

MUNICIPAL CORPORATION KARIMNAGAR
Karimnagar

RFP NOTICE No. E1/3429/MCK/2018, Dated:- 07-05-2018

Bid Document downloading Start date : 08-05-2018 at 11.00 am

Last date for Bid submission : 17-05-2018 at 03.00 pm

Date of Pre-bid meeting : 14-05-2018 at 03.00 pm

Technical Bid opening date & time : 17-05-2018 at 04.00 pm

Subject: Consultancy Services for 3rd party to conduct appropriate tests at different stages of civil works, for achieving quality of works (usually costing above 1.00 lakh) undertaken by MCK in the Two Zones for the period from 1st June, 2018 to 31st March, 2020.

1. The Municipal Corporation Karimnagar invites Consultancy Firms (which term includes Consultancy Wings of Reputed Engineering Colleges) experienced in rendering third party Quality Assurance Services in Civil Construction works including those of Govt. Departments to submit technical and financial proposals for consultancy services required for 3rd party quality assurance of Civil Works (usually costing above Rs. 1.00 Lakh) undertaken by MCK in the Two Zones for the period from 1st June, 2018 to 31st March 2020 which could form the basis for future negotiations and ultimately a contract between the Consultancy Firm (hereafter referred to as Consultant) and the Commissioner, MCK, Karimnagar (hereinafter referred to as Client)

The general categories of works taken up by MCK are as follows –

- a) Cement Concrete Pavements
- b) Bituminous Road Works
- c) RCC Buildings
- d) Culverts & Bridges
- e) Solid Waste Management Works
- f) Water Supply Works
- g) Other Civil Works.

MCK intends to engage independent 3rd party agency to assess the quality of works executed in MCK area and to take necessary remedial measures in case of shortfalls in quality if any found a part from utilizing their services to educate MCK Engineers and construction agencies so as to take the standards of quality to national standards.

2. The Purpose of this assignment is

To obtain independent & objective assessment of the technical quality of construction works to be completed and to assure that the Civil Works are constructed with good construction materials & as per desired standards of good quality construction, to motivate Contractors to achieve above aspects.

The 3rd party technical and quality assurance consultant shall provide an independent assessment on the quality of Civil Works to be executed at different stages of construction. The consultant shall setup a quality control laboratory locally (preferably within 20 km radius) similar to the existing laboratory or of a higher standard. The quality assurance system with the help of prescribed testing norms laid down in Indian Standards through a competent team of appropriate engineers shall be ensured. The consultant employed shall be responsible for quality assurance both basic input materials & workmanship and final product by conducting appropriate tests (Both field & laboratory) including periodical supervision at appropriate stage of construction.

The consultant shall deploy the professional & subordinates as per need of assignment and shall issue report on ongoing and completed works.

The consultant shall highlight the problem area if any, and also suggest steps/solution for the same as to achieve the overall target of quality assurance.

For quality assurance the consultant shall carry out testing (both field & laboratory) of materials used in construction work and concrete casted during the course of construction work.

3. Basic Criteria for consultant for participating in the process.

- a. The Consultancy firm should have (in case of Engineering Colleges) NBA Accreditation in Civil Engineering
- b. **The Consultancy Firm shall possess Laboratory accredited of NABL or BIS/Tie-up with NABL or BIS accredited Laboratory (in case of Laboratories other than those of Engineering Colleges).**
The agencies tie-up with NABL or BIS laboratory should submit declaration of willingness and certificates of eligibility from the NABL or BIS Laboratory.
- c. The consultant should provide evidence of similar work of monitoring and certification as 3rd party as a prime consultant for a minimum period of five years (out of which at least three year in Govt. Works) during the preceding seven years.
- d. The Consultancy Firm shall have valid registration for GST (by Central Excise Department / State Commercial taxes Department).
- e. The bidder shall submit an undertaking that they will remit the EPF, ESI and professional tax of their employees promptly and furnish proof whenever required.

Note:

- i) In support of qualifying criteria, the details and certificates are to be furnished as per the proforma available in the tender schedules.
- ii) The bidder is subjected to be disqualified and liable for black listing and forfeiture of bid security, if he is found to have misled or furnished false information in the forms / statements / certificates submitted in proof of qualification requirements.
- iii) Even while currency of the contract, if **it is** found that the agency has produced False / fake certificates of experience he will be liable for black listing and the contract will be liable for termination and liable for forfeiture of bid security and all the amounts due to him.
- iv) The bidder should submit a copy of PAN CARD and a copy of valid GST registration certificate issued by the competent authority, and copy of the latest GST Return (not earlier than the Month/Quarter ending September 2017) filed by them.
- v) Sub-Contracting is not allowed.
- vi) Though it is not mandatory to attend the pre-bid meeting, the prospective bidders are advised to attend the pre-bid meeting in their interest. The decisions taken at the pre-bid meeting will be binding on all the bidders (including those who do not attend the pre-bid meeting)

4. Bid Security.

The consultant shall furnish Bid Security for Rs. 1.00 Lakh in the form of DD or irrevocable Bank Guarantee (with validity period of one year) in favour of the Commissioner, MCK, Karimnagar. Bid Security shall be kept in the first envelope containing technical proposal. The proposals received without Bid Security shall not be considered. The Bid Security is liable to be forfeited if successful Bidder fails to execute the agreement within 07 days from the date of issue of Letter of acceptance. The bid security of qualified bidders will be discharged on fulfillment of the contract

5. The following documents are enclosed to enable the Consultants to submit their proposal:

- (a) Terms of reference (TOR) (Annexure -1)
- (b) Supplementary information for consultant, including a suggested format of curriculum vitae (Annexure-2).
- (c) A sample form of Contract for Consulting Service under which the services will be performed (Annexure-3)

In order to obtain first hand information on the assignment, it is considered desirable that a representative of the firm visits the office of the Superintending Engineer, MCK.

6. The submission of the proposals: The proposals shall be submitted in two parts viz., Technical and Financial and should follow the form given in the “Supplementary Information for the Consultants:

6.1. The “Technical” and “Financial” proposals must be submitted in two separate sealed envelopes (with respective marking in the bold letters) following the formats/schedules give in the supplementary information for consultants. The first envelope marked “TECHNICAL PROPOSAL” should include the description of the firm/ organization, the firm’s general experience in the field of assignment and competency of the personnel proposed for the assignment and the proposed work plan methodology and approach in response to suggested terms of reference. The first envelope should not contain any cost information whatsoever. The second envelope marked “FINANCIAL PROPOSAL” must also be sealed with sealing wax and initialed twice across the seal and should contain the detailed price offer for the consultancy services.

Both the sealed envelopes should again be placed in an OUTER COVER (which shall also be sealed) sealed cover, which will be received in the office of the Superintending Engineer, MCK upto the time mentioned in tender notice.

6.2 Opening of Technical Proposal

The proposals (first envelope containing technical proposal only) will be opened by the Superintending Engineer, MCK or his authorized representative in his office at time mentioned in tender notice in presence of such consultant or their authorized representative who may choose to be present. It may please be noted that the second envelope contained the detailed price offer will not be opened until technical evaluation has been completed and the result approved by the Superintending Engineer, MCK or any other officer so authorized.

7. Evaluation

A two-stage procedure will be adopted in evaluating the proposals with the technical evaluation being completed prior to any financial proposals being opened. The technical evaluation with be carried out on the information & documentary evidence furnished along with the bid. The technical proposals will be evaluated using the following criteria by the Superintending Engineer, MCK or any other Officer or Committee authorized by the Commissioner, MCK.

- (i) The consultant’s relevant experience and quantum of similar works executed by them (20 Points).**
- (ii) The methodology proposed and experience of the key staff proposed for the assignment (20 points)**
- (iii) The qualifications and experience of the key staff proposed for the assignment (20 points)**
- (iv) Existing Laboratory facility (40 Points).**

Curriculum vitae of senior personnel in each discipline for assessing the qualifications and the experience of the personnel proposed to be deployed for the assignment should be included with the proposal (in the format of simple curriculum vitae.) these personnel will be rated in accordance with:

(a) General qualifications – (20 points)

(b) Adequacy for the project (suitability to perform the duties for this assignment. These include education and training, length of experience on fields similar to those required as per terms of reference, type of position held, time spent with the firm etc.) – (50 points).

(C) Their language and the experience in the A.P / Telangana. state (30 Points)

All agencies who satisfied the qualifying criteria will be declared successful in technical proposal and the financial proposals of those tenderers who are declared successful in technical proposal will be opened.

8. Deciding Award of Contract

Quality and competence of the consulting service shall be considered, as the paramount requirement. The nature of the contract is non-exclusive and the client/MCK can choose as many firms as required depending on the work load. The decision of the award of the contract would be as under:

(a) Technical proposals scoring not less than 70% of the total points will only be considered for financial evaluation. The client/MCK shall notify those consultants whose proposal did not meet the minimum qualifying mark or were considered non responsive to the Letter of Invitation and Terms of Reference, indicating that their financial proposals will be kept unopened. The client/MCK shall simultaneously notify the consultants that have secured the minimum qualifying mark, indicating the date and time set for opening of financial proposals. The notification may be sent by the registered letter, cable, telex, facsimile or electronic mail.

(b) The Financial proposals shall be opened publicly in the presence of the consultants' representatives who choose to attend. The name of consultants, the quality scores, and the proposals are opened. The client/MCK shall prepare minutes of the public opening.

(c) The Superintending Engineer (or any other Officer/Committee authorized by the Commissioner, MCK) will determine whether the financial proposals are complete (i.e. whether they have estimated all items of the corresponding Technical proposals; if not, the client/MCK reserves the right to cost them and add their cost to the initial price, and to correct any computational errors. The evaluation shall exclude local taxes (if any). The

client/MCK will negotiate with the firms, which qualify in technical evaluation to arrive at uniform rates for the consultancy charges.

(d) During negotiations the consultants must be prepared to furnish the cost breakup and other clarifications to the proposals submitted by them, as may be required. Based on negotiations, the Client/MCK shall select the firms with whom the negotiations are successful; the award will be made to them by demarcating the area of operation (Zone wise or Division wise). However, the Client/MCK reserves the right to designate an alternative (i.e., second option) Consultant for each area of operation to obviate the CONFLICT OF INTEREST as stipulated in G.O.Ms.No.289 Finance (TFR II) dated: 4th December, 2006.

(e) If negotiations with any firm fail, and if it is concluded that a contract with reasonable terms cannot be concluded with the said firm, the Bid Security will be returned. The Client/MCK reserves the right to select as many firms as required depending the workload.

9. It may be noted the Superintending Engineer, MCK is not bound to select any of the firms submitting proposals. Further, as quality is the principal selection criterion, Client/MCK does not bind itself in any way to select the firm offering the lowest price, if the lowest rates quoted are found not workable.

10. The firms are requested to hold their proposals valid for 30 days from the date of submission without changing the personnel proposed for the assignment and the proposed price. The Superintending Engineer, MCK, will make best efforts to select a consultant firm within this period.

11. It may be noted that the cost of preparing a proposal and of negotiating a contract including visits to Superintending Engineer, or other functionaries of MCK, if any is not reimbursable as a direct cost of the assignment.

12. Assuming that the contract can be satisfactorily concluded in one month, the firms are expected to take up/commence the assignment within one month.

13. It may be noted that the remuneration, which will be received from the contract, will be subject to normal tax liability in India. The concerned tax authorities may be contacted for further information in this regard if required.

14. The quantum of work can be increased or reduced by the Commissioner, MCK or any other authorized officer, and the payment will be done as per prorata basis (as per financial offer). The Client/MCK reserves the right to change the area of operation of the Consultant.

15. MCK reserves the right to accept or reject any or all bids without assigning any reasons whatsoever.

16. The dates stipulated in the RFP are followed by the agency and under no circumstances they will be relaxed unless officially extended.

17. The bidders are hereby instructed to not alter and make any changes to the bidding documents. If any changes are made by bidder, it shall be treated as tampering of documents and the bid shall be summarily rejected.

18. The bidder is likely to be rejected if on opening it is found that –

- i. The bidders has not strictly followed the procedure laid down for submission of tender.**
- ii. The bidder has proposed conditions which are inconsistent with or contrary to the terms and conditions specified.**
- iii. Additions, corrections or alteration are made by the bidder on any page of tender document.**
- iv. Any Page or pasted slips are missing.**
- v. The bidder has not signed the tender.**
- vi. The bidder has specified any additional condition.**
- vii. The bidder has quoted financial offer anywhere other than specified in financial bid.**

19. If there is any discrepancy between the offer quoted in figures and in words, the rate quoted in words will be treated as the offer.

**Superintending Engineer
MCK**

Enclosures:

- 1. Terms of Reference**
- 2. Supplementary Information to Consultants.**
- 3. Draft Contract under which service will be performed.**

Annexure-1
TERMS OF REFERENCE
FOR

Consultancy Services for 3rd party to conduct appropriate tests at different stages of civil works, for achieving quality of works (usually costing above 1.00 lakhs) undertaken by MCK in the Various Engineering Divisions for the period from 1st June, 2018 to 31st March, 2020

1. BACKGROUND

The Municipal Corporation Karimnagar is undertaking large no. of civil works involving huge expenditure. For the purpose of Third party QC, MCK area is divided into two administrative units (viz. Zones).

2. OBJECTIVES

The main objective of this assignment is to obtain independent & objective assessment of the technical quality of all construction works to be completed by Contractors and to assure that the civil works are constructed with good construction materials and as per desired standards of good quality construction.

The 3rd party quality assurance Consultant shall provide an independent assessment on the quality of the works to be executed at different stages of construction by conducting tests at different stages of work i.e., material testing during work in progress and after completion. It shall setup a quality control and quality assurance system with the help of prescribed testing norms laid down in Indian Standards through a competent team of Technical Personnel.

The consultant employed shall be responsible for quality control testing both for materials and workmanship at appropriate stage of construction.

For periodical testing of the civil works the consultant shall deploy the professionals and subordinates as per need of assignment and shall issue certificate of completed works.

The consultant shall highlight the problem area if any, and also suggest steps/ solutions for the same so as to achieve the overall target of quality.

For quality assurance the consultant shall carryout testing (both field and laboratory) of materials used in construction work and concrete casted during the course of construction work.

3. SCOPE OF WORK:

3.1 The consultant or his representative shall conduct tests during the work under progress frequently to achieve the stipulated standards of quality in the work.

3.2. The consultant shall carry out independent testing (Field & Laboratory) (List Enclosed) of construction materials and will reported to the concerned Executive Engineer with his suggestions and remedial measures if any.

3.3. The consultant shall conduct the tests / checks / sampling of materials and work as per relevant IS/IRC/ASTM/MORTH/CPHEEO standards.

3.4. The consultant shall issue test reports and suggest deductions as per standards.

4. GOVERNING FACTORS

4.1 The job of consultancy quality assurance shall be testing of materials, office work, comments on construction materials, checking of test results.

4.2. The consultant shall furnish details about the testing equipment, skilled & unskilled persons engaged by him for testing of samples with their qualifications and experience.

4.3. The firm having mobile testing laboratory shall be given additional weightage as it will ensure testing of materials at site of work.

4.4. The consultant shall provide methodology for testing of materials.

4.5. The consultancy team shall have considerable strength of expertise and established track record of providing technical audit and quality assurance services.

4.6.1 The consultant shall appoint minimum two Engineers either having two years minimum experience for B.E. Civil or five years experience for D.C.E. of similar type of work.

4.6.2 The consultant shall establish division offices in the MCK area, for regular field inspections and observation reports in time for better quality of work execution. The tests are to be conducted daily as per need in the presence of departmental staff and contracting agency for transparency.

4.7. The name of the engineers to be deployed along with their CV's shall be furnished to the client/MCK. The Client/MCK will not consider substituted, except in case of unexpected delay on the starting date or for reasons of health or engineer leaving the firm.

4.8. The Consultant shall ensure that each site is visited for minimum 3 times (before execution, during execution and after execution) by the Engineer of the Consultancy Firm. The consultant shall take photographs at the site (capturing salient views of Testing).

Frequency of visits: (Minimum Number)

S.No	Estimated cost of work	Prior to work starts	Work in progress	After Completion of the work
1	Upto Rs. 5.00 Lakhs	0	0	1
2	Above Rs. 5.00 Lakhs and upto Rs. 10.00 Lakhs	1	1	1
3	Above Rs. 10.00 Lakhs and upto Rs. 50.00 Lakhs	1	2	1
4	Above Rs. 50.00 Lakhs	1	2+1 visit per every Rs. 50.00 Lakhs expenditure over and above initial Rs. 50.00 Lakhs	1

Sampling or testing done without following the above procedure is deemed to be invalid.

During field visits, the consultant shall check and report whether work has been executed according to the drawings, designs and specifications and in line, levels as per approved drawings.

During this visits he will spend time observing the contractors working practices also. He will prepare a report on his visits on the same day as the visit takes place. This report will be submitted without delay and no case later than the following day to the concerned Executive Engineer with a copy to the EE & SE. The point mention in the report shall be checked for compliance in subsequent visits and reported. The consultant shall make further visits has necessary to follow up particular areas of concern. One of the main objectives is to point out to the respective contractors how improvements can be made to the working practices and to resolve difficulties in an amicable manner. It should be remembered that time is the essence of the contract and that considerable judgement is required regarding quality aspects of the work. If contractors failed to heed advice or undertake work that is suspect which required rectification or replacement the matter is to be immediately reported to the Executive Engineer so that appropriate action can be taken under the terms of contract.

4.9. The Consultant shall take action for casting the cubes during the concreting work of pavements and other concrete works. On completion of the work, core tests shall be conducted to assess the strength/Density of pavements, and incase of pipelines, pressure test

must be conducted and also propose proportionate deductions to be made from the contractors bill.

4.10. The Consultants shall communicate immediately the entire audit points to concerned Assistant Engineer and copy marked to Concerned Dy. EEs & EEs.

4.11. The Consultant shall develop and follow the computerized reporting and record management system and shall obtain prior concurrence of the same from Client/MCK.

4.12. The Consultant shall educate the field Engineers as well as the masons regarding good construction practices for maintaining the Quality of the work. The Executive Engineer concerned shall ensure that the Copies of TS/AS/Agreement/Detailed drawing are made available to the Consultant.

4.13. The Consultant shall provide workwise inspection report highlighting problem area and its solution etc. to concerned Executive Engineer.

4.14. The Consultant shall communicate tentative inspection schedule to the concerned Executive Engineer the core cutting is planned. The Consultant shall also communicate the schedule of testing of Steel Reinforcement, Concrete Cubes, Concrete Cores and BT Cores well in advance to the concerned Executive Engineer through electronic mail to enable them to witness the test of random.

4.15. Reports of material testing should be provided by the Consultant to concerned Executive Engineer along with remarks.

4.17. The test reports of Cement and Steel purchased by construction agency should be checked by the Consultant if available/provided by construction agency and it should be mentioned in inspection report.

4.18 In respect of RCC pipes, SWG pipes, HDPE pipes Manhole Covers etc, the Consultant shall visit the factory of witness the tests conducted and the results shall be incorporated in the inspection report. The consultant shall inform the **Executive Engineer & the Superintending Engineer** whenever such inspections are planned. The Executive Engineer / the Superintending Engineer shall also visit the factory to witness such tests for some works selected at random.

4.19 In respect of RMC, the Consultant shall verify the suitability and mix design at plants original invoices as well as Batch sheets and the same shall be mentioned in the inspection report. The Consultant shall endorse on such invoices and Batch Sheets that the verification is done. Scanned copies of all such verified documents shall be communicated to the concerned Executive Engineer, the Superintending Engineer through electronic mail.

4.20. The cement used in construction work should be fresh and not older than 3 months. It should be ascertained by the Consultant and mentioned in the inspection report also

4.21. From starting of work to the completion, minimum 3 Nos. of photographs of work should be taken at different levels and enclosed with the respective test reports.

4.22 . The frequency, number, location and timing of sampling shall be spread over the whole area of the work and construction period such that they will fairly represent the whole works quality.

4.23 The consultant shall bring to the notice of S.E & E.E immediately, if any work is found being executed with change of specifications and / or change of site without approval of competent authority: If in his opinion it is found necessary to change specifications or modify design, the same shall be brought to the notice of concerned Executive Engineer if the work is below Rs. 10.00 lakhs and the Superintending Engineer if the work value exceeding Rs. 10.00 lakhs. In both cases the information shall be furnished to S.E

4.24 A consolidated monthly statement showing the dates of visit i.e., 1st visit, 2nd visit and 3rd visit and so on for all the sites shall be submitted to the concerned division Executive Engineers and copy marked to the Superintending Engineer, MCK.

4.25 After the work is completed consultant shall issue final Quality Control report after due verification of various item of work. The final report shall consist of action taken report of site engineers if any on the earlier reports, lab and field test results on the finished products and general comments on overall quality of work based on visual inspection.

4.22. Based on the test results, necessary deductions may be proposed in case of desired criteria is not satisfied.

4.23. Test to be conducted for various type of works and acceptance criteria is enclosed in Annexure - 3

5. SCHEDULE FOR COMPLETION OF ASSIGNMENT

The time schedule for completion of job is upto 31st March, 2020 from the date of assignment. However, the assignment is job oriented only and shall last till last of the work (grounded during the financial year 2018-19, 2019-20) is completed and completion certificate is issued. However, the contract can be continued for further period by mutual consent.

6. FORMATS

6.1. The workwise Inspection Reports shall include the following details:

- (a) The Name of the Work**
- (b) Estimated Cost**
- (c) Name of the Construction Agency**
- (d) Work Order No.**

- (e) **Names of the in-charge Departmental Engineers**
 - (f) **Observations, remedial measures, suggestive measures**
 - (g) **As far as possible, the proformas given in the respective IS/IRC/MORTH standards shall be followed for test reports (field tests as well as Laboratory tests). While mentioning the strength/thickness/ density etc. the target values as per the specifications & tolerances (if any) shall be mentioned.**
- 6.2. Fortnightly abstracts shall incorporate the following:**
- (a) **No. of tests (workwise & testwise) carried out along with results.**
 - (b) **Summary of Observations.**

7. SUBMISSION OF REPORTS TO

- 7.1 Concerned Executive Engineer (for workwise Inspection Reports)**
- 7.2. Concerned Superintending Engineer**

8. PAYMENT SHEDULE

Payment shall be at the agreed percentage on the work done as per the work bill.

Rates agreed shall be firm till the completion of the contract inclusive of transportation, photography, documentation, stationery, accommodation, fuel, communication charges and other incidental expenses etc.,

Annexure – 2

SUPPLEMENTARY INFORMATION FOR CONSULTANTS

Proposals

(1) Proposals should include the following information:

(a) Technical Proposal

- 1. Any comments or suggestions of the consultant on the Terms of Reference (TOR)**
- 2. A description of the manner in which consultant would plan to execute the work. Composition of the Team Personnel in Form F-3 and approach or methodology proposed for carrying out the required work.**
- 3. Curriculum Vitae of personnel which the consultant would propose to engage in Form F-4.**
- 4. The consultant's comments if any, on the data, services and facilities to be provided by MCK, Karimnagar indicated in the Terms of Reference (TOR)**
- 5. Bid Security amount of Rs.1.00 Lakh in the form of DD or irrevocable Bank Guarantee in favour of the Commissioner, MCK, Karimnagar.**

(b) Financial proposals:

The financial proposals should include the following:

- i) Schedule of Price Bid in Form F-5 with cost estimate of services**
- ii). Work Program and time schedule for key personnel in Form F-6.**

(2) Copy of the Proposals should be submitted to the Superintending Engineer, MCK, Karimnagar.

(3) Contract Negotiations:

The aim of the negotiation is to reach an agreement on all points with the consultants and initial a draft contract by the conclusion of negotiation. Negotiations commence with a discussion of consultant's proposal, the proposed work plan, staffing and any suggestions that may be made to improve the Terms of Reference. Agreement will then be reached on the final Terms of Reference, the staffing and the methodology which will indicated personnel, periods in the field & office, man-mouth, and reporting schedule.

(4) Contracts with Team Members

Bearing in mind that rates are negotiable, firms are advised against making firm financial attunement with prospective team member prior to negotiations.

(5) Nomination of Experts

Having selected a firm party on the basis of an evaluation of personnel presented in the firm's proposals, Superintending Engineer, MCK expects to negotiate a contract on the basis of the expert's name in the proposals. As the expected date of mobilization is given in the letter inviting proposals, MCK will not consider substitution after contract negotiations except in cases of unexpected delays on the starting date of incapacity of an expert for reasons of health, or leaving the firm. The desire of a firm to use an expert working on another project shall not be accepted for substitution of personnel.

(6) Mode of Payment:

The payments shall be arranged by the concerned Executive Engineer along with the work bill of the Construction agency depending on the testing charges quoted.

FORM F -1

From To

Sir,

Sub:- Hiring of Consultancy Services forof..... regarding.

**I/We Consultant/consultancy firm/
organisation
herewith enclose Technical & Financial Proposal for selection of my/our
firm as consultant for.....**

**We undertake that, in competing for (and, if the award is made to us, in
executing) the above contract, we will strictly observe the laws against fraud
and corruption in force in India namely "Prevention of Corruption Act 1988"**

Yours faithfully

Signature

.....
Full Name.....
Add address.....
Authorized Representative

FORM F -2
ASSIGNMENT OF SIMILAR NATURE SUCCESSFULLY COMPLETED
DURING LAST 8 YEARS

Outline of recent experience on assignment of similar nature

S. No.	Name of Assignment	Name of the Project	Department	Cost of assignment	Date of Commencement	Date of completion
1.	2.	3.	4.	5.	6.	7.

Note: Please attach Certificates from the employer by way of documentary proof(in case of Govt. Works, Certificates issued by the officer of rank not below Executive Engineer or Equivalent).

FORM F -3

**COMPOSITION OF THE TEAM PERSONNEL AND THE TASK
WHICH WOULD BE ASSIGNED TO EACH TEAM MEMBER**

Technical / Managerial Staff

S. No.	Name	Position	Task Assignment
1.	2.	3.	4.

Support Staff

S. No.	Name	Position	Task Assignment
1.	2.	3.	4.

FORM F -4

**SUGGESTED FORMAT OF CURRICULUM VITAE FOR MEMBERS OF
CONSULTANT'S TEAM**

- 1. Name :**
- 2. Date of Birth**
- 3. Profession / Present Designation :**
- 4. Year with firm / Organisation : Year**
- 5. Area of Specialization :**
- 6. Proposed position of Team :**

7. Key Qualification

(Under this heading, give outline of staff member's experience and training most pertinent to assigned work on proposed team Describe degree of responsibility held by staff member on relevant previous assignment and give dates and locations Use up to half a page)

8. Education:

(Under this heading, summarize college/University and other specialized education of staff member, giving names of schools / college etc. Date attended and degree obtained. Use up to a Quarter pages.)

9. Experience

(Under this heading, list of all positions held by staff members since graduation, giving dates, names of employing organization, title of positions held and location of assignments. For experience in last two years for B.E. civil and & Five years for D.C.E. also give types of activities performed and client references, where appropriate. Use up to three quarters of a page).

10. Language:

(Indicate proficiency in speaking, reading and writing of each language by "good" or "poor")

Date

Signature of Staff Member

Annexure-3
Illustrative List of Tests to be Conducted

S. No.	Test
	GROUP TESTS
1.	CEMENT Fineness (By Sieving), Specific Gravity, Standard Consistency Setting Time (Initial & Final) Compressive Strength, Soundness
2.	COARSE AGGREGATE a) Concrete Sieve Analysis, Water Absorption, Specific Gravity, Impact Value Abrasion Value/ Crushing Value, Flakiness Index
	b) WBM Sieve Analysis, Water Absorption, Specific Gravity, Impact Value Abrasion Value/ Crushing Value, Flakiness Index
	C) BT WORK Sieve Analysis, Water Absorption, Specific Gravity, Impact Value Abrasion Value/Crushing Value, Flakiness Index, Stripping Value
3.	FINE AGGREGATES A) Fineness Modules (Sieve Analysis), Stilt & Clay Content (Wet Sieving), Chloride & Sulphate Content
	B) Fineness Modulus (Sieve Analysis), Stilt & Clay Content (Wet Sieving)
4.	BRICKS Water Absorption (5 Bricks), Compressive Strength (5 Bricks) Efflorescence (5 Bricks)
5.	FLOORING TILES Flexural test (6 Tiles), Water Absorption (6 Tiles)
6.	GLAZED TILED Water Absorption (6 Tiles), Modulus of Rupture (6 Tiles)
7.	CERAMIC TILES/VITRIFIED TILES Water Absorption, Modulus of Rapture (6 Tiles)
8.	CONCRETE PAVING BLOCKS Compressive Strength, Water Absorption (8 Blocks)
9.	MANGALORE TILES Water Absorption (6 Tiles), Flexural Test (6 Tiles)
10.	STONE Water Absorption & Specific Gravity Compressive Strength (Dressing of Stone already done)
11.	SOIL/Murum for Earthwork Sieve analysis, Liquid limit & Plastic Limit, Compaction Test (Proctor Density)
12.	MURUM FOR ROAD WORK Sieve Analysis, Liquid limit & Plastic Limit
13.	BITUMEN A) BITUMEN Penetration, Softening Point, Specific gravity, Ductility
	B) Modified Bitumen (C.R.M.B./P.M.B.) Penetration, Softening Point, Elastic Recovery, Thin firm over test

	c) Mix Material Extraction Test, Gradation
14.	BITUMINOUS EMULSION % Residue Test, Particle charge Test, Sieve Test
15.	HOLLOW BRICKS Density Test (3 Blocks) Compressive Strength (8 Blocks) Water Absorption Test (3 Blocks)
16.	SOLID BRICKS Density Test (3 Blocks) Compressive Strength (8 Blocks) Water Absorption Test (3 Blocks)
17.	STEEL BAR TESTING a) Upto 16 mm (3 Bars) (Tensile strength, % Elongation Weight-Per Meter, Bend/ Rebend Test, Yield Stress, Proof Stress)
	b) Above 16 mm (3 Bars) (Tensile strength, % Elongation Weight-Per Meter, Bend/Rebend Test), Yield Stress, Proof Stress
	INDIVIDUAL TESTS
	CEMENT
1.	Fitness (By Sieving)
2.	Fineness by Blains Apparatus
3.	Specific Gravity
4.	Standard Consistency
5.	Setting Time (Initial & Final)
6.,	Compressive Strength
7.	Soundness
	COARSE AGGREGATE
8.	Sieve Analysis
9.	Water Absorption
10.	Specific Gravity
11.	Impact Value
12.	Abrasion Value
13.	Crushing Value
14.	Flakiness Index
15.	Soundness
16.	Bulk Density
17.	G.S.B. Mix Design
18.	W.M.M.Mix Design
19.	Stripping Value
20.	Elongation Index
	FINE AGGREGATES
21.	Fineness Modulus (Sieve Analysis)
22.	Silt & Clay Content (Wet Sieving)
23.	Chloride & Sulphate Content
24.	Moisture Content
25.	Bulkage of Sand
	BRICKS

27.	Water Absorption (5 Bricks)
28.	Compressive Strength (5 Bricks)
29.	Efflorescence (5 Bricks)
	FLOORING TILES
30.	Flexural Test (6 Tiles)
31.	Water Absorption (6 Tiles)
32.	Resistance to Wear (6 Tiles)
	GLAZED TILES
33.	Determination of Impact Resistance (6 Tiles)
34.	Determination of Chemical Resistance (6 Tiles)
36.	Modulus of Rupture (6 Tiles)
38.	Modulus of Rupture (6 Tiles)
39.	Determination of Chemical Resistance (6 Tiles)
	MANGALORE TILES
	CONCRETE
43.	Compressive Strength of C.C. Cube (3 Cubes)
44.	Concrete Mix Design (With all Tests On basic materials)
45.	Concrete Mix Design for other grade Of concrete than in item No.44 for The same work for which basic Material tests were already been Performed in item No.44
48.	Permeability Test Concrete mix design by Accelerated curing method (Boiling water method)
49.	Chemical Analysis to assess cement Quality
	CONCRETE PAVING BLOCKS
50.	Compressive Strength (8 Blocks)
51.	Water Absorption (3 Blocks)
52.	Flexural Test (8 Blocks)
53.	Resistance to wear (3 Blocks)
	MORTOR
54.	Compressive Strength
	STONE
55.	Crushing Value
56.	Water Absorption & Specific Gravity
57.	Compressive Strength (Dressing of stone already done)
	SOIL/MURUM (on specific request only)
58.	Sieve Analysis
59.	Field Moisture Content
60.	Liquid Limit & Plastic Limit
61.	Compaction Test (Proctor Density)

62.	C.B.R. Test (Lab) Excluding Compaction Test
63.	Field Density by Sand Replacement method
64.	Sulphate & Chloride content
65.	Mechanical Analysis
66.	Plate Load Bearing Test (Excluding Transportation)
67.	Differential Free Swell Test for Soil
	BITUMENT
68.	Extraction Test
69.	Marshall Stability & Flow Measurement (3 Moulds)
70.	Preparation of Marshall Mould (3 Moulds)
71.	Job Mix Design (With all Tests on Basic material) for DBM/SDBC/BC
72.	B.M. Job Mix Design (Preparation of Marshal Mould & Density)
73.	Penetration
74.	Softening Point
75.	Viscosity
76.	Flash & Fire Point
77.	Specific Gravity
78.	Ductility / Elastic Recovery (CRMB/PMB)
79.	Mastic Hardness No.
80.	Thin film over test & test on residue of modified bitumen
81.	Separation test for modified bitumen
82.	Determiration of Wax content in the Bitumen
83.	Matter soluble inTrichloroethyelene
84.	Density of Bituminous Mix Mould BM/BC/SDBC/DBM
	BITUMINOUS EMULSION
85.	% Residue Test
86.	Particle Charge Test
87.	Sieve Test
	HOLLOW BLOCKS
88.	Density Test (3 Blocks)
89.	Compressive Strength (8 Blocks)
90.	Water Absorption Test (3 Blocks)
	SOLID BLOCKS
91,	Density Test (3 Blocks)
92.	Compressive Strength (8 Blocks)
93.	Water Absorption Test (3 Blocks)
	WATER
94.	pH Value
95.	Sulphate & Chloride Content
	WOOD
96.	Density
97.	Moisture Content
	RCC / HDPE PIPES
98.	Three edge bearing test
99.	Absorption Test
100.	Hydrostatic Test
	FLUSH DOOR
101	Knife Test

102.	Adhesion Test
103.	End Immersion Test
	PLYWOOD
104	Determination of Resistance to dry heat
105.	Determination of Moisture Content
106.	Determination of Density
107.	Thickness of Plywood
108.	Test for Glue Adhesion
	PARTICLE BOARD
109.	Determination of Moisture Content
110.	Determination of Density
	ALUMINIUM SECTION
111.	Thickness
112.	Mass per Unit
113.	Test on Powder Coating
	POLYMER MATERIAL
114	pH Value
115.	Solid Content
	AC PIPES
116.	Water Absorption
117.	Bursting Strength
	A..C. SHEETS
118.	Water Absorption
119.	Loading Bearing
	G.I. PIPES
120.	Weight Per Running Meter
121.	Diameter of Pipes & Wall Thickness of Pipe
122.	Weight of Zink Coating Per Square Meter
	PVC PIPES (NON PLASTISIED)
123.	Weight per running meter
124.	Diameter of pipe & wall thickness of pipe
	STEEL (ANTI CORROSIVE TEST)
125.	Resistance to applied Voltage (1 Hrs. Test) (2 Samples)
126.	Resistance to applied Voltage (30 Days . Test) (2 Samples)
127.	Thickness of Coating
128.	Chemical Resistance (8 Samples)
129.	Hardness of Coating
130.	Salt Spray Test (4 Cycles) (2 Samples)
	STREEL BAR TESTING
131.	Upto 16 mm (3 Bars)
132.	Above 16 mm (3 Bars) (Tensile Strength, % Elongation, Yield Stress, Weight Per Meter, Bend Rebend Test, Proof Stress)
133.	Nitrol Solution Test (3 Bars)
	PAINT THERMOPLASTIC PAINT
134.	Glass beading contents & Grading analysis
135.	Reflectance & Yellowness Index
136.	Flowability (Percent residue)

137)	Softening Point (Ring & Ball method)
138.	Drying Time
	COAL TAR EPOXY PAINT
139.	Drying Time
140.	Dry Film Thickness
141.	Flexibility
142.	Gel Time
143.	Pot life
144.	Volume of Solid
	ROAD SIGN BOARD
145.	Retro Refractive Test
	CORE EXTRACTION & TESTING
146.	Taking of Core samples in concrete pavement & Testing for thickness, strength and density
147.	Taking of core samples in bituminuous flexible pavement & testing for density
	SWG PIPES
148.	Acid Resistance Test
149.	Alkali Resistance Test
150.	Hydraulic Test
151.	Absorption Test
152.	Crushing Strength Test
	MANHOLE COVERS
153.	Load Test

Test to be conducted / Frequency of Sampling and acceptance criteria

1) CC roads:

I) Test to be conducted:

- a) Tests on cement
- b) Tests on Coarse Aggregates & Fine Aggregate
- c) Workability

II) Frequency of Sampling:

Quantity of Concrete	No. of Samples
1 -5 cum	1 samples
6-15 cum	2 samples
16-30 cum	3 samples
31-50cum	4 samples
51 cum and above	4-1 addl. sample

III) Acceptance criteria:

a) On thickness:

Payment Adjustment for deficiency in thickness	
Thickness	Percentage of deduction
21-25 mm	30
16-20 mm	25
11-15 mm	19
6-10 mm	17

b) On strength of the concrete core :

Concrete in the member represented by a core test shall be considered acceptable if the average equivalent cube strength of the cores is equal to at least 85 percent (avg: 25.5 kg/sqm) of the cube strength of the grade of concrete specified for the corresponding age and no individual core has a strength less than 75 percent i.e., 22.5 kg/sqm for M30 grade will be considered for payment with a penalty and less than this has to be rejected

- 1) Overall size metal of up to 5% no recovery
- 2) between 5-10% recovery at 25% of differencing cost of the metal and that of higher size of metal
- 3) Over size of metal above 10% rejected.
- 4) If Mastic pads are not used recover double the cost of mastic pad and fixing charges.

2) For Slabs:

I) Test to be conducted:

- a) Tests on cement
- b) Tests on Coarse Aggregates & Fine Aggregate
- c) Workability

II) Frequency of Sampling:

Quantity of Concrete	No. of Samples
1 -5 cum	1 samples
6-15 cum	2 samples
16-30 cum	3 samples
31-50cum	4 samples
51 cum and above	4-1 addl. sample

III) Acceptance criteria:

c) On thickness:

Thickness of the slab specified	Minimum tolerance in thickness
75mm thick slab	5mm
100mm thick slab	10mm
125mm thick slab	13mm
150mm thick slab and above	15mm

If the difference exceeds the tolerance limit work shall be rejected

IV) Payment adjustments

Deficiency in thickness	Payment deductions
Up to 5%	Payment will be made as per quantity recorded
6-10%	15%

3) C.C. Lean concrete:

Acceptance criteria:

Deficiency in thickness	Payment deductions
Up to 10%	The cost deficient the quantity of concrete shall be recovered
10-20%	Double of the cost of the concrete shall be recovered
Above 20%	The part of the work shall be rejected

4) W.B.M. Roads:

I) Test to be conducted:

a) Tests on Corse Aggregates & Fine Aggregate

II) Frequency of Sampling:

One for every 500sqm area, 0.75m away from the each edge of WBM layer with area of 0.50m x0.50m for each layer.

III) Acceptance criteria:

The weight of the metal collected from the compacted layer of the standard test pit shall not be less than 35kg for compacted thickness of 75mm.

IV) Recoveries:

For deficiencies in weight of metal proportionate recoveries shall be affected.

5)W.B.M./G.S.B/Gravel road:

a) Thickness:

Deficiency in Thickness	Recovery
Up to 10%	As per the agreement rates and proportionate to the thickness of layer
10-20%	1 1/2 times the agreement rates and proportionate to the thickness of layer
More than 20%	rejected

b) Size of metal:

Size of metal	recovery
10%	No recovery
10-20%	25% of difference in cost of the metal and that of next higher size metal.
20-30%	Recovery of 50%
30-40%	Rate of next higher size metal shall be allowed.
Above 40%	Rejected.

Pipelines:-

Water supply pipelines must be tested for pressure test before commissioning, and should withstand upto a pressure of 1.33 times the specified pressure in kg/cm² (This test avails the joint strength in turn leakages) otherwise the bill will not be recommended.

Drains:-

For drains the slope of the drains constructed is to be clearly specified (i.e., correct slope is maintained or not, any stagnation points of water etc.) Non destructive tests such as Rebound hammer test is to be conducted and test results has to be given.

For Sec-I, Sec-II Mini Box drain & Box drains, the payment should be recommended only if the sections are as per Standard proto types and the observations should be clearly mentioned in the QC Report.

For every drain section, the bed laid should be checked during the execution and thickness should be given.

FORM F -5

SCHEDULE OF PRICE BID
PART – A

S. No.	Name of the Work	Percentage (%)	
		In Figures	In Words
1.	Consultancy Services for “3 rd party to conduct appropriate tests at different stages of civil works, for achieving quality of works (usually costing above 1.00 lakhs) undertaken by MCK		
1(A)	Upto Rs. 50.00 Lakhs		
1(B)	Above Rs. 50.00 Lakhs		

For arriving at the Weighted average, 60% Weightage of 1(A) and 40% of 1(B) will be adopted.

Signature of consultant
(Authorized Representative)