



REQUIST FOR PROPOSAL (RFP)
FOR
SELECTION OF CONSULTANT FOR CARRYING OUT FEASIBILITY STUDY
FOR DEVELOPMENT OF HANGING BRIDGE
IN BUDHAI, DEOGHAR

RFP No. :- 431, Dated :- 15/06/2022

Directorate of Tourism
MDI Building, 2nd floor, HEC Campus, Dhurwa, Ranchi – 834 004
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GOVERNMENT OF JHARKHAND
DEPARTMENT OF TOURISM, ART CULTURE, SPORTS AND
YOUTH AFFAIRS (TOURISM)
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NOTICE INVITING TENDER

**SELECTION OF CONSULTANT FOR CARRYING OUT FEASIBILITY STUDY
FOR DEVELOPMENT OF HANGING BRIDGE IN BUDHAI, DEOGHAR**

Ref.No. :- 431,

Dated : 15/06/2022

Directorate of Tourism, Government of Jharkhand invites proposals from interested technical consultant agency for conducting feasibility study for Development of Hanging Bridge in Budhai, Deoghar as per the details given in Bidding Documents. A brief description of the Project may be seen in the Project Terms of Reference of this Bidding Document.

The Bidding Documents may be downloaded from the website **www.tourism.jharkhand.gov.in**

The pre-proposal meeting for the Project shall be organized at the Directorate of Tourism at 1500 hours on 4th July, 2022. The last date for submission of proposal shall be 8th July, 2022 up to 1400 hours at the office of Directorate of Tourism at the above mentioned address. All notifications, changes and amendments to the Bidding Document will be posted only on the website www.tourism.jharkhand.gov.in and shall not be published in the newspapers.

Directorate of Tourism shall have the right to reject one or all proposals and also cancel the bid process at any stage without assigning any reason whatsoever.

In case of any queries/clarifications on the project/ documents please contact Directorate of Tourism.

Sd/-
Director,
Tourism.

Name of the Authority	Department of Tourism, Jharkhand, Ranchi
Name of RFP	Request for Proposal (RFP) for selection of consultant for carrying out feasibility study for development of Hanging Bridge in Budhai, Deoghar
Selection Process	Quality Cost Based Selection (QCBS 80:20) -Two Envelope System (A,B) through e-tender.
Scope of Work	Selection of consultant for carrying out Techno-Economic Feasibility Study, Detailed Project Report (DPR) and Bid Process Management for Hanging Bridge in Budhai, Deoghar
Eligibility Criteria	Registered Legal Entity The Bidder shall be a registered company/ Firm
	Duration of company in operation The Bidder shall have been in operation for a period of at least 15 years out of which minimum 10 years shall be in consultancy services in Planning & Detail Engineering Design of Bridges/Roads/Flyovers/ROB's/UBs/VUPs prior to the last date of submission of bid.
	Net worth The Bidder shall have a positive Net Worth, in the last three financial years (Financial years 2017-18, 2018-19 and 2019-20)
	Average Annual Turnover The bidder shall have average annual turnover of INR. 25 cr and above in last 3 consecutive financial years preceding the proposal due date.
	Project Experience a) The Bidding firm shall have prepared/completed the Detailed Engineering Design/Detailed Project Report of 3 Bridges/Flyovers/ ROBs/ Major Roads (More than 2.5 Km) in urban area in last 10 yrs. for Govt./Semi Govt. Organizations b) Out of the above 3 projects, at least 1(One) project should have been across water body i.e. river/sea etc.
	Blacklisting The Bidder shall not be debarred / blacklisted in last 5 years by any State Government/ Central Government/PSU Organization in India for Unsatisfactory performance, corrupt or fraudulent practices or any other unethical conduct either indefinitely or for a period of time as on bid submission date.
Selection Criteria	The technical evaluation marks shall be given 80% weightage and financial evaluation marks shall be given 20% weightage to arrive at a composite score (Quality and Cost Based Selection : QCBS 80:20)

Payment Terms	1.	On submission of concept Planning and Master Plan and approved from client department. Including hydrological data and survey (if, required)	20% of the payable fee as above
	2.	On approval of Drawings and Design and approval of documents from statutory bodies (if any)	20% of the payable fee as above
	3.	On submission of Preliminary DPR	20% of the payable fee as above
	4.	Submission of DPR including detail design report, detail structural drawing for proof checking (i) On Approval of DPR by DOT	20% of the payable fee as above
	5.	(ii) On approval of DPR by the client/Govt.	20% the payable fee as above.

Schedule of Selection Process

DoT shall endeavour to adhere to the following schedule:

Sl No	Description	Date
1	Pre-Bid Queries Submission (Through E-mail)	28.06.2022 by 1500 Hours
2	Pre-Bid Conference	04.07.2022 by 1500 Hours at DoT Office
3	Bid Due Date	08.07.2022 by 1400 Hours
4	Technical Evaluation/Presentation & Financial Bid opening Conference	08.07.2022 at 1500 Hours Venue Details: Director Directorate of Tourism Government of Jharkhand MDI Building, 2nd Floor, HEC Campus, Dhurwa, Ranchi, Jharkhand TEL NO: +91 651 2400493
5	Bid Validity Period	90 days from Bid Due Date
6	Tender/Bid Document Fee	Rs. 5,000/- (Rupees Five Thousand Only) inclusive of GST (Not Refundable)
7	Earnest Money Deposit	Rs. 1,00,000/- (Rupees One Lakhs Only)

SCOPE OF WORKS

1.1 Engineering surveys and investigations.

1.1.1. The Consultant should undertake a detailed survey of the proposed site to prepare L.A. (Longitudinal Alignment), land width plan, topographic maps etc. and other relevant information should also be collected by them for the preparing detailed project wise report.

1.1.2 Detailed topographical surveys using total stations and GPS.

1.1.3 Preparation of index map to locate the project area With reference to its connection with the main city and nearby major / Minor towns. It should give a bird's eye view of the project area and the overall location of bridge and its approaches connected with other major road and railway network, if any. The alternative sites Investigated/ the general topography of the country along with location of existing bridges on the various / same road, the important towns, villages, etc in the vicinity are to be shown in the index map.

1.1.4 Preparation of site plan along with the detailed commentary in the main report, to a suitable scale indicating there in the details of the sites considered under various alternatives. The direction of traffic, the alignment of approach, angle of skew, location and value of permanent benchmark; the location of cross section and longitudinal sections taken, location of trial pits or boring, soil investigation and other details such as building or any permanent structures, places of worship, well, nallah, burial ground, outcrop area etc are also to be indicated.

1.1.5 Preparation of detailed engineered plan.

1.1.6 (a) Consultant shall prepare the proposal for permission from Competent Authority for utility shifting. Such as electric lines, traffic lights, water supply lines sewerage lines, irrigation channel, removal of encroachment, verification of ROW from land records, preparation of land acquisition plan, submission and verification of ROW from Revenue Authorities, liasoining with Govt. Authorities for getting clearances from respective authorities, Trees Cutting, statutory clearances / approval and Traffic & Transport Management work, removal of encroachments, survey report for demolition of structures and deciding compensation as per Govt. Policy and shall take permission from any authority as applicable / Railway Department / State Forest Deptt. /MoEF/ Revenue Deptt., any other authority department, regarding cutting of the tree compensatory afforestation, transfer of land, if any under Forest Act & Extent rules in close consultation with concerned Forest/ Revenue Officials & to their total satisfaction & requirements, if required.

(b) The Consultant shall get the GAD and other Drawing approved from competent authority of the Railway Department / Statutory Authorities / other Authorities in applicable. Analysis and evaluation of all design data.

1.2 Geotechnical Investigation and Sub-Soil Exploration

1.2.1 The Consultant shall carry out Geotechnical investigations and subsurface exploration for the proposed Bridges and along its high embankment approaches (greater than 6m) and any location as necessary for design properties of the works as per relevant I.R.C / B.I.S codes and conduct all relevant laboratory and field tests on soil/ rock samples.

1.2.2 However, where a study of geotechnical reports and information available from adjacent crossings over to the same highway and railway bridges Indicates that the subsurface variability is such that boring at the suggested spacing will be insufficient to adequately define the conditions for design purposes, the Consultant shall review and finalize the bore hole depth and locations accordingly.

1.2.3 The boring in strata other than rocky (as per I.R.C. 78) shall extend to a depth not less than twice the width of the foundation in question below the proposed foundation level. In case of rocky strata,

3m drilling only is required below founding level as per I.R.C. - 78. The boring shall be done for boulders / gravel / clayey strata etc. as per requirement and shall be governed as per codes or latest practices.

1.2.4 The consultant shall prepare the scheme for the boring locations and the depth of boring and DOT approval thereto shall be obtained before starting the work. The scheme may be finalized in consultation with DOT.

1.2.5 The sub-soil exploration and testing should be carried out either directly by the consultants or through reputed sub-soil investigation Consultants /IIT.

1.2.6 Analysis and interpretation of field & laboratory test data for the preparation of Geotechnical investigation report either directly by consultants or through reputed sub-soil investigation consultants / IIT.

1.3 Meteorological data

All meteorological data records as per clause 5.3.9 of IRC:SP:54-2000 shall be collected and accordingly will be taken into account.

1.4 Hydrological data

All Hydrological data records shall be collected for irrigation channels / sewerage channel etc. as per IRC specification or Hydrological Survey of India.

1.5 Design of Bridges and Structures

1.5.1 The Consultant shall prepare General Arrangement Drawing (GAD) of **Bridges** and its approaches with showing the salient features of the bridges and structures proposed to be constructed along the road sections covered under the scope of work. The structures are to be designed in view of the movement of elephants & wild animals with consultation of CTR and forest administration. The salient features such as alignment, overall length, span arrangement, cross section, deck level, founding level, type of bridge, number lanes and other components such as superstructure, substructure, foundation, bearing, expansion joint, return wall etc. considering suitable earthquake Zone etc shall be finalized based upon aesthetics and geotechnical studies, cost effectiveness and ease of construction. The GAD shall be supplemented by Preliminary designs only to assess the cost of bridges. In respect of span arrangement, type of bridge and its approaches (like RCC retaining wall/RES/natural earth slope etc) at least three alternatives with cost-benefit implications should be submitted to enable DOT to approve the best alternative.

1.5.2 The detailed designs of main bridges are to be submitted by the consultants.

1.5.3 The bridges shall be designed for loading as per IRC Code.

1.5.4 The consultants shall furnish the detailed design and working drawing for suitable protection works wherever required during the construction phase and thereafter as per requirement of DOT.

1.6 Detailed Design of Approach Roads, Pavement and other Cross Drainage Structures

1.6.1 The consultant is to carry out detailed designs, prepare and submit working drawings for the following:

1.6.2 Prepare alignment plans, longitudinal sections and cross sections @ 25m interval or lesser interval as decided by DOT wherever required.

1.6.3 Drainage design showing location of turnouts, out falling structures.

1.6.4 Cross drainage structures including bridges/culvert over tributaries/channels, if any. Design for relocation of existing utility services. Such as electric lines, traffic lights, water supply lines sewerage lines, irrigation channel, removal of encroachment, verification of ROW from land records,

preparation of land acquisition plan, buildings, boundary wall, borewell etc.

1.6.5 The detailed design for geometric elements shall cover, but not be limited to the following major aspects: Horizontal alignment Longitudinal profile Cross-sectional elements Junctions and intersections.

1.6.6 The alignment designs shall be verified for available sight distances as per the standard norms. The provision of appropriate markings and signs shall be made wherever the Existing site conditions do not permit the adherence to the site distance requirement as per the standard norms.

1.6.7 The Consultant shall prepare Design of pavement of approach road including drainage as per IRC 37 latest.

1.6.8 The Consultant shall prepare for the most appropriate design option established on life cycle costing and techno- economic considerations taking design period of 15 years for flexible pavements.

1.6.9 For the design of pavement, each set of design input shall be decided on the basis of rigorous testing and evaluation of its suitability and relevance in respect of in – service performance of the pavement. The design methodology shall accompany the design proposals and shall clearly bring out the basic assumptions, values of the various design inputs, rationale behind the selection of design inputs and the criteria for checking and control during the implementation of works. In other words, the design of the pavement structure should take due account of the type, characteristics of material used in the respective courses, variability of their properties and also the reliability of traffic prediction. Furthermore, the methodology adopted for design of pavement shall be complete with flow charts indicating the various steps in the design process, their interaction with one another and the input parameters required at each step.

The Consultant shall prepare for the most appropriate design option established on present traffic surveys and shall carry out detailed design in view of future projections for traffic taking into consideration urban and local growth of the Region. The Consultant shall carry out traffic survey as per IRC Codes and shall be responsible for accuracy of the data in future also.

1.7 Design of Embankment

1.7.1 The embankment design should provide for maximum utilization of locally available materials consistent with economy.

1.7.2 The Consultant shall carry out detailed analysis and designs for all embankments height greater than 6m based on relevant IRC publications and computer package on high embankment.

1.7.3 The design of embankment should include the requirements for protection works and traffic safety features.

1.8 Estimation of Quantities and Project Costs

1.8.1 The consultant shall prepare detailed estimates for quantities considering designs and project cost including the cost of environmental and social safeguards proposed based on MORTH Standard Data Book /latest SOR published by GOU/PWD, CPWD DSR, rates applicable for Bridge works in the Jharkhand State as published by PWD and market rate for the inputs. The estimation of quantity shall be based on detailed design of various components of the projects.

1.8.2 The Consultant shall make detailed analysis for computing the unit rates for the different items of works. The unit rate analysis shall duly take into account the various inputs and their basic rates, suggested location of plants and respect lead distances for mechanized construction. The unit rate for each item of works shall be worked in terms manpower, machinery Staff and materials.

1.8.3 The consultant shall make himself available for checking of the estimates and giving proofs for adoption of rates as per requirement of DOT.

1.9 Time Period for the Service

1.9.1(i) A total completion time for the scope of services will be **6 Months from the date of commencement of services**. The final reports, drawings and documentations should be completed within this time schedule.

1.9.2 DOT shall arrange to give approval on all sketches, drawings, reports and recommendations and other matters and proposal submitted for approval by the Consultant in such reasonable time as not delay or disrupt the performance of the Consultant's services.

1.9.3 Sequencing of Project Preparation

Project preparation activities will be split into two stages as brought out below. Each stage will cover a set of activities to be completed before moving to the next stage and shall be followed with a detailed in respect of each stage.

Stage 1: Preliminary Project Report (PPR)

Stage 2: Detailed Project Report (DPR)

1.9.4 Schedule of Submission

Consultants shall be required to complete, to the satisfaction of the DOT, all the different stages to study within the time frame indicated in the schedule of submission pertaining to Reports and documents for becoming eligible for payment for any part of the next stage.

1.9.5 Strip Plan and Clearances

The Consultants shall submit the following documents (04 sets) within a period of 2 weeks after the commencement of services:

Details of the centre line of proposed alignment along with the existing and proposed right-of way limits to appreciate the requirements of land acquisition. The information concerning the ownership of land to be acquired for the implementation of the project shall be collected from the revenue and other concerned authorities and presented along with the strip plans if required; Strip plans showing the positions of existing utilities and services indicating clearly the position of their relocation; Details for various clearances such as environment and forest clearances if required; Various clearance as applicable from Railway department. Separate strip plan showing shifting / relocation of each utility services in consultation with the concerned local authorities; The utility relocation plans should clearly show existing right – of – way (ROW) and pertinent plans topographic details including bridges, major trees, fences and other installations such as water mains, telephone, telegraph and electricity poles and suggest relocation of the services along with their crossing the highway at designated locations as required and prepare necessary details for submission to the Service Departments; Detail schedule for acquisition of additional land/ additional forest land for diversion and additional properties in consultation with the revenue authorities; and Land acquisition plan.

1.10 Submission of Preliminary Project Report

1.10.1 The final PPR (4sets) shall be submitted within 1 month from the date of commencement of services. The report shall be prepared separately for each construction and shall contain the following. Rehabilitation, improvement and upgrading requirement for existing features and requirements for the additional design of pavement. Preliminary design of pavement. Detailed GAD for structures (minor bridge) and alignment plan based upon hydraulic and geotechnical investigations and preliminary design calculations. Detailed GAD and alignment plan for main bridge with different alignment alternatives along with structural alternatives. Number and location of proposed culverts and other structures, if any.

Preliminary costs.

1.10.2 The basic data obtained from the field studies and investigations and input data used for the preliminary design shall be submitted in a separate volume as an appendix to PPR.

1.10.3 The Final PPR incorporating comments, revisions and modifications suggested by DOT shall be submitted within 7 days of receiving comments from DOT.

1.11 Stage II: Draft Detailed Project Report (DPR)- 6 Sets.

1.11.1 The draft DPR submission shall consist of Main Report, Design report, Materials Report Engineering Report, Protection work Design Report, bid documents and drawings.

1.11.2 The Report volumes shall be submitted as tabulated above.

1.11.3 The documents and drawings shall be submitted for the project and shall be in the following format.

Reports Volume-I, Main Report:

The report will present the project background, details of surveys and investigations carried out, analysis and interpretation of survey and investigation data, traffic studies and demand forecasts, designs, cost estimation, aspects, economic and commercial analysis and conclusions. The report shall also include maps, charts and diagrams showing locations and details of existing features and the essential features of improvement and upgrading. The basic data obtained from the field studies and investigations and input data used for the preliminary design shall be submitted in separate volume as an Appendix to Main Report. The Report shall also include the project clearances from various concerned Govt. agencies that matter for project implementation.

Volume- II, Design Report:

This volume shall contain design calculations, supported by computer printout of calculations wherever applicable. The Report shall clearly bring out the various features of design standards adopted for the study. The design report will be in two parts. Part I shall primarily details with the design of approach road features and pavement composition while Part II shall deal with the design of bridges and cross drainage structures.

The sub-soil Exploration report including the complete details of boring done, analysis and interpretation of data and the selection of design parameters shall be included as an Appendix to the Design Report. The detailed design for all features should be carried out as per relevant IRC codes.

However, there may be situations wherein it has not been possible to strictly adhere to the design standards due to existing site conditions, restrictions and other considerations, the report should clearly bring out the details of these aspects and standards adopted.

Consultant shall also include the launching or erection scheme (including design) for construction of main bridge. Consultant has to submit the final design to client deptt. For proof checking. Proof checking will be done with concerning of the deptt. by I.I.T. and other Govt. Institute but the cost will be borne by the consultant.

Volume-III, Materials Report:

The materials Report shall contain details concerning the proposed borrow areas and quarries for construction materials and possible sources of water for construction purposes. The report shall include details on locations of borrow areas and quarries shown on maps and charts and also the estimated quantities with mass haul diagram including possible and

use with leads involved, the details of sampling and testing carried out and results in the form of important index values with possible end use thereof. The material Report should also include details of sampling, testing and test results obtained in respect physical properties of sub grade soils of approach road. The information shall be presented in tabularas well as in graphical representations and schematic diagrams. The

Report shall present soil profiles along the alignment. The material Report should also clearly indicate the locations of areas / availability of material with problematic soils. Recommendations concerning the improvement of such soils for use in the proposed construction works, such as stabilization (cement, lime, mechanical) should be included in the Report. The Report shall also suggest various steps that the client has to take to own such sources for exploitation purposes for the project implementation phase.

Volume- IV, Technical Specifications:

Technical Specifications for Road and Bridge works shall be followed for this study, However, this volume shall contain the special technical specifications, which are not covered by MoRTH specifications for Road and Bridge (latest edition/revision) and also specific qualitycontrol norms for the construction of works.

Volume- V, Rate Analysis:

This volume will present the analysis of rates for all items of works. The details of unit rateof materials at source, carriage charges, any other applicable charges. labour rates, machine charges as considered in arriving at unit rates will be included in this volume.

Volume- VI, Cost Estimates:

This volume will present the contract package wise cost of each item of work as well as a summary of total cost, bill of quantities. This volume shall contain the package-wise detailed Bill of Quantities for all items of works.

Volume-VII, Drawing Volume:

All plan and profile drawings will be prepared in scale 1:250V and 1:2500H scale to coverone km in one sheet. In addition, this volume will contain drawings for the following.

- a. Horizontal Alignment and Longitudinal Profile.
- b. Cross section @ 25 m interval / any other interval as decided by DOT along thealignment within ROW
- c. Typical cross section with details of pavement structure.
- d. Detailed Working drawing of protection works.
- e. GAD of Main Bridge.
- f. Detailed Working drawings of Protection works:
- g details working drawing of bridge superstructure sub structure/bearing (including reinforcement schedule)**
- h. Drawings for Road sign, Marking, Office cum residential complex for PIU if required, and other Facilities.
- i. All working drawings will be prepared in A2 size sheets. The format for plan, cross sectionand profile drawings shall be finalized in consultation with the concerned DOT officers. The drawings shall also include details of all BM and reference pillars, HIP and VIP. The co-ordinates of all points should be referenced to a common datum, preferably, GTS referencing system. The drawings shall also include the locations of all traffic safety features including traffic signals, signs, markings, crash barriers, delineators and rest areas, but bays, parking areas etc as required.

Volume-VIII, Civil Work Bid Documents:

As per MORT& H Standards the consultant shall submit the bid documents.

Volume IX

Three copies of forest papers will be sent to Nodal Officer From District authority and Private land acquisition papers, if any required.

Volume X

Three copies of Utility shifting estimates for electric lines, traffic lights, water supply lines sewerage lines, irrigation channel, removal of encroachment, verification of ROW from landrecords, preparation of land acquisition plan, submission and verification of ROW from Revenue Authorities submitted liasoing with Govt. Authorities, getting clearances from respective authorities, Trees Cutting, statutory clearances/approval and Traffic &TransportManagement work already sent to Nodal Officer from District authority and Private land acquisition papers, if any required.

1.11.4 The consultant shall submit the soft copies of the DPR including all drawings in Auto Cad-Latest format and also shall supply the necessary software such as Auto CAD, STAAD, MS Project, PRIMAVERA, MXROAD etc. in DOT office and any other software required for association of the work, free of cost.

1.12 Data and Software:

1.12.1 The CD diskettes containing all basic as well as the processed data from all field studies and investigations, report appendices, annexure, documents and drawings shall be submitted to DOT at the time of the submission of the Final Report. The data can be classified as follows:-

i. Engineering Investigations and Traffic Studies: Material Investigation including test result for sub grade soil. Traffic Studies (Traffic surveys), Sub-soil Exploration Hydraulic data for bridge and culverts, new construction requirement ect. in MS EXCEL or any other format which could be imported to widely used utility packages.

ii. Topographic Surveys and Drawings: All topographic data would be supplied in (x,y,z) format along with complete reference so that the data could be imported into any standard highway design software.

The drawing files would be submitted in Auto Cad latest format.

iii. Rate Analysis: The consultant shall submit the rate analysis for various works items including the data developed on computer in this relation so that it could be used by the Authority later for the purpose of updating the cost of the project.

iv. Reports: All report shall be submitted in electronic media besides required number of Hard copies as stipulated above.

v. Design Report – All design data & design calculation shall be submitted in soft copy as well as hard copy to DOT.

1.12.2 Software:

The consultant shall also hand-over to DOT all CD containing any general software including the financial model that has been specified developed for the project.

1.12.3 The CD diskettes should be properly indexed and a catalogue giving contents of all floppies and printouts of the contents (data from field studies topographic data and drawings) should be handed over to DOT at the time of submission of the Final

1.13 OUTPUT/DESIGN SUBMITTALS OF THE CONSULTANCY:-

1.13.1 The output of the consultancy and any other details envisaged under this agreement shall be supplied as specified in the following table:

S.No	Description	No. of Copies	Scale
1	Geotechnical Investigat Hydrological investigation acquisition report.	As reqd.	
2	Concept Design Stage:-Concept plan having concept of proposed bridges, approach roads, utility, other link road and cross drainage structure etc as required.	4 copies	1:200
3	Final Master Plan.	4 copies	1:100
4	Architectural Drawings showing Elevations, cross section and including details of foundations, Substructure, superstructure in case of bridges.	6 copies	1:50
5	Drawings for submission to local / statutory authorities.	As Reqd. by local/statutory authority	As Reqd.
6	Working Drawings for plans, sections, elevations of bridges.	6 copies	1:50
7	Working Drawings for Electrical Installation, Electrification of bridge as required.	6 copies	1:50
8	Detailed Structural Drawings	6 copies	1:20
9	Detailed Structural Design, Bearings Design, Expansion Joints Design etc as required.	6 copies & Soft copy in CD	
10	Detailed Estimate of proposed bridges	6 copies	-
11	Detailed Working Drawings for execution of work(Good for Construction drawings)	6 copies	1:20/ 1:10
12	Preliminary Detailed Project Reports	2 copies	
13	Final Detailed Project Reports	6 copies	-
14	A soft copy of all drawings in AutoCAD and that of reports and statements in relevant soft form.	5 CDs	-
15	Completion drawings and completion certificate	6 copies	-

2. TECHNICAL EVALUATION MARKING SYSTEM:

Sr. No.	Proposal Criteria	Max Marks	Minimum Required Marks
01	Firms Eligibility (a+b)	30	22.5
1.a	Financial Eligibility (a)	10	7.5
1.b	Technical Eligibility (b)	20	15
	Technical Proposal (c+d)		

02		70	52.50
2.a	Approach and Methodology with Presentation (c)	15	11.25
2b	Key Professional (d)	55	41.25
Total		100	75

100 Marks of Technical Proposal will be converted to 80marks of QCBS 80:20. Bidders scoring minimum 75% of marks i.e. 75/100 will be qualified for opening of financial proposal.

List of key professionals and Support Staff required:

Sr No.	Key Professional	Experience in years	No. of Staff required
1.	Team Leader -Civil Engg/ Bridge Engg.	Minimum 20 years Exp.	1
2	Transportation Expert	Minimum 10 years Exp	1
3	Geotechnical Expert	Minimum 10 years Exp.	1
4	Environmental Expert	Minimum 10 Years Exp.	1
5	Quantity Surveyor	Minimum 10 Years Exp	1
6	Auto Cad D' Man/GIS/Design Expert	Minimum 5 years Exp	1
7	Field Engg/ Site Engineers	Minimum 4 years Exp	2

Minimum Qualifications and Minimum Experience Requirements for Key Personnel

Sr No.	Key Personnel	Educational Qualifications	Experience in Assignments
1	Team Leader: -Civil Engg/ Bridge Engg.	Graduate in Civil Engineering & Master in Civil Engineering / Masters in Structural Engineering	Masters in Civil Engineering with specialization in Structural Engineering from an accredited college/university. Shall have 15 years of experience in field of Implementing Urban Infrastructure project. Should have completed at least 5(Five) projects in Construction of Major Bridges/flyovers · Shall have completed minimum 3(three)project as a Team Leader/ in preparation

			of Feasibility Report s/DPRs for civil Engineering works.
2	Transportation Expert	Masters Degree in Transportation Planning/ Transportation Engineering	Masters degree in Transportation Engineering/ Planning Overall 10years' experience in field of Transportation Engineering/Planning in urban transport sector. · Should have hands on experience on travel demand estimation and completed at least 2 DPRs for urban transport infra structure projects.
3	Geotechnical Expert	Masters in Civil Engineering with specialization in Geotechnical Engineering from an accredited college/university.	Masters in Civil Engineering with specialization in Geotechnical Engineering from an accredited college/university. Should have minimum 10years' experience in field of civil engineering. · Should have completed at least 5(Five) projects in field of design and implementation of major structures like flyovers, bridges ROB's, VUP's etc.Shall have completed minimum 2(two) project of similar magnitude & Nature.

Support Professionals / Staff team

In addition to the above Key Professionals, Consultants shall deploy Support Professionals / Staff team. Consultants need to provide brief resume for the Support Professional / staff in prescribed formats. The support staff shall include but not be limited to-

- Environmental Expert
- Auto Cad D' Man/GIS/Design Expert
- Field Engg/ Site Engineers
- Quantity Surveyor

3. Evaluation of Financial Proposals

- 3.1 The Financial Proposals of only the qualified Bidders shall be opened in the presence of the Bidder's representatives who choose to attend on the date and time intimated to the qualified Bidders. The name of the Bidder and the proposed financial offer shall be read aloud and recorded.
- 3.2 For financial evaluation, the Service Fee exclusive of all applicable Taxes indicated in the Financial Proposal for each component shall be evaluated.
- 3.3 DoT will determine whether the Financial Proposals are complete, unqualified and unconditional. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. **The lowest Financial Proposal (F_M) will be given a financial score of 100 points. The financial scores of other proposals will be computed as follows:**

$$SF = 100 \times FM/F$$

(F = amount/rate/fee of Financial Proposal)

Combined and final evaluation - Quality and Cost based selection (QCBS)

- 3.4 Proposals will finally be ranked according to their combined **technical (S_T)** and **financial (S_F)** scores as follows:

$$S = S_T \times TW + S_F \times FW$$

Where S is the combined score, and **TW = 0.8** and **FW = 0.2** and are the weights assigned to the Technical Score and the Financial Score respectively.

4. Selection of Bidder

The Bidders shall be ranked in descending order and the Bidder scoring the **Highest Combined Score (H1)** shall be ranked first. The Bidder scoring the highest combined score shall be declared as Selected Bidder.

In the event that the first ranked Bidder withdraws its Proposal or is not selected for any reason in the first instance, JTDCL may invite the second ranked Bidder for negotiations.

In the event that two or more Bidders obtain the same combined score, (the "Tie Bidders"), the Bidder quoting the lowest Service Fee shall be the Selected Bidder.

5. Letter of Award (LoA) / Work Order

After selection, a Letter of Award (the "**LoA**") / Work Order shall be issued, in duplicate, by DoT to the Selected Bidder(s) and the Selected Bidder(s) shall, within 7 (seven) days of the receipt of the LoA, sign and return the duplicate copy of the LoA in acknowledgement thereof. In the event the duplicate copy of the LoA duly signed by the Selected Bidder is not received by the stipulated date, DoT may, unless it consents to extension of time for submission thereof, appropriate the EMD of such Bidder on account of failure of the Selected Bidder to acknowledge the LoA, and the next eligible Bidder may be considered.