual inspection for Mechanical equipments like Pumpsets with accessories, Motors, Bearings, Spare parts, filtration plant equipments etc and functionality with respect to estimate. Checking of design heads and delivery heads of pumps and motors

Electrical works

- Transformers, main cables, panel boards, Circuit breakers, Earthing, Distribution cables, Encasing of cables, motors, yard lighting, booster pumps and other related items.

Additional Quality Tests for Structures(Buildings, ELSR, STP etc)

- i. Tensile strength test, Elongation test etc. for steel bars (steel reinforcement) at regular intervals.
 - ii. Water Quality test for water to be used in concrete.
 - iii. Additional CC samples for rich mix. Tests on cement to be used.
 - iv. Check on the mix design and procedure adopted for production of concrete.
- 3.3 In addition, the Consultant need to check the manufacturer's test certificates for the materials like pipes and fittings, electrical items, steel, cement, bitumen etc. The contractor will have to provide these certificates to the Consultant at the time of inspection.
- 3.4 The Consultant shall faithfully conduct tests/checks and sampling required to be executed by them as per Andhra Pradesh Detailed Standard Specifications (APDSS)/MORT&J/IRC Specifications/IE rules/PH&MED Specifications to the contractors. The Consultant will be fully responsible for the authenticity of the test results and submit test results in original to the Commissioner / Executive Engineer without any hindrance to work. The Consultant is expected to carry a copy of the above-mentioned specifications.

4. Procedure for Inspection

- 4.1 The Field Quality Assurance staff at the site, which will be headed by one Sr. Engineer, would inspect the construction and other activities; **Field Quality Assurance team would consist of required number of Engineers from the relevant disciple of civil / electrical / mechanical engineering depending up on the quantum and nature of work.** The Consultant will be provided schedule of works likely to be executed in the following week by the Executive Engineer or his representative so that the Consultant can plan the field work programme. Besides this, there would be Junior Engineers/Supervisors having similar specialization as mentioned above, Lab Technicians and Field Assistants. However, the exact composition of the team will be depending upon the scope of work and the workload based shall be submitted before the start of assignment. No changes to the team leader and Senior QA Engineer will be acceptable to the employer.

- 4.2 After obtaining the construction programme and the work schedule from Executive Engineer or his representative, a joint visit of Executive Engineer or his representative and the Engineer of the Consultant to the sites for inspection and overall appraisal shall be undertaken. All Tests, checks are to be carried out as per relevant APDSS/MORT&H/IRC Codes and IS Specifications, IE rules as applicable and Agreements and drawings for qualitative and quantitative analysis.
- 4.3 The Consultant shall make its own arrangements for transport including local travel and for his office accommodations. The Consultant will be supplied with the latest construction drawings and Contractor's agreements along with technical specification and would interact directly with Executive Engineer

5. Schedule of Inspection

- 5.1 The following inspection schedule shall be adhered by the Consultant's Field Quality Assurance team; frequent surprise checks depending upon the job requirements to be specified in the contract between the Consultant and Employer. The Engineer will identify the items and the location on site, which will be inspected by the Assistant Managers / Site Engineers for the next working day. The Contractor would be advised not to carry out important activities of construction without prior information to the third-party quality assurance Consultant.
- 5.2 The inspections shall be properly spaced with reference to the quantum and amount of the item of work. In no case the frequency of inspection shall be spaced for amount of item of work costing more than Rs. 10.00 Lakhs. The inspections reports shall cover all the items of work uniformly at all the stages of construction and shall truly represent the random quality check in the larger interest of the work.
- 5.3 To inspect each project twice in a week, to collect samples, to test on site and to conduct non destructive testing when the work is completed.

6. Reporting System

- 6.1 The consultant shall submit the inspection reports to the Municipal Assistant Engineer and Commissioner, NARSAMPET MUNICIPALITY clearly showing the location with reference to some permanent existing structure, details of sample collected with visual observations on all the items of work under execution at that location and remedial action proposed towards defective quality of material or work, if any.
- 6.2 Documentation of the reports on each item of work taken up with work-wise photographs (electronic version as well as printed copies) before commencing, during and after execution with final sets of report would be submitted to Municipal Assistant Engineer and Commissioner.

6.3 Copy of the adverse results must be sent immediately to the Commissioner, NARSAMPET MUNICIPALITY. However the test reports of kind that “mistakes found and cannot be rectified” must be sent to the Commissioner, NARSAMPET MUNICIPALITY in sealed cover labeled “CONFIDENTIAL” with out giving information to the implementing agency.

7. Price & Payment Schedule

7.1 Consultancy fee

The Consultancy’s fee for the Quality Assurance assignment will be based on **the value of the work done** by the contractor at estimate rates **and the quality assured & reported.**

7.2 Service Tax

In addition to above, Employer would pay to the Consultant service tax as applicable, apart from the consultancy fee and the Consultant is responsible to pay to the **Central Excise** department.

7.3 Payment Schedule

The Consultant shall raise the invoice on fifth day of every 3rd month based on the performance and deliverables that would be defined in the contract between the Consultant and the Client. The Executive Engineer or his representative will verify the payment invoice raised by consultant with the value of work done by the contractor at the estimate rates and submit to Commissioner, WMC and pay for the work performed.

7.4 Standard Deduction:

Standard deduction from the consultancy fee would be made as per the Income Tax law applicable in India.

8. Indemnity

In case of quality of any work certified by the firm is found inferior by State Vigilance or by any other authority, subsequently, the consultant firms will indemnity to government to an extent of 10% of consultancy fee payable for that work only. The indemnity bond shall be executed and included in the agreement.

Section II
SPECIAL CONDITIONS

- ❖ The Consultant shall perform the service and carry out their obligations hereunder with due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Employer, and shall at all times support and safeguard the Employer's legitimate interests in any dealings with Sub- Consultant or third Parties.
- ❖ The Consultant shall hold the Employer's interest's paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their own corporate interests.
- ❖ The Payment of the Consultant shall constitute the Consultant's only payment in connection with this Contract or the Service, and the Consultant 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 discharges of their obligations under the Contract, and the Consultant shall use their best efforts to ensure that the Personnel, any Sub- Consultant, and agents of either of them similarly shall not receive any such additional payment.
- ❖ The Consultant agree that, during the term of this Contract and after its termination, the Consultant and any entity affiliate with the Consultant, as well as any Sub- Consultant and any entity affiliated with such Sub-Consultant, shall be disqualified from providing goods, works or services (other than consulting services) resulting from or directly related to the Consultant's services for the preparation or implementation of the project.

- ❖ The Consultant shall not engage, and shall cause their Personnel as well as their Sub-Consultant and their Personnel not to engage, directly or indirectly, either in any business or professional activities, which would conflict with the activities assigned to them under this Contract.

- ❖ Except with the prior written consent of the Employer, the Consultant and the Personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Consultant and the Personnel make public the recommendations formulated in the course of, or as a result of, the Services.

- ❖ The Consultant (a) shall take out and maintain, and shall cause any Sub-Consultant to take out and maintain, at their (or the Sub-Consultant', as the case may be) own cost but on terms and conditions approved by the Employer.

- ❖ The Consultant shall keep accurate and systematic accounts and records in respect of the Services hereunder and in such form and detail as will clearly identify all relevant time changes and costs, and the bases thereof, and (ii) shall periodically permit the Employer or its designated representative and / or the Bank, and up to two years from the expiration or termination of the Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Employer, if so required by the employer.

APPENDIX - B

Financial Proposal

The unit price in percentage excluding core cutting test charges as directed by the departmental officers for performance of the contract as percentage of the value of work executed at estimated rates (base cost), which inter alia includes, all costs, taxes, overheads, administration costs for providing Quality Assurance Services for the works taken up by NARSAMPET MUNICIPALITY as follows. The Unit Price including Service Tax.

The approximate cost of works of this financial year would be around Rs. 20.00 crores

Sl. No.	Description of Item	Unit	Unit Rate is Quoted price in percentage on ECV including service tax.	
			In figures	in words
1	Providing Quality Assurance Service of the works taken up in Narsampet Municipality from 01-04-2021 to 31-03-2022 of the all nature of the works.	In percentage on ECV		
2	Core Cutting charges for CC Road	Each Core cutting		
3	Drinking water supply chemical tests	Each Sample		
4	Drinking water supply Bacteriological test.	Each Sample		

NOTE: * Some more schemes are likely to be sanctioned and the respective consultant shall undertake additional work at quoted percentage with the approval of the competent authority.

Signature:

Name of the Authorized person:

Name and address of the consultant:

Contact no:

Contractor

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