

Qualification required for each work

1. EMD is 2% of the estimated cost
2. Machineries & Equipment (the numbers depends on the cost and quantity of item in each tender)
 - i) Tar Boiler
 - ii) Mini Mix Plant
 - iii) Pave finisher
 - iv) Excavator
 - v) Air Compressor
 - vi) Concrete Mixer
 - vii) Water Tanker
 - viii) Water Tanker with sprinkler
 - ix) DRR / Vibratory Road Roller
 - x) Truck / Tipper
 - xi) Tractor
 - xii) Vehicle mounted Mechanical Sprayer
3. Technical Personnel:
 - i) Degree Holder in Civil Engineering - 1
 - ii) Diploma in Civil Engineering - 1

} Minimum experience of
2 years in road works
4. For Field Lab:
 - i) Lab Assistant (Graduate) - 1
 - ii) Lab Assistant (S.S.L.C.) - 1
 - iii) Lab Attender - 1
5. Maintenance:

The road shall be maintained by the Contractor for 5 years. The amount for the routine maintenance will be paid by the Department.

Equipment Requirements at Site and Central Laboratory

[A] Apparatus for Material Testing

Sl.No.	Particulars of Items	Quantity
1	Riffle Box	1 No
2	Sieve Set	2 Set
3	Sieve Shaker (for 450 mm & 200 mm sieves)	1 No
4	Atterberg Limits (liquid and plastic limit) Apparatus	1 No
5	Specific Gravity Apparatus	1 Set
6	Auto Compaction Test (Light & Heavy Compaction)	1 Set
7	Speedy Moisture Meter (with chemical)	1 Set
8	Compression Machine 200 kN	1 No
9	CBR Testing, Machine with Proving Ring	1 Set
10	CBR Mould, Tripod Stand with Dial Gauge, Perforated Plate, etc.	12 Set
11	Moisture Tins	12 No
12	Spatula	4 Set
13	Aggregate Impact Value Machine with Accessory, as per IS:2386-IV	1 Set
14	Flakiness Gauge as per IS:2386-I	2 Set
15	Los Angeles (Abrasion Value) Apparatus as per IS:2386-IV	1 No
16	3 m Straight Edge with Wedge	1 No
17	Water Bath (Thermostatically Controlled upto 60 degree C)	1 Set
18	Penetration Machine with Accessory	1 Set
19	Softening Point Apparatus with Accessory	1 Set
20	Extraction Machine with 6 Mould, Rammer, Base, etc	1 Set
21	Viscosity (Saybolt Furol) with Accessories	1 No
22	Ductility Machine with accessory	1 No
23	Sand Replacement Cylinder with Accessories	2 No
24	Core Cutter with Collar and Hand Rammer	2 No

[B] Other Accessories, Reagents and Glassware

Sl.No.	Particulars of Items	Quantity
1	Auger, Pick Axe, Spade, Crow Bar, etc. (Digging Tools)	2 No. Each
2	Glass Ware, Filter Paper, Beaker, Cylinder, etc.	6 No. Each
3	Trichloroethylene	10 litres
4	Oven Thermostatically Controlled (upto 200 degree C, Sensitivity 1 degree C)	1 No.
5	Electronic Balance 5 kg cap. Accuracy 0.5 gm	1 No
6	Electronic Balance 500 gm cap. Accuracy 0.1 gm	1 No
7	Electronic Balance 200 gm cap. Accuracy 0.01 gm	1 No
8	Thermometer (0 to 50 degree C, 110, 250, 300 degree C)	6 Each
9	Proving ring 50 kN	2 No.
10	Proving ring 100 kN	1 No.
11	First Aid Box	1 Box
12	Tray Enamelled (Big, Medium, Small, Rectangular & Circular)	6 Each
13	GI Tank 0.75 m x 0.75 m x 0.3 m	1 No.
14	Hot Plate	1 No.

15	Stop Watch	2 No.
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[C] Sieve Set of Galvanised Iron (GI) Frame

Sieve Size	Dia of Sieve	Quantity
Lid	450 mm	1 No.
Pan	450 mm	1 No.
125.0 mm	450 mm	1 No.
90.0 mm	450 mm	1 No.
75.0 mm	450 mm	1 No.
63.0 mm	450 mm	1 No.
53.0 mm	450 mm	1 No.
45.0 mm	450 mm	1 No.
37.5 mm	450 mm	1 No.
26.5 mm	450 mm	1 No.
22.4 mm	450 mm	1 No.
19.0 mm	450 mm	1 No.
13.2 mm	450 mm	1 No.
11.2 mm	450 mm	1 No.
9.5 mm	450 mm	1 No.
6.7 mm	450 mm	1 No.
5.6 mm	450 mm	1 No.
4.75 mm	450 mm	1 No.

[D] Sieve Set of Brass Frame

Sieve Size	Dia of Sieve	Quantity
Lid	200 mm	2 No
Pan	200 mm	2 No.
4.75 mm	200 mm	2 No
2.36 mm	200 mm	2 No.
2.00 mm	200 mm	2 No.
1.70 mm	200 mm	1 No.
1.40 mm	200 mm	1 No.
1.18 mm	200 mm	2 No
1.00 mm	200 mm	2 No.
850 μ	200 mm	1 No
710 μ	200 mm	2 No
600 μ	200 mm	2 No
425 μ	200 mm	2 No
300 μ	200 mm	2 No
250 μ	200 mm	1No
180 μ	200 mm	2 No
150 μ	200 mm	2 No
90 μ	200 mm	2 No
75 μ	200 mm	2 No

Section 2

Instructions to Bidders (ITB)

A. General

1. Scope of Bid

1.1 The Employer as defined in the Appendix to ITB invites bids for the construction of Works and their maintenance for five years, as described in these documents and referred to as “the works”. The name and identification number of the works is provided in the Appendix to ITB. The bidders may submit bids for any or all of the works detailed in the table given in the Notice Inviting Tender. Bid for each work should be submitted separately.

1.2 The successful Bidder will be expected to complete the Works by the Intended Completion Date specified in the Part I General Conditions of Contract and do the routine maintenance of roads for five years from the date of completion.

1.3 Throughout these documents, the terms “bid” and “tender” and their derivatives (bidder/ tenderer, bid/ tender, bidding/ tendering, etc.) are synonymous.

2. Source of Funds

2.1 The Government of the State as defined in the Appendix to ITB has decided to undertake the works of construction and up-gradation of selected rural roads of the State through funds received under Pradhan Mantri Gram Sadak Yojana, from the Government of India, Ministry of Rural Development, and other sources to be implemented through the Employer.

2.2 **The Government of the State has decided to provide funds for the routine maintenance of the roads.**

3. Eligible Bidders

3.1 This Invitation for Bids is open to all bidders as defined in the Appendix to ITB.

3.2 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices by the Central Government, the State Government or any public undertaking, autonomous body, authority by whatever name called under the Central or the State Government.

4. Qualification of the Bidder

4.1 All bidders shall provide in Section 3, Forms of Bid and Qualification information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.

4.2 All bidders shall include the following information and documents with their bids in Section 3, Qualification Information unless otherwise stated in the Appendix to ITB:

- (a) copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;
- (b) total monetary value of civil construction works performed for each of the last five years;
- (c) experience in works of a similar nature and size for each of the last five years, and details of works in progress or contractually committed with certificates from the concerned officer of the rank of Executive Engineer or equivalent;
- (d) evidence of ownership of major items of construction equipment named in Clause 4.4 B (b) (i) of ITB or evidence of arrangement of possessing them on hire/lease/buying as defined therein.
- (e) details of the technical personnel proposed to be employed for the Contract having the qualifications defined in Clause 4.4 B (b) (ii) of ITB for the construction.
- (f) reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past three years;
- (g) an undertaking that the bidder will be able to invest a minimum of cash up to the percentage (defined in the Appendix to ITB) of the contract price of works, during the implementation of the works;
- (h) evidence of access to line(s) of credit and availability of other financial resources/facilities (10 percent of the contract value) certified by banker (the certificate being not more than 3 months old.)
- (i) authority to seek references from the Bidder's bankers;
- (j) information regarding any litigation or arbitration during the last five years in which the Bidder is involved, the parties concerned, the disputed amount, and the matter;
- (k) proposals for subcontracting the components of the Works for **construction/up-gradation**, aggregating to not more than **20** percent of the Contract Price; and
- (l) the proposed methodology and programme of construction, backed with equipment and material planning and deployment, duly supported with broad calculations and Quality Management Plan proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications and within the stipulated period of completion.

4.3 Bids from joint venture are not allowed.

4.4 A To qualify for award of the Contract, each bidder should have in the last five years:

- a) Achieved in any one year a minimum financial turnover (in all cases of civil engineering construction works only) volume of construction work of at least the amount equal to the estimated cost of works (excluding maintenance cost for five years) for which bid has been invited. The turnover will be indexed at the rate of 8 percent for a year.

- b) Satisfactorily completed, as prime Contractor, at least one similar work equal in value to one-third of the estimated cost of work (excluding maintenance cost for five years) for which the bid is invited, or such higher amount as may be specified in the Appendix to ITB.

4.4 B (a) Each bidder must produce:

- (i) The current income-tax clearance certificate;
- (ii) An affidavit that the information furnished with the bid documents is correct in all respects; and
- (iii) Such other certificates as defined in the Appendix to ITB. Failure to produce the certificates shall make the bid non-responsive.

(b) Each bidder must demonstrate:

- (i) availability for construction work, either owned, or on lease or on hire, of the key equipment stated in the Appendix to ITB including equipments required for establishing field laboratory to perform mandatory tests, and those stated in the Appendix to ITB;
- (ii) availability for construction work of technical personnel as stated in the Appendix to ITB.
- (iii) liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, of not less than the amount specified in the Appendix to ITB;

Deleted: for this work

(c) The bidder must not have in his employment:

- (i) the near relations (defined as first blood relations, and their spouses, of the bidder or the bidder's spouse) of persons listed in the Appendix to ITB.
- (ii) without Government permission, any person who retired as gazetted officer within the last two years of the rank and from the departments listed in the Appendix to ITB.

4.4.C To qualify for a package of contracts made up of this and other contracts for which bids are invited in the Notice Inviting Tender, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts.

4.5 Sub-Contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in 4.4 A above.

4.6 Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity for construction work is equal to or more than the total bid value. The available bid capacity will be calculated as under:

$$\text{Assessed Available Bid capacity} = (A * N * M - B)$$

where

A = Maximum value of civil engineering works executed in any one year during the last five years (updated to the price level of the last year at the rate of 8 percent a year) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the works for which bids are invited (period up to 6 months to be taken as half-year and more than 6 months as one year).

M = 2 or such higher figure not exceeding 3 as may be specified in the Appendix to ITB.

B = Value, at the current price level, of existing commitments and on-going works to be completed during the period of completion of the works for which bids are invited.

Note: The statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer in charge, not below the rank of an Executive Engineer or equivalent.

4.7 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- (i) made misleading or false representations in the forms, statements, affidavits and attachments submitted in proof of the qualification requirements; and/or
- (ii) record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.
- (iii) participated in the previous bidding for the same work and had quoted unreasonably high or low bid prices and could not furnish rational justification for it to the Employer.