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BRIDCUL (ब्रिडकुल)

ब्रिज, रोपवे, टनल एण्ड अदर इन्फ्रास्ट्रक्चर डेवलपमेंट कॉरपोरेशन ऑफ उत्तराखण्ड लिमिटेड
(उत्तराखण्ड सरकार का उपक्रम)

पूर्व में उत्तराखण्ड राज्य अवस्थापना विकास निगम लिमिटेड

प्रधान कार्यालय: अवस्थापना भवन, 583-ठ, राजकीय आई0टी0आई0 निरंजनपुर के सामने, माजरा, सहारनपुर रोड, देहरादून- 248001

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EMPANELMENT OF DESIGN AND DPR CONSULTANCY FIRMS FOR BRIDGE WORKS

Applications are invited from the Design and DPR Consultancy firms of bridge works for Empanelment in BRIDCUL. Interested Consultants can apply as per the prescribed application form which can be downloaded from BRIDCUL website www.bridcul.com under the title "Empanelment" & submit to the Managing Director BRIDCUL. The consultant already empanelled with corporation and wish to upgrade their category may also apply for up gradation.

Managing Director
BRIDCUL.

BRIDGE, ROPEWAY, TUNNEL AND OTHER INFRASTRUCTURE DEVELOPMENT CORPORATION OF UTTARAKHAND LTD.



Request For Proposal For EMPANELMENT OF DESIGN AND DPR CONSULTANCY FIRMS FOR BRIDGE WORKS

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REQUEST FOR PROPOSAL
For
EMPANELMENT OF DESIGN AND DPR CONSULTANCY FIRMS FOR
BRIDGE WORKS

1. **General:**

1.1. BRIDCUL is a premier organization of Government of Uttarakhand with a mandate for infrastructure development viz. construction of buildings, bridges, roads, ropeways, tunnels, flyovers and other infrastructure projects, within and outside the State.

BRIDCUL intends to invite Request for Proposals (RFP) from reputed and capable Consultants and Structural Designers who agree to work as per rate decided by BRIDCUL as per **Annexure-J** for empanelment for the Consultancy work of preparation of DPR including Design and drawings of bridge projects on rate contract basis. The consultants should have the experience of working for CPWD, Railways, MES, P&T Dept., State PWD's, Semi Govt. Organizations, Central or State Govt./PSUs, etc. Consultants already empanelled with BRIDCUL, for bridge works need not apply again but consultant who want to upgrade their class may also apply.

The RFP can be obtained from the office on payment of non-refundable document cost of Rs. 3000.00 + 18% GST through DD/Pay order issued from any Scheduled/Nationalized bank in favour of "Managing Director, BRIDCUL" payable at Dehradun. The RFP can also be downloaded from website www.bridcul.com (under the title empanelment) and submitted on or before the due date along with the payment as above.

Date of issue of RFP document	--	04.01.2018
Date of uploading of RFP document	--	06.01.2018
Last date of receipt of Proposals in the office	--	Continue

The proposals should be submitted in sealed envelopes. Envelope should contain the RFP document cost (if downloaded from the website), eligibility documents and technical proposal with duly signed letter and copy of **Annexure-J** from authorized signatory regarding they are ready to work as per rate decided by BRIDCUL and mentioned in Annexure-J.

2. Objectives:

- 2.1 BRIDCUL requires the services of suitably qualified architectural and design consultancy firms having experience in preparation of Detailed Project Report (DPR) of various infrastructure works for various central/ state govt./ externally funded projects, to provide architectural and design consultancy services in order to ensure that construction works are planned and designed in accordance with the standards fixed by the national standards/ codes to the satisfaction of the BRIDCUL. The consultancy firm will be required to have team of suitably qualified & experienced architects, engineers and other professionals with the latest designing, drawing and planning software and facilities.

3. SCOPE OF WORKS

3.1 Engineering surveys and investigations.

- 3.1.1 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 collected by them for the preparing detailed project wise report.
- 3.1.2 Detailed topographical surveys using total stations and GPS.
- 3.1.3 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.
- 3.1.4 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.
- 3.1.5 Preparation of detailed engineered plan.
- 3.1.6 (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, liasoning 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 aforestation, 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.

3.2 **Geotechnical Investigation and Sub-Soil Exploration**

3.2.1 The Consultant shall carry out Geotechnical investigations and subsurface exploration for the proposed Flyovers / ROBs 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.

3.2.2 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.

3.2.3 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.

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

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

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

3.3 **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.

3.4 **Hydrological data**

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

3.5 **Design of Bridges and Structures**

3.5.1 The Consultant shall prepare General Arrangement Drawing (GAD) of Flyovers / ROBs and its approaches for proposed Flyover 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. These 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 BRIDCUL to approve the best alternative.

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

3.5.3 The bridges/over bridges shall be designed for loading as per IRC Code.

3.5.4 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 BRIDCUL.

3.5.5 All relevant Railway design parameter shall be incorporated. The consultant shall also incorporate safety provision for CRS approval in Railways Specification and shall get the drawings approvals from Railways Authorities.

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

3.6.1 The consultant is to carryout detailed designs, prepare and submit working drawings for the following:

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

3.6.3 Design of road furniture and road safety/traffic control features as per latest specification of International standards.

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

3.6.5 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, bore well etc.

3.6.6 Horizontal and vertical alignment of carriageway.

3.6.7 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.

3.6.8 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.

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

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

3.6.11 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 carryout traffic survey as per IRC Codes and shall be responsible for accuracy of the data in future also.

3.7 **Design of Embankment**

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

3.7.2 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.

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

3.8 **Estimation of Quantities and Project Costs**

3.8.1 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 Uttarakhand 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.

3.8.2 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.

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

3.9 Time Period for the Service

3.9.1(i) A total completion time for the scope of services will be as per agreement. The final reports, drawings and documentations should be completed within this time schedule.

(ii) Association of the consultant shall be till completion and handing over of the project to the client. They are required for carrying out all modifications/ deletion /additions /alteration in /drawing / documents as required by client and BRIDCUL for proper execution of works at site

3.9.2 BRIDCUL 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.

3.9.3 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)

3.9.4 Schedule of Submission

Consultants shall be required to complete, to the satisfaction of the BRIDCUL, all the different stages of 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.

3.9.5 Strip Plan and Clearances

The Consultants shall submit the following documents (10 sets) within a period of 1 month 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; 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; 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.

3.9.6 The strip plans and land acquisition plan/forest proposal shall be prepared on the basis of data from reconnaissance and detailed topographic surveys. In other words, the field surveys are suggested to be completed within a period of 30 days after the commencement of services. The consultant shall also prepare a schedule for L.A. as well as forest proposal within 2 months.

3.9.7 The report accompanying the strip plans should cover the essential aspects as given under Kilometer- wise/ Chainage-wise Land acquisition plan(LAP)/forest proposal and schedule of ownership thereof and costs as per revenue authorities and also based on realistic rates. Details of properties such as buildings and structures falling within the right-of-way and cost of acquisition based on realistic rates. Kilometer- wise /Chainage-wise Utility Relocation Plan and cost for relocation per civil construction as per concerned authorities. Kilometer- wise /Chainage-wise account in regard to felling of trees of different type and girth and value estimate of such trees based on realistic rates obtainable from concerned District Forest office.

3.9.8 The strip plans shall clearly indicate the scheme for future widening, if possible.

3.10 Land Acquisition Report(10 sets)

The land acquisition report/forest proposal shall be prepared for each section and shall be submitted within a period of 15 days after the approval of alignment. The report shall include the detail schedules about acquisition of land holdings and their locations in a strip plan and

also the costs as per district authorities/CTR administration and also on market rate basis. The land acquisition/forest proposal report should be prepared in consultation with affected persons, non-governmental organizations and concerned government agencies and should cover land acquisition and resettlement plan and cost of resettlement and rehabilitation of such affected persons. It should also include plan of compensating afforestation its land requirement with specific locations and cost involved for undertaking all activities in this regard. The consultant shall submit forest proposal for each and every over bridge, major bridge and temporary diversion for above structures. Every proposals shall be got signed by every district agency/authority concerned & CTR administration. After getting signed from district authorities the proposal shall be sent to Nodal Officer of forest at Dehradun in One month.

3.11 Submission of Preliminary Project Report

3.11.1 The final PPR (8sets) shall be submitted within 15 days 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 bridges, viaducts etc.) 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.

3.11.2 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.

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

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

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

3.12.2 The Report volumes shall be submitted as tabulated above.

3.12.3 The documents and drawings shall 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 an 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 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. The information shall be presented in tabular as 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:

The MoRTH's 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 quality control 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 rate of 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 cover one 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 BRIDCUL along the alignment 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:
(i) details working drawing of bridge superstructure / sub structure/bearing (including reinforcement schedule)
- g. Drawings for Road sign, Marking, Office cum residential complex for PIU, and other Facilities.
- h. All working drawings will be prepared in A2 size sheets. The format for plan, cross section and profile drawings shall be finalized in consultation with the concerned BRIDCUL 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.

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.

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 land records, preparation of land acquisition plan, submission and verification of ROW from Revenue Authorities submitted liasoining with Govt. Authorities, getting clearances from respective authorities, Trees Cutting, statutory clearances / approval and Traffic &Transport Management work already sent to Nodal Officer from District authority and Private land acquisition papers, if any.

3.12.4 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 BRIDCUL office and any other software required for association of the work, free of cost.

3.13 Interaction with BRIDCUL

3.13.1 During entire period of services, the consultant shall interact continuously with BRIDCUL and provide any clarification as regards methods being followed and carry out modification as suggested by BRIDCUL. A programme of various activities shall be provided to BRIDCUL and intimation shall be given to BRIDCUL regarding start of key activities as boring, survey etc. so that inspections of BRIDCUL officials could be arranged in time.

3.13.2 The BRIDCUL officers and other Government officers may visit the site at any time, individually or collectively to acquaint themselves with the field investigation and survey works.

3.13.3 The consultant shall be required to send 3 copies of concise fortnightly Progress Report by the 5th day of the following fortnight to the designated officer at his Head Quarter so that progress could be monitored by the PWD. These reports will indicate the dates of induction and deinduction of various key personnel and the activities performed by them. Frequent meeting with the consultant at site office or in BRIDCUL Site office or at Delhi Office are foreseen during the project.

3.13.4 All equipment, software, and books etc. bought for this project shall be listed to the client through progress Report and handed over to the client free of cost at the end of the project.

3.14 Data and Software:

3.14.1 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 BRIDCUL 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 BRIDCUL.

3.14.2 Software:

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

3.14.3 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 BRIDCUL at the time of submission of the Final Report.

3.14 Responsibility for Accuracy of project Documents.

3.15.1 The consultant shall be responsible for accuracy of the data collected, by him directly or procured from other agencies/authorities, the designs, drawing, estimates and all other details prepared by him as part of these services. He shall indemnify the BRIDCUL against any inaccuracy in the work that might surface during implementation of the project. The consultant will also be responsible for correcting. at his own cost and risk, the drawings including any re- survey/investigations and correcting layout etc. if required during the execution of the services.

3.15.2 The consultant shall be fully responsible for the accuracy of design and drawings of the bridges and structures. All the design and drawings for bridges and structures including all

their components shall be fully checked by a senior Engineer after completion of the designs. All drawings for bridges and structures shall be duly signed by the (a) Designer, (b) Senior Checking Engineer and (c) senior Bridge/structure Expert. The design and drawings not signed by the three persons mention above shall not be accepted. The consultant shall indemnify the BRIDCUL against any inaccuracy/ deficiency in the design and drawings of the bridges and structure noticed during the construction and even thereafter and the BRIDCUL shall bear no responsibility for the accuracy of the designs and drawings submitted by the consultants.

3.16. The final design will be the property of Govt. & no publication & distribution will be allowed without consent of client.

3.17 **SITE VISITS**

During the execution (Construction Stage) of the project, the consultant is required to visit the site as per requirement of BRIDCUL or before presenting his bill for payment for each stage of construction as given in Para 3.20.3 (B). Additional visits, if any, required during construction stage shall be paid at the rate of Rs. 2500.00 per visit.

3.18 **COST OF THE PROJECT DOES NOT INCLUDE FOLLOWING ITEMS/EXPENDITURE FOR THE PURPOSE OF PAYMENT OF FEE DURING CONSTRUCTION STAGE**

To arrive at the payment of architectural fee to the architect, the cost of project shall be derived by deducting following items from sanctioned cost of project by the Government:-

3.18.1 Contingency charges sanctioned

3.18.2 Centage charges/ supervision charges sanctioned

3.18.3 Payment allowed for shifting of utility and providing other facilities etc, charges to development authority to sanctioned the project maps payment made to forest and other departments. Any other items of works/services sanctioned for which architectural services are not required/ approved.

3.18.4 Cost of land, if any.

3.19 **PAYMENT OF CONSULTANCY FEES:**

3.19.1 The BRIDCUL agrees to pay to the appointed Consultant the fee for the professional services to be rendered by them, for the stipulated schedule of services, as arrived at based on the lowest bid rate which is accepted by all consultancy firms i.e. cost of project as calculated at clause 3.18 above multiplied by the accepted lowest bid rate.

3.19.2 Deleted

3.19.3 Statutory charges/fees payable to any local authority for obtaining statutory approvals for commencement/Completion /occupation of the bridge shall be paid by BRIDCUL on demand by the competent authorities or initially the payment shall be made by the consultant which will be reimbursed to the consultant by BRIDCUL with his bills.

3.19.4 The Consultant shall have to submit the self attested copy of his PAN No. along with the RFP Document.

3.20 PAYMENT SCHEDULE

3.20.1 Payments to the consultant shall be “on account” and shall be adjusted against the final bill.

3.20.2 All payments shall be subject to Income Tax deduction at source.

3.20.3 The Consultant shall be paid for each of the services in the schedule as far as possible by 14th working day after the day of submission of the bill, complete in all respect to the Project Manager in the various stages as follows:

A) PAYMENT AT DPR STAGE:-

Payable fee =70% of amount arrived at Para 3.18 and 3.19 :-

1.	On approval of Concept Planning and Master Plan from client department, On approval of Drawings and Design and approval of documents from statutory bodies (if any), On submission of Preliminary DPR	25% (Twenty Five percent) of the payable fee as above.
2.	Submission of DPR including detail design report, detail structural drawing for proof checking and approval by the BRIDCUL (i) On Approval of DPR by BRIDCUL-	25 % (Twenty Five percent) of the payable fee as above.
3.	(ii) On Approval of DPR by the Client/Govt.	50% (Fifty percent) of the payable fee as above.

Note: 5% security deposit will be deducted from each running bill which shall be released after two months of completion of project and shall work as performance guarantee during the construction stage.

B) PAYMENT AT CONSTRUCTION STAGE:-

Payable fee =30% of amount arrived at Para 3.18 and 3.19

1.	Structural Drawings proof checking	10% of the payable fee as above.
2.	On submission of Detailed Working Drawings for all stages of construction	10% of the payable fee as above.
3.	Site visits on completion of following sub-stages.	
	i) Completion of Foundation for bridges	10% of the payable fee

		as above.
	ii) Completion of substructure of bridge	25% of the payable fee as above.
	iii) Completion of superstructure	15% of the payable fee as above.
	iv) Completion of approaches of bridge and wearing course, painting etc	10% of the payable fee as above.
	v) After trial run of bridges.	10% of the payable fee as above.
4.	On submission of Completion Drawings & Completion Certificate.	10% of the payable fee as above.

Note: 5% Security Deposit will be deducted from each running bill, which shall be released after two months of completion of the work and shall work as Performance Guarantee during the construction stage.

3.21 PERFORMANCE GUARANTEE:

3.21.1 The Consultant shall submit an unconditional Performance Guarantee/FDR/NSC (duly pledged as directed) of 5% (Five Percent) of the consultancy fee or Rs. 50000 (Fifty thousand) whichever is more, for proper performance of the contract agreement from a nationalized/scheduled Bank in the prescribed Performa at Appendix – B (in case of Bank Guarantee only), notwithstanding any other provisions in the contract, within 07 days of issue of Letter of Acceptance.

3.21.2 In case, the Consultant fails to deposit performance guarantee within 07 days of issue of letter of acceptance, the offer of appointment of Architectural consultant shall stand cancelled.

3.21.3 5% retention money deducted from each running bill shall also form part of the performance Guarantee, making it a total of 10 % of the consultancy fee.

3.21.4 Performance guarantee shall be released after 2 months from date of completion of work.

3.22 FORFEITURE OF PERFORMANCE GUARANTEE:

When the consultant has made himself liable for action under any of the clauses aforesaid, the Engineer-in-Charge on behalf of the BRIDCUL shall have powers:

3.22.1 To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of Engineer-in-Charge shall be conclusive evidence) upon such determination rescission, the Security Deposit already recovered and Performance

Guarantee under the contract shall be forfeited and placed absolutely at the disposal of the BRIDCUL.

3.22.2 In case the consultant fails to complete the work, the BRIDCUL, without prejudice to rights and remedies available under the agreement shall forfeit Performance Guarantee in cash and/or by en-cashing the Bank Guarantee.

3.23 ADDITIONS AND ALTERATIONS:

3.23.1 The BRIDCUL shall have the right to make changes, additions, modifications or deletion in the design and drawings or any part of work and instructions given in writing for any such additions / alterations, deletions during the progress of the work and the same shall be complied by the consultant without any extra cost.

3.24 TIME SCHEDULE:

3.24.1 The date of commencement of project will be reckoned from the seventh day of the date of signing of the contract.

3.24.2 Completion of various professional services/activities shall be achieved within the time frame for submission of DPR on would be given in the specific ToR of the assigned project.

3.24.3 As the project has to be completed on fast track, the work shall be carried out with due diligence and as per time frame for submission of DPR for the assigned project. In case of any delay / default, performance/deficiency by the Consultant, to the agreed time schedule, for pre commencement activities the Consultant shall pay by way of agreed compensation and amount equivalent to 0.25% (Zero decimal two five percentage) of the total amount of fee payable for each stage for each week of delay subject to a maximum of 10% (Ten percent) of the fee quoted for the services.

3.25 EXTENSION OF TIME

3.25.1 If the consultant shall desire an extension of time for completion of the work on the grounds of his having been unavoidably hindered in its execution or on any other ground he shall apply in writing to the BRIDCUL within seven days of the date of hindrance on account of which he desires such extension as aforesaid.

3.25.2 The BRIDCUL after satisfying itself about the reasonableness of grounds may grant extension of time which shall be final and binding as in his opinion be justified and communicate the same in writing. Wherever such extension of time is granted, it would be without prejudice to the rights of BRIDCUL to take any other action under the provisions of the Contract. Any extension of time granted as stated above shall neither entitle the consultant to any claim for increase in their fees nor shall it release him from any of the obligations under the said agreement.

3.25.3 The consultant shall extend the validity of his Performance Guarantee if warranted on account of extension of time.

3.26 OUTPUT/DESIGN SUBMITTALS OF THE CONSULTANCY:-

3.26.1 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 Investigation and Hydrological investigation Report, land aquisition 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.	6 copies	1:200
3	Final Master Plan.	6 copies	1:100
4	Architectural Drawings showing Elevations, cross section and including details of foundations, Sub structure, superstructure in case of bridges.	6 copies	1:50
5	Drawings for submission to local / statutory authorities.	As Reqd. by local/ statutory authorities.	As Reqd.
6	Working Drawings for plans, sections, elevations of bridges.	6 copies	1:50
7	Working Drawings for Electrical Installation, Electrification of bridge.	6 copies	1:50
8	Detailed Structural Drawings	6 copies	1:20
9	Detailed Structural Design, Bearings Design, Expansion Joints Design etc.	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 as per detail given at Clause 3	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	-

3.26.2 The BRIDCUL shall be supplied with such drawings along with one reproducible copy in A-0/A-1 size. If there is any revision of any detail in any drawing for any reason whatsoever, same number of drawings shall be reissued after such corrections without any extra charge.

3.26.3 All drawings (Architectural, structural and services) shall be prepared by using latest version of AutoCAD or latest software.

3.27 COPYRIGHT

3.27.1 All these drawings shall become the absolute property of the BRIDCUL and the consultant shall have no right to use the same anywhere else. Such drawings and designs shall not be issued to any other person, firm or authority or used by the Architectural Consultant for any other project. No copies of any drawings or documents shall be issued to anyone except the BRIDCUL and/or its authorized representatives.

3.27.2 All design calculations along with original Architectural/Structural drawings on computer floppy/CDs shall be submitted for proof-checking/ record and shall be the property of the BRIDCUL.

3.28 RESPONSIBILITY FOR ACCURACY OF PROJECT DOCUMENT

The Consultant shall appoint a team leader for this project who shall be an architect of at least Five years of experience and should have designed/supervised construction of similar bridge. His CV shall be submitted to the BRIDCUL within 7 days of signing of the agreement for approval of BRIDCUL. He will regularly interact with the officers of the BRIDCUL and will be responsible for timely submission of the requisite reports/document. The Consultant shall be responsible for accuracy of the data collected by them directly or procured from other agencies/authorities, the designs, drawings, estimates and all other details prepared by them as part of these services. The Consultant shall indemnify the BRIDCUL against any inaccuracy in the work, which might surface during implementation of the project. The Consultant shall also be responsible for correcting, at his own cost and risk, the drawings including any re-designing and correcting layout/ design etc. if required during the execution of the Services, without any extra cost.

3.29 INDEMNIFICATION:

The Consultant shall fully indemnify and keep the BRIDCUL indemnified against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against the BRIDCUL in respect of any such matters as aforesaid the consultant shall be immediately notified thereof and the Consultant shall be at liberty, at

his own expense, to settle any dispute or to conduct any litigation that may arise there from, provided that the Consultant shall not be liable to indemnify the BRIDCUL, if the infringement of the patent or design or any alleged patents or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.

3.30 GUARANTEE:

- 3.30.1 The Consultant shall agree to redesign at his cost any portion of his engineering and design work, which due to his failure to use a reasonable degree of design skill shall be found defective.
- 3.30.2 The BRIDCUL may make good the loss by recovery from the dues of the Consultant in case of failure to comply with the provisions of the above clauses.

3.31 DETERMINATION AND RESCISSION OF AGREEMENT:

- 3.31.1 The BRIDCUL without any prejudice to its right against the Consultant in respect of any delay by notice in writing absolutely determine/ rescind the consultancy contract in any of the following cases:
- i) If the Consultant, being a firm/ company shall pass a resolution or the court shall make any order that the firm/ company shall be wound up or if a Receiver or a Manager on behalf of the creditor shall be appointed or if circumstances shall arise which entitle the court to appoint a Receiver or a Manager or which entitled the court to make up a winding order.
 - ii) If the Consultant commits breach of any of the terms of the agreement.
- 3.31.2 When the Consultant has made himself liable for action under any of the clauses aforesaid, the BRIDCUL shall have power: -
- a. To determine / rescind the agreement:
 - b. To engage another Consultant to carry out the balance work debiting the Consultant the extra amount, if any, so spent for getting the balance work done. This amount would be in addition to the penalties imposed under clause no. 3.8.3 herein above provided further that the Architectural Consultant shall not be entitled to any difference of cost if the balance work is done at a cost less than the contract value.
- 3.31.3 The decision of the Managing Director regarding the grounds for determination of the agreement by the Engineer- in- charge shall be final and binding.

3.32 DISPUTES

- 3.32.1 If the Consultant believes that a decision taken by the Engineer was either outside of

authority given to the Engineer by the Contract or that the decision was wrongly taken, the decision of the engineer shall be referred to the Dispute Review Expert (DRE) within 10 days of the notification of the Engineer's decision.

3.32.2 The DRE for various projects will be Chief General Manager (Projects).

3.33 PROCEDURE FOR DISPUTES

3.33.1 The Dispute Review Expert shall give a decision in writing within 28 days of receipt of a notification of dispute.

- i) If the Consultant is dissatisfied with the instructions or decision of the Dispute Review Expert, the Consultant may, within 15 days of the receipt of the decision, appeal to the MD, BRIDCUL who shall afford an opportunity to the Consultant to be heard, if the latter so desires, and to offer evidence in support of his appeal. The MD, BRIDCUL shall give his decision within 30 days of receipt of Consultant's appeal. If the Consultant is dissatisfied with this decision, the Consultant shall within a period of 30 days from receipt of the decision, give notice to the MD, BRIDCUL for appointment of arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.
- ii) Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above, disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by the MD, BRIDCUL. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.
- iii) It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the MD, BRIDCUL of the appeal.
- iv) It is also a term of this contract that no person, other than a person appointed by MD, BRIDCUL as aforesaid should act as arbitrator.
- v) It is also a term of this contract that if the Consultant does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 115 days of receiving the intimation from the Engineer-in-charge that the final bill is ready for payment, the claim of the Consultant shall be deemed to have been waived and absolutely barred and the BRIDCUL shall be discharged and released of all liabilities under the contract in respect of these claims.
- vi) The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

- vii) It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs. 1,00,000/- the arbitrator shall give reasons for the award.
- viii) It is also a term of the contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.
- ix) It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.
- x) The arbitration shall be conducted in accordance with the arbitration procedure stated in the Clause no. 3.36 below.

3.34 REPLACEMENT OF DISPUTE REVIEW EXPERT.

Should the Dispute Review Expert resign or die, or should the Employer and the Consultant agree that the Dispute Review Expert is not fulfilling his functions in accordance with the provisions of the Contract, a new Dispute Review Expert will be appointed by the Managing Director, BRIDCUL.

3.35 ARBITRATION:

3.35.1 Excepting the decisions taken by the Managing Director, BRIDCUL, all disputes or differences whatsoever arising between the parties out of or relating to the construction, meaning and operation or effect of this contract or the breach thereof shall be settled by arbitration by a reference to the sole arbitrator or the person appointed by the Managing Director, BRIDCUL and the award made in pursuance thereof shall be binding on the parties. Such arbitration shall be governed by the Indian Arbitration and Conciliation Act, 1996.

3.35.2 It is also the term of this agreement that consultant shall have no objection whatsoever, in the appointment of an officer of the BRIDCUL as the sole Arbitrator by the Managing Director.

3.36 FORECLOSURE OF CONTRACT DUE TO ABANDONMENT OR REDUCTION IN SCOPE OF WORK.

If at any time after acceptance of the consultancy tender, the BRIDCUL decides to abandon or reduce the scope of the work for any reason, the Engineer- in- charge shall give notice in writing to that effect to the consultant and the consultant shall act accordingly in the matter.

The consultant shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the work. Further, the consultant shall not have any claim for compensation by reasons of an alteration having made in the scope of work which shall involve any curtailment of work as originally contemplated. However, the consultant shall be paid at contract rates full amount for works executed to the extent and accepted by the Engineer-in-charge.

3.37 MODIFICATION

3.37.1 Modification of the terms and conditions of this contract, including any modification of the scope of the Services, may only be made by written agreement between the Parties. Pursuant to Clause 3.38 hereof, however, each party shall give due consideration to any proposals for modification made by the other Party.

3.37.2 In case scope of work is increased on account of requirement of additional facilities, the consultant shall be paid for additional DPR in the same proportion as their quoted fee for the present scope of work with respect to the sanction amount of DPR excluding centage & contingency.

3.38 OPERATION

The parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause shall or causes of such unfairness, but no failure to agree on any action pursuant to this Clause shall give rise to a dispute to arbitration in accordance with Clause 3.36.

3.39 KEY PERSONNEL

Key personnel shall be different for different projects which shall be intimated in the specific ToR at the time of assigning of the consultancy work.

3.40 Penalty:

Penalty shall be imposed on the consultants for poor performance/deficiency in service as expected from the consultant and as stated in General Conditions of contract. The Architect/Design Consultancy Firm is required to submit the report as per schedule that will be given in the specific ToR for the assigned project. The Architect/Design Consultancy firm is supposed to pay the site visit as per schedule to be given in specific ToR. If the Architect/Design Consultancy Firm fail to adhere to the schedule, a penalty of Rs. 10,000.00 (Rupees Ten Thousand Only) per visit/per week delay of submission of reports/documents, may be imposed.

4. **Class:**

The applicants will be empanelled under the following classes under building & bridges category:

- (a) **Class A** – for projects costing above Rs 25.00 Cr.
- (b) **Class B** – for projects costing above Rs 10.00 Cr but upto Rs. 25.00 Cr.
- (c) **Class C** – for projects costing above Rs 5.00 Cr but upto Rs 10.00 Cr.
- (d) **Class D** – for projects costing upto Rs 5.00 Cr.

Note: Cost of projects being cost of civil works and not the consultancy cost.

- 4.1 The class shall be decided by a Committee of BRIDCUL constituted for this purpose on the basis of predetermined criteria and where it is not possible to do so, based on their own judgment. The decision of the Committee shall be final and binding.

5. **Empanelment Fees:**

- (a) Class A - Rs. 20,000.00 + GST 18%
- (b) Class B - Rs. 10,000.00 + GST 18%
- (c) Class C - Rs. 7,500.00 + GST 18%
- (d) Class D - Rs. 5,000.00 + GST 18%

6. **Application Form:**

Application for empanelment of architectural and design consultancy firms duly filled with relevant details is required to be submitted as per **Annexure- A**.

7. **Eligibility:**

- 7.1 The architectural and design consultancy firms must be empanelled with other Govt./ Semi-Govt. organizations for bridge work and must submit their letter of empanelment with them. However, reputed consultancy firms may also be considered based on their work experience and performance.
- 7.2 “DESIGN CONSULTANCY FIRMS” should have a valid registration with the Indian Road Congress (IRC) and other valid registration of firms with the appropriate authorities.

7.3 **Technical Staff Strength:**

The firms must have minimum qualification and experience of its permanent key staff as under:

S. No	Position Held	Minimum Qualification & Experience							
		Class-A		Class- B		Class- C		Class-D	
1	Team Leader/ Chief Architect	1 No.	M.E./M.Tech in Structural Engineering with 20 Years experience	1 No.	B.E./B.Tech in Structural Engineering with 20 Years experience	1 No.	B.E./B.Tech in Structural Engineering with 15 Years experience	1 No.	B.E./B.Tech in Structural Engineering with 10 Years experience
2	Civil	1	M.Tech with	1 No.	M.Tech with	1 No.	B.tech/B.E.	1 No.	B.tech/B.E.

	Engineers	No.	15 years Experience or B.Tech with 18 years Experience		15 years Experience or B.Tech with 18 years Experience		with 12 years experience		with 8 years experience
3	Civil/ Mechanical Engineer	1 No.	M.Tech with 10 years Experience or B.Tech with 15 years Experience	1 No.	M.Tech with 10years Experience or B.Tech with 15 years Experience	1 No.	B.tech/B.E. with 7 years experience	1 No.	B.tech/B.E. with 5 years experience
4	CAD Operator/ Draftsman	5 Nos.	Diploma with 5 years experience	4 Nos.	Diploma with 5years experience	2 Nos.	Diploma with 4years experience	2 Nos.	Diploma with 3years Experience

Details of qualification and experience of key staff must be submitted in the format given at **Annexure- B.**

7.4 Associated Consultants:

The architectural and design consultancy firms should have sufficient number of technical staff (Clause-7.3.) and associated consultants for the proper execution of the contract with irrevocable letter of association for sufficient period. The applicant should submit a list of these staff and consultants stating clearly how these would be involved in planning and execution. Details of associated consultants should be furnished as per **Annexure – C.**

7.5 Financial Information:

The applicant should have minimum average annual turnover during the last five years and bank solvency certificate in the requisite class as given below.

S. No	Class	Min. Amount of Average Annual Turnover	Bank Solvency
1.	For projects costing above Rs 25.00 Cr (Class-A)	Rs. 50.00 Lacs	Rs. 25.00 lacs
2.	For projects costing above Rs 10.00 Cr but upto Rs. 25 Cr (Class-B)	Rs. 30.00 Lacs	Rs. 15.00 lacs
3.	For projects costing above Rs 5.00 Cr but upto Rs 10.00Cr (Class-C)	Rs. 20.00 Lacs	Rs. 10.00 lacs
4.	For projects costing upto Rs 5.00 Cr (Class-D)	Rs.10.00 Lacs	Rs. 10.00 lacs

Details of Gross Annual Turnover during the last 5 years and bank solvency certificate must be furnished in the format as given at **Annexure-D.**

7.6 Work Experience:

The applicant should have minimum experience (any one of the Col. 3, 4 and 5 of table below) of consultancy services in the requisite class, as given below:

S. No	Class	One completed similar Work	Two completed similar work	Three completed similar work
1	2	3	4	5
1.	(Class-A)	Rs. 50.00 Cr	Rs. 35.00 Cr each	Rs. 20.00 Cr each
2.	(Class-B)	Rs. 15.00 Cr	Rs. 10.00 Cr each	Rs. 5.00 Cr each
3.	(Class-C)	Rs. 6.00 Cr	Rs. 4.00 Cr each	Rs. 2.00 Cr each
4.	(Class-D)	Rs. 3.00 Cr	Rs. 2.00 Cr each	Rs. 1.00 Cr each

Details of experience of work completed during the last 5 years must be furnished as per the format given at **Annexure-E**. Also, details of works in hand be furnished as per the format given at **Annexure-F**.

- 7.7 The Architectural Consultants must be conversant with the architecture and designs of hilly region/terrain matching with the topography and environment of Uttarakhand State.
- 7.8 The Architectural Consultants must have the knowledge of requirements of different types of bridges.
- 7.9 The Architectural Consultants must have specialization and adequate experience in latest technological innovations and trends using latest cost-effective materials, earthquake proof design etc.
- 7.10 Software based designing, Auto CAD drawings, 3D modeling and presentation ability will be essential part of the qualification criteria for which the consultant should submit the list of software on the basis of which they will prepare the Architectural and Structural designs, the working 3D drawing, cost estimates 7 the models of presentation (**Annexure-G**).
- 7.11 Performance evaluation of the empanelled Consultants on the basis of their work actually done during the last one year shall be done further in the month of April every year as per the criteria specified in **Annexure-I**. Decision to continue or terminate the empanelment right at that stage shall be taken by the competent authority after such yearly performance evaluation, irrespective of the fact that the initial empanelment was done for a period of three years. The decision of the competent authority in these regards shall be final and binding on the concerned consultant, for which he shall have no claim what so ever.
8. **Details to be submitted by the consultants**
The proposal is required to be submitted in a large sealed envelope, super scribed "Proposal for Empanelment of Architectural and Design Consultancy firms for bridges" containing following two envelopes :-

8.1 **Technical Proposal (To be super scribed as Technical Proposal) containing following:**

8.1.1 Non refundable document fee, if RFP downloaded from website.

8.1.2 Non refundable empanelment fee for each of the class in the form of Demand Draft/Drafts in favor of “Managing Director, BRIDCUL” payable at Dehradun.

8.1.3 Security fee in the form of Demand Draft only in favor of “Managing Director, BRIDCUL” payable at Dehradun valid for 48 months as below.

a) **Category A** – Rs. 2.00 Lakhs

b) **Category B** – Rs. 1.00 Lakhs

c) **Category C** – Rs. 0.75 Lakhs

d) **Category D** – Rs. 0.50 Lakhs

8.1.4 Detailed profile of the firm.

8.1.5 Duly filled in application form for Empanelment of Architectural and Design Consultancy Firms (As per **Annexure-A**).

8.1.6 The list of in-house technical staff with details of their qualifications, experience and field of expertise (As per **Annexure-B**).

8.1.7 Details of associated consultants. (As per **Annexure-C**).

8.1.8 Details of average annual turnover certified by CA (As per **Annexure-D**).

8.1.9 Details of experience of work during the last 5 years (As per **Annexure-E**).

8.1.10 Current works in hand (As per **Annexure-F**).

8.1.11 List of relevant software and equipment available with the Firm (As per **Annexure-G**).

8.1.12 Information regarding any litigation, current or during the last five years, in which the Applicant is involved, the parties concerned and disputed amount. (As per **Annexure-H**).

8.2. **Financial Proposal:** (To be super scribed as Financial Proposal) shall contain the complete RFP duly signed by authorized signatory at each page with duly filled in schedule of the quote at Annexure – J.

8.3. The consultancy fee is to be quoted in percentage of cost of work, worked out on the basis of Central PWD schedule of rates (DSR) and as approved by Uttarakhand PWD/Government of Uttarakhand. The consultancy fee shall be including of all taxes and expenditures incurred by the Consultant on all activities required for commencement/completion/occupation of the bridge as per the stated scope of consultancy given at clause 3 of this RFP.

9. **Technical Evaluation:**

A committee shall check the application form (Annexure-A) of all the consultants and those found responsive shall be eligible for further technical evaluation of their technical proposals by the committee as per following criteria:-

(i) Technical Staff Strength (Annexure – B) : 20 Marks

(ii) List of Associated consultants (Annexure – C) : 10 Marks

(iii) Financial Information (Annexure – D)	: 15 Marks
(iv) Work Experience during last five years (Annexure – E)	: 25 Marks
(v) Current works in hand (Annexure – F)	: 20 Marks
(vi) List of relevant software and equipment available with the firm (Annexure – G)	: 10 Marks
Total	: 100 Marks

Note: Consultants getting more than 60 marks shall only be eligible for empanelment in the desired class.

- 10. Financial Evaluation:** All those consultants qualifying in the technical evaluation and agreed to work as the rate decided by BRIDCUL shall be eligible for Empanelment. Negotiation for Consultancy fee may be done with the Consultants, if it is desired by BRIDCUL.
- 11.** All the Consultants qualifying in technical evaluation will be concurrently empanelled at the lowest bid rates (in percentage) in the empanelled class after obtaining their consent for the lowest financial quotes. Consultants not giving their consent will not be empanelled.
- 12.** BRIDCUL reserves the right to accept or reject any or all proposals without assigning any reasons thereof.
- 13.** The work shall be assigned from time to time by BRIDCUL to empanelled Consultants in respective class on the basis of work experience and specialization in the particular field. Negotiation of Consultancy fee may be done with the Consultants, if it is desired by BRIDCUL.
- 14.** BRIDCUL shall have full rights to assign any work to any empanelled Consultant in a particular class, without assigning any reason thereof. Moreover, an empanelled Consultant can be assigned any number of projects falling under the class of their empanelment. No consultant shall have any right or claim for assignment of a particular project or a particular number/amount of work. The discretion of the assigning authority in these regards shall be final and binding on all empanelled consultants.
- 15.** The assignment shall be given alongwith additional Terms of Reference (ToR) specific to the work and specific instructions, if any.
- 16. Period of Empanelment:** selected firms shall be empanelled initially for a period of Maximum three years (i.e upto 31.06.2020) which can then be extended on the basis of their performance and policy in vogue at that time. BRIDCUL, however, reserves the right to upgrade/renew the panel at any time without assigning any reasons. The consultants already empanelled with BRIDCUL will remain empanelled till the end of their period of present empanelment which can then be extended on the basis of their performance and policy in vogue at that time.

SCHEDULE OF DESIGN PARAMETERS

S.No.	Description of Item	As per Recommendation
1.	Bearing capacity taken for design of foundation	
2.	HFL	
3.	MSL	
4.	Recommendation for expansion joints consideration of top most nodes deflection of the structure	
Materials		
5.	1- Grade of Concrete Foundation	
6.	2- Grade of concrete Substructure	
7.	3- Grade of concrete Superstructure	
8.	4- Grade of concrete Pedestal	
9.	5- Grade of concrete others	
10.	6- Grade of Steel	
11.	7- Mix of PCC	
Unit Weight of Materials		
12.	RCC	
13.	PCC	
14.	Wearing coat	
15.	Soil	
16.	Others	
Loading		
16.	Dead Load [as per relevant IRC/ BIS/IS Codes]	
17.	Loading of Superstructure	
18.	Loading of Sub structure	
19.	Recommended Parapet wall/crash barrier	
20.	RCC Slab load	
21.	Wearing coat	
22.	others load	
23.	Live load [as per relevant IRC/ BIS/IS Codes]	
24.	Vehicle/Traffic load	
25.	Other loads	
26.	Seismic Load (As per relevant IRC/ BIS/IS Codes)	
27.	Zone	

28.	Zone Factor	
29.	Importance Factor	
30.	Response Reduction Factor	
31.	Damping	
32.	Ductile detailing as per (as per relevant IRC/ BIS/IS Codes)	
33.	Wind Load (As per relevant IRC/ BIS/IS Codes)	
34.	Zone	
35.	Basic Wind speed	
36.	Design Wind speed and others	
37.	Deflections	
38.	a) Vertical deflection	
39.	1. Due to temperature, creep and shrinkage	
40.	2. Due to shrinkage occurring after erection of partitions and application of finishes.	
41.	b) Horizontal deflection	
42.	1. Drift due to earthquake.	
43.	1. Drift due to wind	
44.	Drawing Presentation	
45.	Pier layout	
46.	Beam sections	
47.	Slab sections	
48.	Foundation section	
49.	Typical detail	
50.	Centre line spacing	
51.	Co-related with architectural drawing	
52.	Details specifications	
53.	Other details	
54.	Size changing detail of pier/foundation/slab/beam	
55.	Reinforcement changing details of pier/foundation/slab/beam	

Note: Other design parameter, if required, for structural design of the project may also be given in the same format by the Structural Engineer/Consultant along with structural design & drawings.

PROFORMA FOR PERFORMANCE GUARANTEE
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

B.G No.:

DATE:

To

Project Manager

Bridge, Ropeway, Tunnel and Other Infrastructure

Development Corporation of Uttarakhand Ltd. (BRIDCUL)

Dehradun.

1. In consideration of you, "Bridge, Ropeway, Tunnel and Other Infrastructure Development Corporation of Uttarakhand Ltd.(BRIDCUL)" having its head office at Opposite Govt. ITI, Saharanpur Road, Niranjanpur, Dehradun (hereinafter referred as the "Corporation", which expression shall, unless it be repugnant to the subject or context thereof include its, successors and assigns) having agreed to receive the Bid of Rs. (Rupees only) from M/s, .. (hereinafter referred to as the "Bidder" which expression shall, unless it be repugnant to the subject or context thereof include its, successors and assigns) for Providing Consultancy Services for Planning & Design of (hereinafter referred to as "the Project") pursuant to the RFP Document dated issued in respect to the Project and other related documents hereinafter collectively referred to as "Bidding Documents"),

We, (Name of the Bank) having its registered office at, and one of its branches at(hereinafter referred to as the Bank) at the request of the Bidder do hereby in terms of clause 5.5 of the RFP Document, irrevocably, unconditionally and without reservation guarantee the due and faithful fulfillment and compliance of the terms and conditions of the Bidding Documents (i.e the RFP Document) by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the Corporation an amount of **Rs. (Rupees.only)** as performance guarantee (hereinafter referred to as the "Performance Guarantee") as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Bidder if the Bidder shall fail to fulfill or comply with all or any of the terms and conditions contained in the said Bidding Documents.

2. Any such written demand made by the Corporation stating that the Bidder is in default of the due and faithful fulfillment and compliance with the terms and conditions contained in the Bidding Documents shall be final, conclusive and binding on the Bank.
3. We, the Bank, do hereby unconditionally undertake to pay the amounts due and payable under this Guarantee without any demur, reservation, recourse, contest or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Corporation is disputed by the Bidder or not, merely on the first demand from the Corporation stating that the amount claimed is due to the Corporation by reason of failure of the Bidder to fulfill and comply with the terms and conditions contained in the Bidding Documents. Any such demand made on the Bank shall be conclusive as regards amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding **Rs. (Rupees. only)**.

4. This Guarantee shall be irrevocable and remain in full force for a period of(.....) months from the date of signing of the contract agreement inclusive of a claim period of 60 (sixty) days or for such extended period as may be mutually agreed between the Corporation and the Bidder, and agreed to by the Bank, and shall continue to be enforceable till all amounts under this Guarantee have been paid.
5. We, the Bank, further agree that the Corporation shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfillment and compliance with the terms and conditions contained in the Bidding Documents and the decision of the Corporation that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Corporation and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator or any other Authority.
6. The Guarantee shall not be affected by any change in the constitution or winding up of the Bidder or the Bank or any absorption, merger or amalgamation of the Bidder or the Bank with any other person.
7. In order to give full effect to this Guarantee, the Corporation shall be entitled to treat the Bank as the principal debtor. The Corporation shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee from time to time to vary any of the terms and conditions contained in the said Bidding Documents.
8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Bank and sent by courier or by registered mail to the Bank at the address set forth herein.
9. We undertake to make the payment on receipt of your notice of claim on us addressed to name of Bank along with branch address and delivered at our above branch which shall be deemed to have been duly authorized to receive the said notice of claim.
10. It shall not be necessary for the Corporation to proceed against the said Bidder before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank, notwithstanding any other security which the Corporation may have obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealized.
11. We, the Bank, further undertake not to revoke this Guarantee during its currency except with the previous express consent of the Corporation in writing.
12. The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorized and has full power to execute this Guarantee for and on behalf of the Bank.

(Signature of the Authorized Signatory)
(Official Seal)

LETTER OF TRANSMITTAL

(ON LETTER HEAD OF THE COMPANY)

To,

Managing Director,
Bridge, Ropeway, Tunnel and Other Infrastructure
Development Corporation of Uttarakhand Ltd. (BRIDCUL)
Opposite Govt. ITI, Saharanpur Road,
Niranjanpur, Dehradun-248001

Sub: Proposal for Empanelment of Design and DPR Consultancy Firms for Bridge work.

Sir,

Having examined the details given on your website for the empanelment of Architectural and Design Consultancy Firms in BRIDCUL, we submit our proposal with relevant information and documents for your kind consideration.

1. I/We hereby certify that all the statements made and information supplied in the enclosed **Annexures A to J** and accompanying statements are true and correct.
2. I/We have furnished all information and necessary details required for the empanelment of Architectural and Design Consultancy Firms.
3. I/We submit the requisite certified solvency certificate and authorize the Managing Director, BRIDCUL to approach the bank issuing the solvency certificate to confirm the same. I/We also authorize Managing Director to approach individuals, employers, firms and corporations to verify our competence and general reputation.
4. I/We fully understand and agree that I/we may be de-empanelled from the panel and debarred from future works in BRIDCUL in case any information provided by us is found to be false or incorrect.

Enclosures: Technical and Financial Proposals in separate envelops.

Seal of applicant:

Date of submission:

Signature of Authorized
Signatory of Applicant (s)

APPLICATION FORM

(The applicant should study carefully the RFP for Empanelment and the list of documents to be annexed with the proposal before filling the form. Proposal found deficient in any respect is liable to be rejected without any further correspondence)

1. Class:

S.No.	Class	
1.	Class A	<input type="checkbox"/>
2.	Class B	<input type="checkbox"/>
3.	Class C	<input type="checkbox"/>
4.	Class D	<input type="checkbox"/>

Note:- Please tick (v) in the box against desired class.

2. Empanelment fee enclosed:

Sl. No	Desired Class	Draft No.	Date	Amount	Issuing Bank & Branch

(Refer Clause nos. 4 & 5)

3. Name of firm

4. Address of the firm:

(a) Regd. office.....

(b) Head Office.....

(Attach separate paper for addresses of other offices)

5. Telephone Number Fax No.....

E-mail address:.....

6. Constitution:

Sole Proprietorship Concern Partnership Firm

Public Ltd. Company Private Ltd. Company

7. If partnership firm, names of the partners/ If Company, name of directors

(a).....

(b)

(c)

(d)

(e)

(f)

8. Furnish the following details and enclose copies of each document:

(a) PAN

(b) GST No.

(c) Corporate Identity No. as given by relevant ROC
(if applicable)

9. Is the sole proprietor/any partner/director of company:

(a) Dismissed Government Servant Yes No

(b) Removed from approved list of contractors Yes No

(c) Demoted to a lower class of consultant Yes No

(d) Having business banned/suspended by
any government in the past Yes No

(e) Convicted by a court of law Yes No

If answer to any of the above is 'Yes', furnish details on a separate sheet

10. Name of person holding power of attorney

.....

11. Name of Bankers with full address

12. Place of business

13. (a) Whether already enlisted with BRIDCUL or any other department Yes No

(b) If yes, give details:

(i) Name of department

(ii) Class

(iii) Empanelment authority & address.....

(iv) Empanelment No. & date

(v) Date of validity

14. Certificates:

I/We (including all partners) certify that I/We have read “RFP for Empanelment of Consultants for Architectural and Design of Bridge Projects” in BRIDCUL as amended upto-date and shall abide by them.

Signature(s) of applicant(s):

Name	Signature	Address
1
2
3
4
5

Date :

No. of Documents attached

Details of Technical & Administrative personnel employed with the Firm.

S. No	Designation	Total No.	Name	Qualification	Professional Experience and Details of work carried out	Field of Expertise	Date since employed with the firm	Remarks
1	2	3	4	5	6	7	8	9
1.	Chief Architect/ Team Leader							
2.	Architects							
3.	Civil Engineers (E.g. Structural, Pavement, Geotech, Environment, Service Engineers etc.)							
4.	Electrical Engineers							
5.	Site Engineers etc.							
6.	Fire fighting Expert							
7.	HVAC expert							
8.	Any other specialist/ expert etc.							

Note: (i) Proof of registration of all Architects with Council of Architecture shall be enclosed.

(ii) CVs of each personnel/expert shall be attached with their signatures and counter signed by the authorized representative of the firm.

Signature of Authorized
Signatory of Applicant (s)

List of Associated Consultants

S. No.	Nature of Consultancy	Name & Address of Consultants	Name, Qualification & Experience of Staff	Important Projects Handled	Since When Associated with the firm
1.	Architect Consultant				
2.	Structural Consultant				
3.	Quantity/estimation Consultant				
4.	Geotech Consultant				
5.	Topographical and Contour Survey Consultant				
6.	Landscape & Horticulture Consultants				
7.	E & M Consultant				
8.	HVAC Consultant				
9.	EIA Consultant				
10.	Medical equipment consultant				
11.	ETP/WTP consultant				
12.	Any other relevant consultants				

Note: (i) CVs of each personnel/expert shall be attached with their signature and counter signed by the authorized representative of the firm. Affidavit on Rs.100 stamp paper shall be submitted for proof of association for external experts.

Signature of Authorized
Signatory of Applicant (s)

FINANCIAL INFORMATION

2. Financial Analysis-Details to be furnished duly supported by figures in balance sheet/profit & loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

		Years				
I.	Gross Annual turn over	2012-2013	2013-2014	2014-2015	2015-2016	2016-17

Note: In case the consultancy firm is unable to submit the turn over for the year 2016-2017 due to any reason, they should submit a certificate from a Chartered Accountant duly citing the reasons for non-submission of the turnover and provide the turn over for the year 2011-2012 instead.

- II. Solvency Certificate from Bankers of Applicant. (To be attached on bank's letter head)

Signature of Authorized Signatory of Applicant (s)

Signature of Chartered Accountant with seal

LIST OF CONSULTANCY WORKS COMPLETED DURING THE LAST 5 YEARS

S. No.	Type of Project	Name of Project	Brief Scope of the Consultancy work	Cost of Project	Cost of Consultancy Work	Name of Client Department	Date of start of		Date of completion of		Remark
							Consultancy Work	Civil Work (Project)	Consultancy Work	Civil Work (Project)	
(a)	Bridges										

Note: Only top 5-10 high value and important works be given of each type of work.

Signature of Authorized
Signatory of Applicant (s)

LIST OF CONSULTANCY WORKS IN HAND

S.No.	Type of Project	Name of Project	Brief Scope of the work	Cost of Project	Cost of Consultancy Work	Name of client Department	Date of start of Consultancy Work	Period of Consultancy Work	Special Features of the Projects	Remark
(a)	Bridge									

Note: Only top 5-10 high value and important works be given of each type of work.

Signature of Authorized
Signatory of Applicant (s)

LIST OF RELEVANT SOFTWARE AND EQUIPMENT AVAILABLE WITH THE FIRM

S.No.	Name of Equipment/ Software	Type	Nos.	Year of purchase	Remarks
1.	Computers a) Desktops b) Laptops				
2.	Printers/Scanner/Plotters etc				
3.	Software (i) Auto CAD etc. (ii) STAAD Pro etc. (iii) Revit etc. (iv) Project Management Software etc.				
4.	Survey Equipment				
5.	Field Investigation Equipment				
6.	Lab Equipment				
7.	Any other relevant equipment/ software				

Signature of Authorized
Signatory of Applicant (s)

PARTICULARS OF LITIGATION/ARBITRATION CASES

S. No.	Name of the project under litigation	Name of Client	Amount of Litigation	Period of Litigation	Outcome of Arbitration/ Court	Remarks

Signature of Authorized
Signatory of Applicant (s)

Evaluation of Annual Performance

Annual Evaluation shall be done for the following activities of the empanelled consultants.

1. No. of projects awarded by this department during the financial year.
2. No. of projects timely completed during the financial year.
3. No. of projects delayed during the financial year.
4. No. of projects not commenced by the consultant.
5. Quality of Architectural drawings.
6. Quality of Structural drawings.
7. Response of the consultant with suggestions and modification.
8. Response of the consultant with rectification of mistakes in drawings.
9. Response of the consultant with rectification of structural designs.
10. Response of the consultant with the client suggestions regarding project designing.

The annual performance evaluation of each consultant shall be done each year in the month of April on the above mentioned activities of the consultancy services assigned to them. The total marks for the evaluation of performance will be 100 and each consultant has to secure minimum 60 marks.

- ❖ If any consultant secures marks less than 60 in all the years during his empanelment period, case may not be consider for up gradation/renewal.
- ❖ Consultant securing more than 90 marks shall be given priority for up gradation for higher category.

THE FINANCIAL QUOTE

S. No.	Schedule of Consultancy	Consultancy Fee (in percentage of cost of works arrived at on the basis of Delhi Schedule of rates (DSR)/SOR and as approved by Govt/BRIDCUL /Client including all taxes (GST etc.)			
		Class A	Class B	Class C	Class D
1.	<p>Design Consultancy and Preparation of DPR</p> <p>Site survey, Soil Investigation Concept Design/drawings including power point presentation and Model/3D views etc. and detailed Working Designs & Drawings, Preliminary estimate, Detailed designs, Detailed structural drawings, Preparation of DPR and site visit as per scope of work of this RFP Document.</p>	1.0%	1.25%	1.35%	1.80%

Note: Consultant may quote for the class/category for which they may be eligible.

Seal of Consultant

Signature of the Consultant

Place:

Date: